COMMONWEALTH OF VIRGINIA
STANDARD CONTRACT

Contract No. UCPJMU6762

This contract entered into this 11ᵗʰ day of December, 2023, by Ascending, Inc. hereinafter called the "Contractor" and Commonwealth of Virginia, James Madison University called the "Purchasing Agency".

WITNESSETH that the Contractor and the Purchasing Agency, in consideration of the mutual covenants, promises and agreements herein contained, agree as follows:

SCOPE OF CONTRACT: The Contractor shall provide the services to the Purchasing Agency as set forth in the Contract Documents.

PERIOD OF PERFORMANCE: From 12/11/2023 through 12/10/2024 with four (4) one-year renewal options.

The contract documents shall consist of:

(1)   This signed form;

(2)   The following portions of the Request for Proposal RFP FDC-1175 dated June 15, 2023
    (a)   The Statement of Needs,
    (b)   The General Terms and Conditions,
    (c)   The Special Terms and Conditions together with any negotiated modifications of those Special Conditions;
    (d)   Addendum No. One, dated July, 25, 2023
    (e)   Addendum No. Two, dated August 3, 2023

(3)   The Contractor's Proposal dated August 11, 2023 and the following negotiated modification to the Proposal, all of which documents are incorporated herein.
    (a)   Negotiations Summary, dated December 1, 2023
    (b)   Commonwealth of Virginia Agency Contract Form Addendum to Contractor's Form, dated October 26, 2023, which shall govern in the event of conflict.

IN WITNESS WHEREOF, the parties have caused this Contract to be duly executed intending to be bound thereby.

CONTRACTOR:	PURCHASING AGENCY:
By: *Gloria Zhang*	By: _(signature)_
(Signature)	(Signature)
Gloria Zhang	Doug Chester
(Printed Name)	(Printed Name)
Title: VP, Operation	Title: Buyer Senior

Rev. 5/12/21

RFP # FDC-1175 Information Technology Consulting Services
Negotiation Summary for Ascending, Inc

December 1, 2023

1. Parties agree that this Negotiation Summary modifies RFP# FDC-1175 and the Contractor's initial response to RFP# FDC-1175, and in the event of conflict this negotiation summary shall take precedence.

2. Contractor's pricing schedule for the Purchasing Agency is as follows:

Oracle Core Technologies	Onsite	Offsite
Project Manager	$155.20	$ 135.80
Senior Engineer	$ 184.30	$164.90
Engineer	$145.50	$126.10

Microsoft Azure & M365	Onsite	Offsite
Project Manager	$145.50	$ 126.10
Senior Engineer	$ 174.60	$155.20
Engineer	$135.80	$116.40

Okta	Onsite	Offsite
Project Manager	$145.50	$ 126.10
Senior Engineer	$ 174.60	$155.20
Engineer	$135.80	$116.40

Data Analytics/Visualization/ Warehouse/Lake	Onsite	Offsite
Project Manager	$150.35	$ 130.95
Senior Engineer	$ 179.45	$160.05
Engineer	$140.65	$121.25

Security and Federation Services	Onsite	Offsite
Project Manager	$145.50	$ 126.10
Senior Engineer	$ 174.60	$155.20
Engineer	$135.80	$116.40

3. Onsite pricing shall be inclusive of all travel costs.

4. Billable hours shall be for actual work hours on authorized projects/tasks rounded to the quarter hour. Billable hours shall not include travel time.

5. Contractor shall provide detailed invoicing to include project title, number of hours worked onsite and/or offsite, role of individual(s) performing the work, and specific tasks performed.

6. The University may also request that these services be provided as a fixed-fee project, as would be mutually agreed to prior to services being rendered, with deliverables billed upon completion of milestones.

7. The University may also request that these services be provided as a monthly subscription service, as would be mutually agreed to prior to services being rendered, with deliverables determined by monthly service requirements.

8. The Purchasing Agency reserves the right to reject any assigned personnel at any time with or without cause. Contractor shall provide a suitable replacement within a timely manner.

9. Contractor has disclosed all potential fees. Additional charges will not be accepted.

COMMONWEALTH OF VIRGINIA AGENCY
CONTRACT FORM ADDENDUM TO CONTRACTOR'S FORM

AGENCY NAME: _____James Madison University_____

CONTRACTOR NAME: ASCENDING Inc

DATE: Dec. 11st, 2023

The Commonwealth and the Contractor are this day entering into a contract and, for their mutual convenience, the parties are using the standard form agreement provided by the Contractor. This addendum, duly executed by the parties, is attached to and hereby made a part of the contract. In the event that the Contractor enters into terms of use agreements or other agreements of understanding with University employees and students (whether electronic, click-through, verbal, or in writing), the terms and conditions of this Agreement shall prevail.

The Contractor represents and warrants that it is a(n) // individual proprietorship // association // partnership // corporation // governmental agency or authority authorized to do in Virginia the business provided for in this contract. **(Check the appropriate box.)**

Notwithstanding anything in the Contractor's form to which this Addendum is attached, the payments to be made by the Commonwealth for all goods, services and other deliverables under this contract shall not exceed Purchase Order Amounts; payments will be made only upon receipt of a proper invoice, detailing the goods/services provided and submitted to James Madison University. The total cumulative liability of the Commonwealth, its officers, employees and agents in connection with this contract or in connection with any goods, services, actions or omissions relating to the contract, shall not under any circumstance exceed payment of the above maximum purchase price plus liability for an additional amount equal to such maximum purchase price. In its performance under this contract, the Contractor acts and will act as an independent contractor, and not as an agent or employee of the Commonwealth.

The Contractor's form contract is, with the exceptions noted herein, acceptable to the Commonwealth. Nonetheless, because certain standard clauses that may appear in the Contractor's form agreement cannot be accepted by the Commonwealth, and in consideration of the convenience of using that form, and this form, without the necessity of specifically negotiating a separate contract document, the parties hereto specifically agree that, notwithstanding any provisions appearing in the attached Contractor's form contract, none of the following paragraphs **1 through 18** shall have any effect or be enforceable against the Commonwealth:

1. **Requiring the Commonwealth to maintain any type of insurance either for the Commonwealth's benefit or for the contractor's benefit;**

2. **Renewing or extending the agreement beyond the initial term or automatically continuing the contract period from term to term;**

3. **Requiring or stating that the terms of the attached Contractor's form agreement shall prevail over the terms of this addendum in the event of conflict;**

4. **Requiring the Commonwealth to defend, indemnify or to hold harmless the Contractor for any act or omission;**

5. **Imposing interest charges contrary to that specified by the _Code of Virginia_, §2.2-4347 through 2.2-4354, Prompt Payment;**

6. **Requiring the application of the law of any state other than Virginia in interpreting or enforcing the contract or requiring or permitting that any dispute under the contract be resolved in the courts of any state other than Virginia;**

7. **Requiring any total or partial compensation or payment for lost profit or liquidated damages by the Commonwealth if the contract is terminated before its ordinary period;**

8. **Requiring that the contract be "accepted" or endorsed by the home office or by any other officer subsequent to execution by an official of the Commonwealth before the contract is considered in effect;**
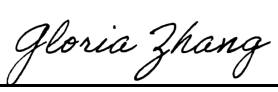
9.   **Delaying the acceptance of this contract or its effective date beyond the date of execution;**

10.   **Limiting or adding to the time period within which claims can be made or actions can be brought;**

11.   **Limiting the liability of the Contractor for property damage or personal injury. The parties agree that this clause does not extend the Contractor's liability beyond its own acts or those of its agents/employees;**

12.   **Permitting unilateral modification of this contract by the Contractor;**

13.   **Binding the Commonwealth to any arbitration or to the decision of any arbitration board, commission, panel or other entity;**

14.   **Obligating the Commonwealth to pay costs of collection or attorney's fees;**

15.   **Granting the Contractor a security interest in property of the Commonwealth;**

16.   **Bestowing any right or incurring any obligation that is beyond the duly granted authority of the undersigned agency representative to bestow or incur on behalf of the Commonwealth.**

17.   **Requiring the "confidentiality" of the agreement, in whole or part, without (i) invoking the protection of Section 2.2-4342F of the Code of Virginia in writing prior to signing the agreement (ii) identifying the data or other materials to be protected, and (iii) stating the reasons why protection is necessary.**

18.   **Requiring the Commonwealth to reimburse for travel and living expenses in excess of the agency policy located at** https://www.jmu.edu/financemanual/procedures/4215mie.shtml

This contract may be renewed annually by the Commonwealth after the expiration of the initial term under the terms and conditions of the original contract except as noted herein. If the Commonwealth elects to exercise the option to renew the contract for an additional renewal period, the contract price(s) for the succeeding renewal period shall not exceed the contract price(s) of the previous contract term increased/decreased by no more than the percentage increase/decrease of the "Other Services" category of the CPI-W of the Consumer Price Index of the United States Bureau of Labor Statistics for the latest twelve months for which statistics are available.

This contract has been reviewed by staff of the agency. Its substantive terms are appropriate to the needs of the agency and sufficient funds have been allocated for its performance by the agency. This contract is subject to appropriations by the Virginia General Assembly.

IN WITNESS WHEREOF, the parties have caused this contract to be duly executed, intending thereby to be legally bound.

AGENCY by _____   **CONTRACTOR by** _Gloria Zhang_____

Title _____Buyer Senior_____   **Title** VP, Operation _____

Printed Name ____Doug Chester____   **Printed Name** Gloria Zhang _____

October 2022

ORIGINAL

RFP# FDC-1175
Technical Proposal

James Madison University (JMU)

Information Technology Consulting Services

ASCENDING

AWS Certified Advanced Consulting Partner
& Public Sector Partner

Minority-Owned Small Business

2751 PROSPERITY AVENUE, SUITE 240, FAIRFAX, VA, 22031

+1 518 288-7586

TABLE OF CONTENTS

I. TRANSMITTAL LETTER

Dear Mr. Chester,

ASCENDING INC is thrilled to present our proposal in response to James Madison University's RFP# FDC-1175— Information Technology Consulting Services. As a fast-growing minority owned small business, ASCENDING specializes in providing cloud computing services, data & analytics, native cloud-based application development, DevOps, and Cloud infrastructure solutions.

ASCENDING has a long-standing history and extensive experience in providing top-notch consulting services to clients across different industries. As a cloud services contracting company, we have established ourselves as a trusted partner in delivering innovative solutions that help our clients to harness the power of cloud computing to further their business objectives.

Our impressive track record, extensive experience on similar projects, and the expertise of our talented team of engineers give us great confidence in collaborating with JMU to deliver exceptional solutions. We are eager to work closely with you to successfully implement this significant undertaking. If you have any inquiries or questions, please don't hesitate to let us know.

Thank you for considering our proposal. We look forward to the opportunity to contribute to the success of James Madison University.

Sincerely,

Gloria Zhang

Vice President of Operations

ASCENDING INC

REQUEST FOR PROPOSAL
RFP# FDC-1175

Issue Date: June 15, 2023

Title: Information Technology Consulting Services

Issuing Agency: Commonwealth of Virginia
James Madison University
Procurement Services MSC 5720
752 Ott Street, Wine Price Building
First Floor, Suite 1023
Harrisonburg, VA 22807

Period of Contract: From Date of Award Through One Year (Renewable)

Sealed Proposals Will Be Received Until 2:00 PM on August 3, 2023 for Furnishing the Services Described Herein.

SEALED PROPOSALS MAY BE MAILED, EXPRESS MAILED, OR HAND DELIVERED DIRECTLY TO THE ISSUING AGENCY SHOWN ABOVE.

All Inquiries For Information And Clarification Should Be Directed To: Doug Chester, Buyer Senior, Procurement Services, chestefd@jmu.edu; 540-568-4272; (Fax) 540-568-7935 by July 20, 2023 by 5:00 PM EST.
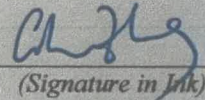
NOTE: THE SIGNED PROPOSAL AND ALL ATTACHMENTS SHALL BE RETURNED.
In compliance with this Request for Proposal and to all the conditions imposed herein, the undersigned offers and agrees to furnish the goods/services in accordance with the attached signed proposal or as mutually agreed upon by subsequent negotiation.

Name and Address of Firm:

ASCENDING, INC.

2751 Prosperity Avenue, Suite 240, Fairfax, VA, 22031-4397

By: _____ *(Signature in Ink)*

Name: Gloria Zhang *(Please Print)*

Date: August 11, 2023

Title: VP of Operations

Web Address: https://ascendingdc.com/

Phone: 518 288 7586

Email: Gloria.zhang@ascendingdc.com

Fax #: _____

ACKNOWLEDGE RECEIPT OF ADDENDUM: #1 ✓ #2 ✓ #3 ____ #4 ____ #5 ____ (please initial)

SMALL, WOMAN OR MINORITY OWNED BUSINESS:
(YES) • NO; *IF YES* ⇒ (SMALL;) WOMAN; (MINORITY) *IF MINORITY*: • AA; • HA; • AsA; • NW; • Micro

III. ASCENDNG's Expertise, Qualifications, and Experience

ASCENDING Inc, a dynamic small business headquartered in Virginia, was established in 2011 and incorporated in Virginia in 2018. ASCENDING excels in delivering comprehensive cloud computing solutions to both public and commercial clients. Our core expertise lies in an array of services, including Data and Analytics Solutions, Web Application Development, Digital Transformation strategies, and top-notch cloud consultation and migration services.

ASCENDING proudly holds the distinction of being an AWS Advanced Tier Partner, Microsoft Azure Implementing Partner, Snowflake Partner, and HubSpot Partner with distinguished proficiencies in Data & Analytics, AI/ML, and DevOps.

We have provided consulting services to public as well as commercial clients in various sectors, including higher education. In the higher education sector, ASCENDING partnered with GWU's Lab for Intelligent Networking and Computing (LINC) in an NSF I-Corp initiative, providing consulting services to both the program and Professor Tian Lan. The collaboration supported LINC's research team, resulting in enhanced investigations into cloud computing, cybersecurity, fairness theory, and wireless communications. This yielded strengthened research, successful solution implementation, and case test studies, backed by recognition from organizations like NSF, ONR, DARPA, ARO, USMA, CISCO, AT&T, and Meta. Further, our consultants partnered with the College Board's IT division, collaborating across operations and business units to enhance data quality, streamline processes, and optimize efficiencies. They adhere to standards, ensuring consistent enterprise data, minimizing risks, and aligning with objectives. Additionally, they work closely with the BigFuture team, contributing to data management and services, engaging in data analysis, governance, and supporting strategic initiatives. They assess data flow, collaborate with internal and external partners, and drive integration and testing, all furthering the College Board's mission.

Our historical achievements involving the specified technologies mentioned in the RFP encompass the following: execution of Okta's identity and access management solutions for notable clients such as GoDaddy and George Washington University; transfer of on-premises applications to Azure and deployment of M365 for clients including GoDaddy and LoadOTR; proficient handling of Oracle Core Technologies for clients like Overture; conceptualization and execution of Data Analytics Platforms for numerous clients, including Canadian Animal Surveillance System (CAHSS), FINRA, and GoDaddy; and with regard to Security and Federation Services, security forms an integral part of nearly all our undertaken projects.

Furthermore, ASCENDING has successfully provided (and in most cases continues to provide) consulting services to entities such as FINRA, The World Bank, Abbott Laboratories, Kaiser Permanente, Metropolitan Washington Airport Authority, Maryland Health Benefit Exchange, among others. We were recently awarded an indefinite delivery/indefinite quantity (IDIQ) contract by the Baltimore City Public Schools to provide IT consultants on an as-needed basis.

ASCENDING's project management approach involves comprehensive onboarding, needs assessment, and collaborative engagement with JMU's IT department. We conduct thorough technology research, providing detailed recommendations and hands-on support during project phases. Knowledge transfer, transparent reporting, and continuous improvement are key tenets. Our role extends to technical advising, empowering JMU's IT staff, and ensuring successful project execution. Through task ownership and expertise, ASCENDING aims to be a valuable partner in advancing JMU's IT initiatives.

.

IV. OUR RESPONSE TO STATEMENT OF NEEDS (SECTION IV)

1. **Describe your corporate competencies/experience providing IT consulting services for one or more of the technologies listed below.**

Oracle Core Technologies

ASCENDING has demonstrated expertise in Oracle Core Technologies that can align with JMU's needs.

- Oracle Database: ASCENDING has extensive experience in implementing and managing Oracle databases for large-scale organizations like GoDaddy and Overture. We have successfully designed and built data warehouses and data lakes using Oracle databases, ensuring data integrity, security, and high performance. With this expertise, ASCENDING can support JMU in database administration, data modeling, and optimization to enhance the University's data management capabilities.
- Oracle Cloud Infrastructure (OCI): ASCENDING has demonstrated competence in deploying and managing applications on Oracle Cloud Infrastructure. This cloud platform offers a wide range of services for computing, storage, and networking, which can be leveraged to support JMU's technology infrastructure needs. ASCENDING's experience in migrating on-premises applications to OCI and integrating with other cloud services positions us well to assist JMU in cloud adoption and migration strategies.
- Oracle WebLogic Server: As part of their past projects, ASCENDING has worked with application servers like Oracle WebLogic to host and manage web applications for clients such as GoDaddy and Overture. We have implemented scalable and reliable architectures to ensure the smooth functioning of web applications. This expertise can be valuable for JMU's web application development and hosting requirements.
- Oracle Integration Cloud: ASCENDING's knowledge in cloud-based integration platforms, including Oracle Integration Cloud, enables us to facilitate seamless data integration between various systems. This expertise can be valuable for JMU in connecting disparate applications and data sources, allowing for efficient data flow and real-time data access.

With this range of expertise in Oracle Core Technologies, ASCENDING is well-equipped to serve as a technology advisor and consultant for JMU. We can support the University's technology projects, provide recommendations for technology solutions, and offer technical expertise to enhance JMU IT staff's capabilities. The University can benefit from ASCENDING's extensive experience in implementing and managing Oracle technologies, ensuring the successful execution of their technology initiatives.

Microsoft Azure and M365

ASCENDING has extensive experience in working with Microsoft Azure and Microsoft 365 (M365), making us an ideal technology partner for JMU's requirements.

- Microsoft Azure Cloud Services: ASCENDING has a proven track record in deploying and managing applications on the Microsoft Azure cloud platform. We have successfully migrated on-premises applications to Azure and have implemented scalable and secure cloud architectures for clients like GoDaddy and LoadOTR. With our expertise in Azure Virtual Machines, Azure App Service, Azure Storage, and Azure Networking, ASCENDING can help JMU adopt cloud solutions and optimize their technology infrastructure.
- Azure Data Services: ASCENDING has implemented data solutions using Azure Data Services such as Azure SQL Database, Azure Data Lake Storage, and Azure Data Factory. We have built data warehouses and data lakes to handle large volumes of data and enable data-driven insights for clients like Overture and ZCoder. JMU can benefit from this expertise to enhance their data management capabilities and implement advanced analytics and reporting solutions.
- Azure Identity and Security: ASCENDING has implemented identity and access management solutions using Azure Active Directory, ensuring secure access to applications and data for clients like George Washington University. We have also implemented data encryption and other security measures to protect sensitive data. JMU can rely on ASCENDING's expertise to strengthen their security posture and ensure compliance with data protection regulations.
- Microsoft 365 Collaboration Suite: ASCENDING has worked extensively with the M365 collaboration suite, including applications like Microsoft Teams, SharePoint, and OneDrive. We have implemented document management and collaboration solutions for clients like GoDaddy and George Washington University. JMU can leverage ASCENDING's expertise to improve communication and collaboration among faculty, staff, and students.
- Azure DevOps and Automation: ASCENDING has experience in implementing DevOps practices using Azure DevOps, enabling continuous integration and continuous deployment for clients like GoDaddy and Overture. We have automated infrastructure provisioning and application deployment, resulting in improved efficiency and reduced time-to-market. JMU can benefit from ASCENDING's expertise to streamline their development and deployment processes and improve software delivery.

In conclusion, ASCENDING's expertise in Microsoft Azure and M365 positions us as a highly capable technology partner for JMU. Our ability to provide technical advice, support technology projects, and propose solutions aligned with JMU's requirements makes them an invaluable resource for the university. JMU can confidently collaborate with ASCENDING to enhance their technology capabilities and achieve their objectives effectively.

Okta

ASCENDING has a solid track record in working with Okta, showcasing proficiency in identity and access management solutions, which aligns well with JMU's requirements.

- Okta Identity and Access Management: ASCENDING has successfully implemented Okta's identity and access management solutions for clients like GoDaddy and George Washington University. We have expertise in setting up Single Sign-On (SSO), Multi-Factor Authentication (MFA), and user provisioning, enhancing security and user experience. JMU can rely on ASCENDING's capabilities to implement Okta for seamless and secure access to applications and data.
- User Lifecycle Management: ASCENDING has demonstrated the ability to manage user lifecycles effectively using Okta. We have integrated Okta with various applications and systems, ensuring that users have the right access permissions throughout their journey. JMU can benefit from ASCENDING's expertise in user provisioning, deprovisioning, and access management to streamline user management processes.
- Security and Compliance: ASCENDING has implemented security measures using Okta to ensure compliance with industry standards and data protection regulations. We have enforced strong authentication methods and implemented policies to safeguard sensitive data. JMU can trust ASCENDING to implement Okta with a strong focus on security, helping the university maintain a secure and compliant IT environment.
- Integration and Automation: ASCENDING's experience in integrating Okta with various applications and systems is evident in our projects for clients like LoadOTR and Overture. We have automated user provisioning and access management workflows, reducing manual effort and improving efficiency. JMU can leverage ASCENDING's expertise to integrate Okta with their existing systems and automate user-related processes.

In summary, ASCENDING's proficiency in implementing Okta aligns well with JMU's requirements for identity and access management. Our past project experience and technical expertise make us a suitable partner for JMU to enhance their security, streamline user management, and ensure compliance with Okta's robust identity solutions.

Data Analytics/Visualization/Warehouse/Lake

Drawing from ASCENDING's proven success stories with various clients, it's evident that we possess the technical prowess to fulfill JMU's needs for Data Analytics, Visualization, Warehouse, and Lake solutions.

- Data Analytics: ASCENDING's portfolio showcases adeptness in deciphering intricate datasets, a skill perfectly aligned with JMU's requirements. Our collaborations with clients such as GoDaddy and LoadOTR demonstrate our capability to extract actionable insights from vast data landscapes, an invaluable asset for JMU's operational and strategic decision-making.
- Data Visualization: With involvement in projects like Overture and ZCoder, ASCENDING has displayed a knack for transforming complex data into visually appealing dashboards. Our proficiency with tools like Tableau and Power BI enables us to empower JMU with

compelling visualizations that offer a clear understanding of data trends and correlations.

- Data Warehouse and Lake: ASCENDING's successful deployments of data warehouses and lakes for GoDaddy and LoadOTR underscore our proficiency in managing structured, unstructured, and semi-structured data. Utilizing technologies like AWS Glue, Snowflake, and AWS LakeFormation, ASCENDING is equipped to design and implement a centralized repository that ensures efficient data storage and retrieval for JMU.
- ETL Processes: ASCENDING's track record in implementing seamless ETL processes, showcased in our work with GoDaddy and LoadOTR, establishes capability in handling data extraction, transformation, and loading tasks. For JMU, ASCENDING's expertise ensures smooth integration and processing of diverse data sources while maintaining data quality and accuracy.
- Data Governance and Security: ASCENDING's commitment to data security and governance, as seen in our projects with GoDaddy and Overture, positions us well to address JMU's concerns. Their establishment of robust data governance frameworks, access controls, and compliance measures will safeguard JMU's sensitive information and uphold regulatory standards.

In essence, ASCENDING's acumen in Data Analytics, Visualization, Warehousing, and Data Lake solutions aligns seamlessly with JMU's needs. Our history of successful projects and technical proficiency makes us a dependable partner for JMU to achieve data-driven insights, enhanced visualization capabilities, and well-organized data storage, all while maintaining stringent data governance.

Security and Federation Services

Drawing from JMU's requisites and ASCENDING's accomplished project involvement with numerous clients, it is evident that ASCENDING excels in delivering comprehensive Security and Federation Services.

- Identity and Access Management (IAM): ASCENDING's extensive work with GoDaddy and LoadOTR signifies their adeptness in devising IAM solutions. Our skill set encompasses creating intricate access controls, implementing role-based authentication, and deploying multi-factor authentication (MFA), mirroring JMU's emphasis on safeguarding user access.
- Single Sign-On (SSO): ASCENDING's contributions to ZCoder and LoadOTR spotlight their proficiency in SSO implementation. Our mastery over tools like Okta, AWS Cognito, and Azure Active Directory enables us to orchestrate seamless, secure user journeys across diverse applications, streamlining access management while enhancing overall security.
- Federation Services: ASCENDING's involvement with GoDaddy and LoadOTR provides testament to our competence in configuring federation services. Our grasp of SAML and OAuth protocols positions JMU to facilitate secure cross-domain authentication and authorization, fostering a cohesive user experience amid interconnected systems.
- Data Protection and Encryption: ASCENDING's unwavering commitment to data security, demonstrated through collaborations with GoDaddy and Overture, reflects our prowess in fortifying data protection. Our proficiency in encrypting data both at rest and in transit,

utilizing technologies like AWS Key Management Service and Azure Encryption, aligns perfectly with JMU's stringent data security needs.

- Active Directory Integration: ASCENDING's involvement with George Washington University underscores acumen in integrating systems with Active Directory environments. This capability is pivotal for JMU to ensure seamless synchronization of user accounts, heightening user management efficiency and bolstering overall security.
- Auditing and Compliance: ASCENDING's accomplished track record with Overture and GoDaddy showcases capability in setting up robust auditing mechanisms and compliance frameworks. Our capacity to implement monitoring tools that track user activity and maintain detailed audit logs equips JMU to meet regulatory obligations and uphold a high standard of accountability.

In essence, ASCENDING's proven expertise in Security and Federation Services positions us as a dependable partner to address JMU's requisites. Our demonstrated proficiency in IAM, SSO, federation services, data protection, and compliance illustrates their capacity to enhance security while ensuring seamless user experiences across JMU's technology ecosystem.

2. **Describe the approach and methodology that will be used to provide IT consulting services to James Madison University. Include how your firm would manage the scope of projects.**

Our Approach and Methodology

Project Onboarding and Needs Assessment:

To kickstart our collaboration, we will initiate a comprehensive onboarding process with JMU's IT department. This will allow us to gain a deep understanding of your ongoing projects, technology needs, and upcoming challenges. Concurrently, we will conduct a thorough needs assessment to pinpoint specific areas where ASCENDING's technology expertise can provide substantial value. This initial phase will lay the groundwork for a productive partnership.

Collaborative Engagement:

Effective communication is essential for a successful partnership. To foster collaboration, we will establish regular communication channels with the University's IT staff and project managers. This open line of communication will enable us to stay informed about project developments and identify potential areas where technology advisory could be pivotal. We will actively participate in meetings and discussions, ensuring that we are well-informed and equipped to contribute effectively.

Technology Research and Analysis:

Informed decision-making is at the core of our approach. Our team will dedicate time to in-depth research on relevant technologies, industry best practices, and emerging trends. This research will serve as the foundation for the recommendations we provide. We will meticulously analyze the suitability and feasibility of various technology options for each specific project, ensuring that our suggestions are grounded in a thorough understanding of the landscape.

Solution Proposal and Recommendations:

Based on our research, we will compile well-structured reports that distill research findings, available options, and actionable recommendations tailored to the unique requirements of each project. Our approach will be comprehensive, presenting the pros and cons of different solutions. We will consider factors such as budget, scalability, compatibility with existing systems, and alignment with future needs. This comprehensive analysis will empower the University to make informed choices.

Technology Advisory Services:

Our role extends beyond providing recommendations. We are committed to serving as dedicated technology advisors to the University. This entails offering insights, guidance, and expertise to address any technology-related queries or challenges that may arise. We will work closely with IT staff and stakeholders, collaborating to propose efficient and effective solutions to complex problems. Together, we will navigate the technological landscape with confidence.

Resourceful Technical Support:

We recognize the importance of practical support. During critical stages of projects, we will serve as a reliable resource for research, implementation, and troubleshooting of technical tasks. Our hands-on assistance will ensure that projects progress smoothly and efficiently. By actively engaging in these operational aspects, we aim to enhance project execution and overall outcomes.

Knowledge Transfer and Capacity Building:

Empowerment through knowledge transfer is a priority for us. We will organize knowledge transfer sessions, workshops, and training programs designed to share our expertise and upskill the University's IT staff. Our goal is to equip JMU to independently handle certain technical tasks in the future, fostering self-sufficiency and long-term growth.

Transparent Reporting and Documentation:

Transparency is paramount in our partnership. We are committed to maintaining open and transparent reporting practices. This will involve providing regular progress updates and status reports to the University. Additionally, we will diligently document all technology-related activities, decisions, and findings. This documentation will serve as a valuable resource for future reference and planning.

Continuous Improvement and Feedback:

We value your input and are dedicated to continuous improvement. We encourage open feedback from the University's IT staff to identify areas where we can enhance ASCENDING's services. This feedback loop will be crucial in refining our approach and methodology over time, ensuring that our partnership evolves to meet your evolving needs.

Task Ownership and Expert Representation:

With each assigned task, we assume full ownership and responsibility. Our team is committed to delivering the highest level of expertise and professionalism in every representation. As functional consultants, we embody deep expertise in the tasks and functions delegated by the University, working tirelessly to meet and exceed expectations.

By utilizing the above approach and methodology, ASCENDING can effectively serve as a technology expert and advisor for James Madison University Information Technology. This strategy emphasizes collaboration, research, knowledge sharing, and continuous improvement, enabling ASCENDING to provide valuable support and contribute significantly to the success of the University's special projects and IT initiatives.

3. **Provide the names, qualifications, and experience of personnel to be assigned to James Madison University. Designate who would be assigned as the primary contact for the account.**

ASCENDING is proposing the following consultants to be assigned to James Madison University. Edrees Saljuki, our senior project manager, will be the primary contact for the account. Resumes for the assigned personnel are included in Annex 1.

Data Analytics/Visualization/Warehouse/Lake

EDREES SALJUKI, SENIOR PROJECT MANAGER

Tech-savvy, agile-SAFe program manager with 15+ years of operations/projects management in IT, Finance and Energy sectors. Exceptional project management skills --working closely with cross-functional teams and partners across business and technology to guide data-driven decision-making and strategy, for large IT and non-IT projects. Excellent verbal and written communication skills with client-facing and executive-level presentations.

CELESTE SHAO, SENIOR DATA WAREHOUSE SPECIALIST

Ms. Shao has a total of 7 years' experience in Cloud. She has strong hands-on experience in the implementation of AWS DataLake projects with ASCENDING's clients. She worked as Senior Data Analyst in GoDaddy Revenue API project, where she implemented DataLake on AWS and ingested a variety of data from upstream applications. She also worked as a Big Data Analyst in Information Builders Inc project, where she migrated huge chunks of data to the cloud & Performed the OLAP analytics.

YUAN ZHAO, LEAD DATA ENGINEER/ SCIENTIST

Yuan Zhao, a data enthusiast with 12+ years of experience, is a strong fit for James Madison University's Data Analytics/Visualization/Warehouse/Lake project. Co-founder of Intellinum Analytics, Yuan has excelled in digital marketing, finance, telco, and healthcare industries. His expertise in AWS, Spark, Python, and machine learning, combined with successful project leadership, make him an invaluable asset for driving data-driven innovations and optimizations. Yuan's profound insights from complex data models and geospatial analysis align perfectly with JMU's pursuit of technological advancement and data-driven decision-making.

Microsoft Azure and MS365

JIM ADAMS, PROGRAM MANAGER - SR

As a Program Manager with a strong technical background in both software and hardware, Mr. Adams has 25+ years of hands-on experience in organization management, technical solutions and management of Information Technologies projects. He has managed multiple IT projects with budgets of up to $22 million with expertise in Strategic Planning, Risk Assessment Analysis and BPR. Mr. Adams also has experience in managing a number of projects for state and federal government agencies such as Maryland Department of Transportation, Maryland Public Service

Commission, and some educational institutions like Baltimore County Public School and University of Maryland.

HARIS SHARIF AZURE CLOUD ENGINEER - SR

Highly skilled Azure Cloud Engineer with over 8 years of experience and a PhD in Information Technology and a master's in computer science. Expertise in cloud architecture planning, deployment, and management, coupled with a proven ability to transform business requirements into efficient IT solutions. Proven record in streamlining operations and enhancing system efficiency for large-scale companies like the FDA, Ctel, and Select Computing Inc.

XUE KEMICROSOFT 365 ADMINISTRATOR

BS degree in Computer Science and PhD degree in Mathematics. Mr. Ke is a self-motivated and interest-driven problem solver who has developed diverse applications demanded by the automation necessities of research projects. Mr. Ke is experienced with most of the MS tools including Microsoft Azure, Microsoft Exchange, Microsoft Teams and Microsoft SharePoint and has used & managed them in his daily work. Mr. Ke also played a role as the bridge between IT team and business owners to transfer the business requirements into functional requirements then designed the system's infrastructure to ensure productive and consistent application life cycle enhancement and adjustments.

Okta

RAHUL SINGH, OKTA PROJECT MANAGER AND CONSULTANT

Results-driven and highly skilled Engineer with extensive experience in Okta engineering, Client Consultation and Project Management. Proven ability to architect, implement, and maintain IAM solutions, ensuring robust security measures and privileged access management. Possesses a deep understanding of SSO/Federated authentication methods, SCIM, JIT provisioning, and on-premises application integration. Excels in fast-paced, distributed team environments, multitasking, and delivering innovative solutions to meet clients' unique needs.

THOMAS BEN, OKTA SOFTWARE ENGINEER

Innovative Engineer with 8+ years of experience in application design, development, testing, and deployment. Highly experienced in writing codes and algorithms as well as building complex neural networks through various programming languages. Constantly eager to grow and be part of an innovative and creative team that develops technology platforms and products for various components.

KELVIN YU, OKTA SOFTWARE ENGINEER

BS degree in Software Engineering, MS degree in Data Science. Mr. Yu has a total of 5 years' IT experience. He has worked on Identity Access Management, SSO, web development, integration, and data validation in the past with ASCENDING's clients using Python, AWS, Azure and big data technologies. He has extensive DevSecOps experience on AWS from 2018 such as

EC2, ELB/ALB, ECS, SQS, AutoScaling, CloudFormation, CloudFront, Lambda and IAM etc. He also has been working with Microsoft Azure for years.

Oracle Core Technologies

AKINBOBOLA VICTOR IBOSIOLA, PROJECT MANAGER

Possesses a thorough knowledge of project management and program planning principles and practices, including the Project Management Book of Knowledge (PMBOK) and methodologies. In addition, has a master's degree in project management, as well as at least 10 years of experience as a project manager. Moreover, has a deep understanding of the processes, methods, and techniques used to analyze and evaluate business operations, and the principles and practices of planning, developing, implementing, and supporting computer information systems and programs.

RENE COOPER, ORACLE DATABASE DEVELOPER

Rene Cooper is an accomplished Oracle Database Developer with expertise in cloud computing and database management. Her B.Sc. in Computer Science and multiple certifications demonstrate her strong foundation in data analytics and technology. Currently at CGI GROUP, INC, Rene supports major projects from development to production, ensuring data availability and protection on IBM AIX. Her proficiency in Oracle, MySQL, SQL Server, and cloud platforms like AWS and Azure makes her a valuable asset. Rene excels in Oracle RAC, Standby Database, Clustering, and Data Guard setup, with experience in capacity planning and disaster recovery. Her technical skills include Oracle Enterprise Manager, SQL*Plus, RMAN, and remote tools like Cisco VPN. Previously at LabCorp, she provided 24x7 support, conducted successful database migrations, and implemented standby databases using Data Guard features.

YI MU, ORACLE INFRASTRUCTURE ARCHITECT

Mr. Mu has 13 years of professional experience in IT with a strong knowledge of Software Design & Implementation. He is an experienced IT software developer with expertise in Oracle Core Apps (Databases/Data Warehouses/ERPs), AWS, Azure, Java, Python and JavaScript, as well as background with DevOps, testing and data modeling. He has Strong experience of Software Development Life Cycle (SDLC), extensive background in team collaboration for software to meet quality standards and solutions.

Security and Federation Services

JOHN BOYER, IT PROJECT MANAGER

Highly motivated and results-driven IT Professional with 11 years of diverse experience in leading large-scale IT projects for 60+ professional organizations. Recognized for exceptional project management skills, successfully overseeing projects from inception to implementation while achieving a 100% client satisfaction record. Proven track record of maintaining & upgrading network systems, analyzing & mitigating security risks, troubleshooting technical issues and providing high level customer service. Expert in formulating and implementing

business continuity plans that helped clients respond to major disruptions & minimize downtime. Adept at innovation-centric problem solving with the strategic vision to customize technical support in line with the business goals. Exceptional client/vendor management skills with the ability to tailor communication to all levels of the hierarchy.

JORDAN XIE, DEVSECOPS ENGINEER

With over 5 years of IT experience, Jordan possesses a robust background in DevSecOps, primarily focused on AWS cloud environments, backed by a Certified AWS Associate Developer credential. With a strong foundation in application development and data project support, Jordan has played a pivotal role in numerous initiatives, demonstrating expertise in key AWS services including EC2, S3, RDS, Glue, Lake Formation, Athena, and Lambda. Since 2017, Jordan has been actively engaged in DevOps practices within the AWS ecosystem, showcasing proficiency in services such as EC2, ELB/ALB, ECS, SQS, AutoScaling, and CloudFormation. Bolstering this skill set is 5 years of hands-on experience in Python coding.

VINH PHAM, CLOUD AND SECURITY ENGINEER

Dedicated Cloud and Security Engineer with extensive experience in delivering AWS solutions using DevOps methodologies. Experience developing solutions to automate and scale infrastructure, as well as improve processes to enhance workflow for both the team and client. Skilled in building relationships with colleagues and clients and passionate about leveraging technology to create scalable and reliable solutions.

4. **Describe the ability to provide continuity of consultants throughout the duration of a project.**

Providing continuity of consultants throughout the duration of a project refers to maintaining a consistent team of consultants or experts who are involved in the project from its inception to completion. This approach aims to ensure that the same individuals with in-depth knowledge and experience are available throughout the project's lifecycle, fostering a smoother and more effective execution. Here are some key aspects of the ability to provide continuity of consultants:

Long-Term Engagement:

Maintaining continuity requires a commitment to long-term engagement with the consultants. Rather than frequently changing team members, the project stakeholders, such as the client or the organization hiring the consultants, prioritize working with the same individuals for an extended period.

Clear Project Scope and Timeline:

At the beginning of the project, the scope, objectives, and expected timeline should be well-defined and communicated to the consultants. This clarity allows the consultants to plan their availability and allocation of resources accordingly.

Resource Planning and Management:

Effective resource planning is essential to ensure that the right consultants are available when needed. This involves aligning the consultants' expertise and availability with specific project phases, milestones, or tasks.

Contractual Agreements:

The contracts or agreements with the consultants should outline the expected duration of their involvement in the project. This clarity helps both parties manage expectations and ensures commitment to the project's continuity.

Mitigating Risks of Staff Turnover:

While striving for continuity, it's crucial to be aware of the potential risks of staff turnover. Develop contingency plans to address the possibility of key consultants departing unexpectedly, ensuring that the project can progress without major disruptions.

Knowledge Sharing and Documentation:

Throughout the project, encourage knowledge sharing among consultants to create redundancy in expertise. Proper documentation of project decisions, processes, and solutions aids in transferring knowledge among team members and prepares for potential changes in the team.

Strong Project Management:

A robust project management framework is vital to ensure that tasks are well-organized, timelines are adhered to, and team members remain informed about project progress. Efficient project management contributes to maintaining continuity and minimizing delays.

Effective Communication:

Establish open and clear lines of communication within the project team, including consultants, project managers, and stakeholders. This fosters a collaborative environment and ensures that everyone is aware of project developments and potential challenges.

Client Relationship Management:

Maintaining a positive and trustful relationship between the client and the consultants enhances the likelihood of continuity. Satisfied clients are more likely to extend contracts and retain the same consultants for future projects.

Performance Evaluation and Feedback:

Periodically assess the performance of the consultants and provide constructive feedback. This process helps identify areas for improvement, address any concerns, and foster a culture of continuous growth.

By prioritizing continuity of consultants throughout the duration of a project, organizations can benefit from consistent expertise, better team dynamics, improved efficiency, and enhanced client satisfaction. It is an investment that can lead to successful project outcomes and long-term partnerships between consultants and clients.

5. **Describe IT consulting services available from your firm. Examples of services may include, but are not limited to, the following:**
   a. Implementation
   b. Development
   c. Project Management
   d. Architecture and Design
   e. Capacity Planning
   f. Installation and Configuration
   g. Performance and Scalability
   h. Conversion
   i. Monitoring, Administration and Upgrades
   j. Training Development
   k. Operations Metrics

ASCENDING offers a comprehensive suite of IT consulting services tailored to meet the diverse needs of institutions like JMU by leveraging our extensive project experience with renowned organizations. ASCENDING's expertise spans across various crucial aspects of IT, enabling seamless implementations and holistic solutions.

- Implementation is a cornerstone of ASCENDING's services, encompassing the deployment of cutting-edge technologies to optimize operations. The company has a proven track record of successfully implementing solutions for a variety of industries, including higher education, e-commerce, and telecommunications. Our experience with GoDaddy and George Washington University underscores the ability to deliver robust implementations that align with client objectives.
- Development is another strength of ASCENDING, evident from our collaboration with ZCoder in building a blockchain-based trading platform. The company's skilled developers and engineers design custom applications and solutions that cater to specific client needs, ensuring alignment with organizational goals and industry best practices.
- Project Management is integral to ASCENDING's approach, ensuring projects are executed efficiently, on time, and within budget. Our experience working with diverse clients, such as LoadOTR and Overture, showcases our proficiency in handling complex projects and orchestrating cross-functional teams.
- Architecture and Design is a critical aspect of IT solutions, and ASCENDING excels in designing scalable, secure, and efficient architectures. This expertise is evident from our work with George Washington University, where we developed a sophisticated AWS monitoring and alert system.
- Capacity Planning is crucial to ensure systems can handle growing demands. ASCENDING's experience with LoadOTR highlights our ability to architect solutions that can accommodate fluctuating workloads while maintaining high performance and user experience.

- Installation and Configuration is seamless with ASCENDING's skilled professionals who meticulously set up and configure systems. This proficiency is demonstrated through the work with GoDaddy, where we designed and implemented an AWS-based Revenue API solution.
- Performance and Scalability are key considerations for any IT solution. ASCENDING's collaboration with Overture underscores our capability to build scalable data warehouses and solutions that perform consistently, even as data volume grows.
- Conversion, a critical phase in technology transitions, is another area where ASCENDING excels. Our successful implementations, like the one with George Washington University, underscore the ability to smoothly migrate systems while minimizing disruptions.
- Monitoring, Administration, and Upgrades are paramount for sustained performance. ASCENDING's ongoing support for projects such as LoadOTR and Zcoder demonstrates our commitment to maintaining systems at optimal performance levels.
- Training Development is a crucial component for IT solutions to thrive. ASCENDING's ability to develop tailored training programs, as showcased with the work for GoDaddy, ensures that organizations can effectively manage and utilize the implemented technologies.
- Operations Metrics are key to measuring the success of IT solutions. ASCENDING's collaboration with Overture highlights our capability to design solutions that capture relevant metrics for informed decision-making and continuous improvement.

Overall, ASCENDING's array of services spanning implementation, development, project management, architecture and design, capacity planning, installation and configuration, performance and scalability, conversion, monitoring, administration and upgrades, training development, and operations metrics, position us as a reliable partner to meet JMU's IT consulting needs. Our diverse portfolio of successful projects stands as a testament to our expertise in providing holistic and tailored solutions that drive organizational success.

6. **Describe training options and specify associated costs in *Section X. Pricing Schedule*. Include a catalog of training offerings and differentiation between technical staff and end-user training.**

We offer a range of training options designed to meet the diverse needs of your organization. Our training programs are carefully crafted to provide targeted instruction for both technical staff and end-users, ensuring that each group gains the skills and knowledge necessary to maximize their effectiveness and proficiency.

Training Options:

Technical Staff Training:

Our technical staff training is designed to equip your IT professionals with the expertise required to manage, maintain, and optimize the technologies implemented within your organization. This training covers a variety of advanced topics, including:

- System Configuration and Administration
- Performance Tuning and Optimization
- Security and Compliance Best Practices
- Integration and Interoperability Solutions
- Troubleshooting and Diagnostics

The technical staff training is delivered through comprehensive workshops, interactive labs, and hands-on simulations. This enables your IT team to confidently address complex technical challenges and effectively support the technology infrastructure.

End-User Training:

Our end-user training is tailored to empower non-technical staff with the practical skills needed to make the most of the implemented solutions. This training focuses on:

- System Navigation and User Interface Familiarization
- Task Execution and Workflow Management
- Data Entry and Retrieval Techniques
- Collaboration Tools and Communication Features
- Basic Troubleshooting and Issue Resolution

The end-user training is designed to enhance user adoption and productivity. By equipping your employees with the knowledge to navigate technology effortlessly, we ensure a smooth transition to the new systems and tools.

Our goal is to provide comprehensive training solutions that cater to the unique needs of each group. By offering specialized instruction, we ensure that your entire workforce, from technical experts to end-users, is well-equipped to leverage the technology effectively and contribute to your organization's success.

Delivery of Training Courses:

We understand that effective training delivery is crucial for successful knowledge transfer. Our training courses will be delivered through a combination of methods to accommodate various learning preferences:

In-Person Workshops:

We offer in-person workshops for both technical staff and end-users. These workshops provide interactive sessions where participants can engage with instructors, ask questions, and participate in hands-on activities. In-person training fosters real-time interactions and immediate clarification of doubts.

Virtual Training Sessions:

Virtual training sessions will be conducted through webinars or online platforms. These sessions offer the flexibility for participants to join from different locations. They include live presentations, demonstrations, and interactive Q&A segments, ensuring effective learning and engagement.

Self-Paced Online Modules:

For added flexibility, we provide self-paced online modules that participants can access at their convenience. These modules include instructional videos, step-by-step guides, and quizzes to reinforce learning. This option accommodates different schedules and allows participants to learn at their own pace.

Customized Training Plans:

We understand that every organization has unique requirements. Therefore, we offer customized training plans that can combine different delivery methods based on your preferences and needs. This tailored approach ensures that your team receives training in the most effective and convenient way.

Our training courses are designed to be engaging, informative, and practical. By offering a variety of delivery methods, we aim to accommodate diverse learning styles and ensure that your technical staff and end-users gain the knowledge and skills needed to succeed in utilizing the implemented technology. If you require further details or have specific preferences, please don't hesitate to contact us for a personalized discussion.

7. **Provide examples of recent projects at higher education institutions comparable to James Madison University. Describe the project, time frame, end result, etc. (Yi)**

The George Washington University

One notable project that parallels JMU's requirements and showcases ASCENDING's capabilities involves George Washington University (GWU) Lab for Intelligent Networking and Computing (LINC). ASCENDING developed an AWS monitoring and alert system to oversee servers within GWU's Electrical and Computing department. This project aligns with JMU's need for technology expertise and support on special projects.

The project centered around building a robust data lake foundation on AWS to ingest system logs. Leveraging AWS Glue, ASCENDING cataloged and structured the data, addressing issues of data noise and format discrepancies. The outcome resonates with JMU's objective of seamless integration with various data sets, as ASCENDING's solution facilitated the effective ingestion and transformation of data.

ASCENDING's advanced capabilities come to the fore as LINC harnessed AI algorithms to analyze the data lake's logs. ASCENDING's expertise in predictive analytics and AI, akin to JMU's interest in data analytics and visualization, enabled the implementation of an AI model to predict system outages and issues across numerous servers. This predictive analytics component is akin to the "Predictive Analytics" aspect highlighted in JMU's requirements.

The deployment of this solution in a production environment for over three years exemplifies ASCENDING's reliability in delivering enduring solutions, reflecting their potential to cater to JMU's ongoing technology needs. Moreover, the "Support" and "Maintenance" aspects of JMU's requisites are evident in the ongoing on-demand support that ASCENDING provides to ensure the system's consistent performance.

The GWU project exemplifies ASCENDING's capacity to collaborate with higher education institutions, aligning with JMU's vision. The development of the AWS monitoring, and alert system showcases ASCENDING's expertise in data analytics, AI implementation, and ongoing support, resonating well with JMU's multifaceted requirements.

The College Board

The College Board, a not-for-profit membership organization committed to advancing educational excellence and equity, manages a sophisticated array of data systems, feeds, and reports that underpin diverse student support, educator resources, and program offerings.

In partnership with the College Board's Information Technology division and in collaboration with Operations and key business units, our consultants play an integral role. They scrutinize processes, conceive solutions, and execute strategies that enhance data quality and streamline operations. Adhering to established standards and protocols, these consultants drive

consistency across enterprise data, minimize risks, and optimize operational efficiencies in alignment with organizational objectives.

Furthermore, our consultants are deeply engaged in another pivotal initiative. Working closely with the BigFuture team Architects and Leads, as well as essential business stakeholders, they contribute significantly to enhancing the organization's data management and services. These consultants actively engage in all facets of information and data analysis and governance, playing a crucial role in supporting strategic initiatives and projects. They assess data flow, origin, and reporting, collaborating extensively with both internal and external partners to design comprehensive business data requirements. Alongside this, they participate in functional and regression testing, support user acceptance testing, and facilitate seamless product and process integration, ultimately driving forward the College Board's mission.

8. **Describe the ability to provide for a thorough transfer of knowledge to JMU IT on any given project.**

Our commitment to knowledge transfer is a fundamental aspect of our service delivery, and we prioritize empowering your team with the skills and insights necessary to seamlessly manage and maintain implemented solutions. Our approach to knowledge transfer is a holistic and collaborative effort. We are dedicated to equipping your team with the expertise, resources, and ongoing support you need to manage the solutions confidently and independently. Here are a few examples of how we implement knowledge transfer.

Structured Knowledge Transfer Sessions:

Our approach begins with structured knowledge transfer sessions. These sessions are designed to effectively communicate the technical details, best practices, and intricacies of the implemented technology. Our experts will engage with your JMU IT team in interactive sessions, workshops, and hands-on demonstrations, ensuring that every aspect of the solution is thoroughly understood.

Tailored Training Programs:

We understand that every project is unique, and so are the learning needs of your IT team. Our training programs are customized to address the specific requirements of each project. We provide a range of training options, from in-depth technical training for your IT professionals to user-focused training for end-users. This tailored approach ensures that each member of your team receives knowledge that directly aligns with their roles and responsibilities.

Comprehensive Documentation:

To supplement the knowledge transfer process, we provide comprehensive documentation that outlines key concepts, configurations, procedures, and troubleshooting guidelines. This documentation serves as a valuable resource for your IT team, enabling them to reference critical information long after the project's completion. We ensure that the documentation is clear, concise, and readily accessible.

Hands-On Collaboration:

Our commitment to knowledge transfer extends beyond formal training sessions. We encourage hands-on collaboration between our experts and your JMU IT team throughout the project lifecycle. This collaborative approach allows your team to actively participate in tasks, troubleshooting, and decision-making, gaining practical experience and building confidence in managing the technology.

Continuous Support and Mentorship:

Even after the project concludes, our support doesn't end. We provide ongoing mentorship and assistance to address any questions, challenges, or refinements that may arise. Our team remains accessible to provide guidance and ensure a smooth transition as your IT team takes on increasing responsibilities.

Evaluating Knowledge Transfer Success:

We measure the success of knowledge transfer by the proficiency and autonomy demonstrated by your IT team in managing the technology post-implementation. Regular assessments, feedback loops, and performance metrics allow us to gauge the effectiveness of the knowledge transfer process and adjust as needed.

9. **Describe your approach to project management.**

At our core, we believe that successful project management is a combination of strategic planning, effective communication, meticulous execution, and continuous monitoring. Our approach revolves around the following key principles:

Clear Project Definition:

Before embarking on any project, we ensure a thorough understanding of the project's objectives, scope, and requirements. This includes defining clear deliverables, success criteria, and key milestones. This initial step lays the foundation for a shared vision and sets the stage for effective project planning.

Comprehensive Planning:

Our project planning phase involves creating a detailed roadmap that outlines tasks, timelines, dependencies, and resource allocation. We engage stakeholders to gather insights and input, ensuring that the plan is well-informed and aligned with the project's goals. This comprehensive plan acts as a guide for the entire project lifecycle.

Agile Methodology:

We embrace an agile methodology that promotes flexibility and adaptability. This approach allows us to respond to changing project requirements, refine priorities, and make necessary adjustments without compromising quality. Regular feedback loops and incremental development cycles ensure that the project stays aligned with evolving needs.

Effective Communication:

Communication is the backbone of successful project management. We establish clear communication channels with stakeholders, team members, and any relevant parties. Regular status updates, progress reports, and transparent discussions ensure that everyone is on the same page and any potential challenges are addressed promptly.

Risk Management:

We proactively identify potential risks and develop mitigation strategies to address them. Our risk management approach involves continuous monitoring of project elements that might deviate from the plan. By being prepared for contingencies, we minimize disruptions and maintain project momentum.

Skilled Team Collaboration:

We assemble teams with the right skills and expertise for each project. Collaborative teamwork is fostered through open communication, shared goals, and a supportive environment. We encourage creativity and innovation, allowing team members to contribute their unique insights for optimal solutions.

Performance Monitoring and Quality Assurance:

We implement robust performance monitoring processes to track progress against project milestones. Quality assurance protocols are integrated throughout the project lifecycle to ensure that deliverables meet the highest standards and align with project objectives.

Continuous Improvement:

Upon project completion, we conduct thorough reviews to evaluate successes, challenges, and areas for improvement. This retrospective approach enables us to capture lessons learned and refine our project management processes for future endeavors.

Our project management approach is rooted in thorough planning, flexibility, effective communication, and a commitment to delivering exceptional results. We believe that by adhering to these principles, we can successfully navigate projects, drive collaboration, and deliver on our promises. We welcome the opportunity to discuss how we can tailor this approach to best meet your specific project requirements.

10. **Describe how your firm would propose a functional staffing plan indicating the number, characteristics, and schedule for the consultants.**

Our proposed plan focuses on aligning the right expertise with project needs, ensuring efficient resource allocation, and achieving successful project outcomes.

Determining the Number of Consultants:

Our first step is to conduct a thorough analysis of the project scope, complexity, and timeline. This analysis guides us in determining the appropriate number of consultants required. We consider factors such as the volume of work, specialized skill sets needed, and the project's critical phases. This enables us to create a well-balanced team that can handle the project's demands effectively.

Defining Consultant Characteristics:

Each consultant's characteristics are tailored to the specific requirements of the project. We match consultants based on their expertise, experience, and competencies that directly align with the project's objectives. This might include technical skills, industry knowledge, certifications, and prior successful project experience. By assembling a team with diverse yet complementary characteristics, we ensure comprehensive coverage of all project aspects.

Creating a Consultant Schedule:

Our consultant schedule is meticulously crafted to optimize resource utilization and meet project milestones. We develop a timeline that aligns with project phases and deliverables. Consultants are assigned based on their areas of specialization and the project's evolving needs. Regular assessments and adjustments are made to the schedule to accommodate changes in scope, priorities, and unexpected challenges.

Iterative Approach:

We understand that project dynamics may evolve over time. Therefore, our staffing plan is iterative and adaptable. We maintain open communication channels to address any adjustments that may be required. As project requirements evolve, we ensure that the staffing plan remains responsive, providing the flexibility to scale resources up or down as needed.

Collaboration and Reporting:

Our consultants work collaboratively with your team, maintaining constant communication and reporting mechanisms. Regular updates are provided to track progress, address concerns, and ensure that the staffing plan remains aligned with project goals.

In conclusion, our functional staffing plan emphasizes a comprehensive and dynamic approach to assembling the right consultants, with the appropriate characteristics and skills, to meet project requirements. By diligently aligning resources with project demands and fostering effective collaboration, we are confident in our ability to contribute to the success of your project. We welcome the opportunity to further discuss and tailor this approach to your specific needs.

11. Describe the functions that may be provided by a subcontractor of your firm. Specify the expertise and credentials required from the subcontractor.

ASCENDING is fully equipped to undertake all tasks across the five designated areas for which we've submitted bids. We're self-reliant and won't require any external subcontractor assistance for these endeavors. Additionally, ASCENDING holds certification from the Department of Small Business and Supplier Diversity (SBSD) as a Minority Owned, Small Business in Virginia. As a result, subcontractor involvement is not foreseen for this project.

V. OFFEROR DATA SHEET (ATTACHMENT A)

ATTACHMENT A

OFFEROR DATA SHEET

TO BE COMPLETED BY OFFEROR

1. QUALIFICATIONS OF OFFEROR: Offerors must have the capability and capacity in all respects to fully satisfy the contractual requirements.

2. YEARS IN BUSINESS: Indicate the length of time you have been in business providing these types of goods and services. Years__5____   Months____1____

3. REFERENCES: Indicate below a listing of at least five (5) organizations, either commercial or governmental/educational, that your agency is servicing. Include the name and address of the person the purchasing agency has your permission to contact.

CLIENT	LENGTH OF SERVICE	ADDRESS	CONTACT PERSON/PHONE #
George Washington University	1 Year 2 months	800 22nd St., NW, Washington, D.C. 20052	Professor Tian Lan / tlan@email.gwu.edu
The College Board (subcontract under Tal-Ex	2 Years	1875 Connecticut Ave NW | 10th Floor, Washington, DC 20009	WILLIAM WESTLY / Will.Westly@Tal-Ex.com
FINRA (subcontract under Consultnet)	3 Years	1735 K St., NW Washington, D.C. 20006	Elias Saljuki / esaljuki@consultnet.com
Overture, LLC	5 years	80 East Jefferson Street, Suite 300D Falls Church, Virginia 22046	Ryan Li / (571) 363-1818 / ryan.li@famulei.us
GoDaddy	3 years	2150 E. Warner Road, Tempe, AZ 85284	Rags Cittineni / rcittineni@godaddy.com

4. List full names and addresses of Offeror and any branch offices which may be responsible for administering the contract.

    Gloria Zhang, VP of Operations: 2751 Prosperity Avenue, Suite 240, Fairfax, VA, 22031-4397 (HQ)

5. RELATIONSHIP WITH THE COMMONWEALTH OF VIRGINIA: Is any member of the firm an employee of the Commonwealth of Virginia who has a personal interest in this contract pursuant to the CODE OF VIRGINIA, SECTION 2.2-3100 – 3131?

    [ ] YES   [X] NO

    IF YES, EXPLAIN:

VI. SMALL BUSINESS SUBCONTRACTING PLAN (ATTACHMENT B)

ATTACHMENT B

Small, Women and Minority-owned Businesses (SWaM) Utilization Plan

Offeror Name: __ASCENDING INC_____ **Preparer** Name: Edrees Saljuki_

Date: August 8, 2023_____

Is your firm a **Small Business Enterprise** certified by the Department of Small Business and Supplier Diversity (SBSD)? Yes_X_____   No_____

   If yes, certification number: _812635_____   Certification <u>date:</u>_ Feb 22, 2025_____

Is your firm a **Woman-owned Business Enterprise** certified by the Department of Small Business and Supplier Diversity (SBSD)?   Yes_____   No_X___

   If yes, certification number: _____   Certification <u>date:</u>_____

Is your firm a **Minority-Owned Business Enterprise** certified by the Department of Small Business and Supplier Diversity (SBSD)? Yes_X___   No_____

   If yes, certification number: 812635_____   Certification date: Feb 22, 2025_____

Is your firm a **Micro Business** certified by the Department of Small Business and Supplier Diversity (SBSD)?   Yes_____   No_X___

   __If yes, certification number: _____   Certification date: _____

Instructions: *Populate the table below to show your firm's plans for utilization of small, women-owned and minority-owned business enterprises in the performance of the contract. Describe plans to utilize SWAMs businesses as part of joint ventures, partnerships, subcontractors, suppliers, etc.*

<u>**Small Business:**</u>   "Small business " means a business, independently owned or operated by one or more persons who are citizens of the United States or non-citizens who are in full compliance with United States immigration law, which, together with affiliates, has 250 or fewer employees, or average annual gross receipts of $10 million or less averaged over the previous three years.

<u>**Woman-Owned Business Enterprise:**</u>   A business concern which is at least 51 percent owned by one or more women who are U.S. citizens or legal resident aliens, or in the case of a corporation, partnership or limited liability company or other entity, at least 51 percent of the equity ownership interest in which is owned by one or more women, and whose management and daily business operations are controlled by one or more of such individuals. **For purposes of the SWAM Program, all certified women-owned businesses are also a small business enterprise.**

<u>**Minority-Owned Business Enterprise:**</u>   A business concern which is at least 51 percent owned by one or more minorities or in the case of a corporation, partnership or limited liability company or other entity, at least 51 percent of the equity ownership interest in which is owned by one or more minorities and whose management and daily business operations are controlled by one or more of such individuals. **For purposes of the SWAM Program, all certified minority-owned businesses are also <u>a small</u> business enterprise.**

<u>**Micro Business**</u> is a certified Small Business under the SWaM Program and has no more than twenty-five (25) employees **AND** no more than $3 million in average annual revenue over the three-year period prior to their certification.

<u>**All small, women, and minority owned businesses must be certified by the Commonwealth of Virginia Department of Small Business and Supplier Diversity (SBSD) to be counted in the SWAM program.   Certification applications are available through SBSD at 800-223-0671 in Virginia, 804-786-6585 outside Virginia, or online at http://www.sbsd.virginia.gov/ (Customer Service).**</u>

RETURN OF THIS PAGE IS REQUIRED

VII. Amount of Sales to VASCUPP Member Institutions

Up until now, ASCENDING hasn't had the chance to collaborate with any VASCUPP members. Our aspiration is for JMU to become our inaugural VASCUPP member, allowing us to extend our services.

VIII. PROPOSED COST -- PRICING SCHEDULE (ATTACHMENT D)

Attachment D – Pricing Schedule

For each technology/category listed below, provide your company's hourly rate for each of the three roles listed. If you refer to the role by a different name, list it in the space provided next to the corresponding role. Onsite pricing must be inclusive of all billables (travel, lodging, meals, etc.)

***** *The Offeror shall also provide onsite and offsite pricing for all other services/roles not listed below, including training offerings.* *****

	Onsite	Offsite		Onsite	Offsite
Oracle Core Technologies			**Change Management Training, Svcs, & Cert.**		
Project Manager or _____	_160_/hr.	_140_/hr.	Project Manager or _____	____/hr.	____/hr.
Senior Engineer or _____	_190_/hr.	_170_/hr.	Senior Engineer or _____	____/hr.	____/hr.
Engineer or _____	_150_/hr.	_130_/hr.	Engineer or _____	____/hr.	____/hr.
Oracle/PeopleSoft Enterprise Solutions			**Security and Federation Services**		
Project Manager or _____	____/hr.	____/hr.	Project Manager or _____	_150_/hr.	_130_/hr.
Senior Engineer or _____	____/hr.	____/hr.	Senior Engineer or _____	_180_/hr.	_160_/hr.
Engineer or _____	____/hr.	____/hr.	Engineer or _____	_140_/hr.	_120_/hr.
Desktop and Mobile Device Management			**Cisco Technologies, Infrastructure Support, and Virtualization**		
Project Manager or _____	____/hr.	____/hr.	Project Manager or _____	____/hr.	____/hr.
Senior Engineer or _____	____/hr.	____/hr.	Senior Engineer or _____	____/hr.	____/hr.
Engineer or _____	____/hr.	____/hr.	Engineer or _____	____/hr.	____/hr.
Microsoft Azure and M365			**Audio Visual Technologies**		
Project Manager or _____	_150_/hr.	_130_/hr.	Project Manager or _____	____/hr.	____/hr.
Senior Engineer or _____	_180_/hr.	_160_/hr.	Senior Engineer or _____	____/hr.	____/hr.
Engineer or _____	_140_/hr.	_120_/hr.	Engineer or _____	____/hr.	____/hr.
Okta			**Secure Research Enclaves**		
Project Manager or _____	_150_/hr.	_130_/hr.	Project Manager or _____	____/hr.	____/hr.
Senior Engineer or _____	_180_/hr.	_160_/hr.	Senior Engineer or _____	____/hr.	____/hr.
Engineer or _____	_140_/hr.	_120_/hr.	Engineer or _____	____/hr.	____/hr.
Data Analytics/Visualization/Warehouse/Lake			**Other Technology**		
Project Manager or _____	_155_/hr.	_135_/hr.	Project Manager or _____	____/hr.	____/hr.
Senior Engineer or _____	_185_/hr.	_165_/hr.	Senior Engineer or _____	____/hr.	____/hr.
Engineer or _____	_145_/hr.	_125_/hr.	Engineer or _____	____/hr.	____/hr.

IX. ANNEX 1: RESUMES OF PROPOSED PERSONNEL

EDREES SALJUKI	SENIOR PROJECT MANAGER

Tech-savvy, agile-SAFe program manager with 15+ years of operations/projects management in IT, Finance and Energy sectors. Exceptional project management skills --working closely with cross-functional teams and partners across business and technology to guide data-driven decision-making and strategy, for large IT and non-IT projects. Excellent verbal and written communication skills with client-facing and executive-level presentations.

Technical Skills

- Data Analysis with R Programming
- Quantitative and Financial Modeling
- Proficiency with SQL, and advanced Excel
- Microsoft, Microsoft Azure, and Oracle
- Expert knowledge of Jira and Confluence
- Software Development Life Cycle

Business and Communication Skills

- Strategic Planning
- Data-driven Business-Process Optimization/Efficiency
- Client Engagement
- Executive-level communication
- Risk Analysis and valuation
- Budgeting & Financial Analysis

Licenses/Certifications/Training

- Certified Google Data Analytics Professional
- Data Visualization with Tableau Specialization
- AWS Certified Solutions Architect Associate
- AWS Certified Cloud Practitioner

Education

- MBA, Finance, George Mason University, 2007
- B.Sc., Electrical Engineering, George Washington University, 2004

EXPERIENCE WITH SCOPE OF WORK

- ✔ Managed IT transformation, cloud migration, and cyber security projects utilizing Agile SAFe mythology.
- ✔ Excellent verbal and written communication skills at various levels for IT and non-IT audiences.
- ✔ Hands-on experience with AWS services.
- ✔ Experience with business Analysis, business process efficiency, and data analytics.

Nov 2021 – Present

Project Manager, ASCENDING Inc, Fairfax Virginia

- Lead team in IT transformation and cloud migration projects for major banks and non-profit organizations, utilizing Agile SAFe project management methodology.

- Serve as a technical project manager for a big data migration project using Snowflake and AWS.

- Manage an IT risk transformation project for a major bank, develop a defect management process using Jira for the risk transformation project and handling stakeholders from 20+ teams.

- Lead the upgrade of Oracle database and applications, streamlining critical business processes, and reducing system downtime by 30%.

- Ensure adherence to regulatory requirements and mitigate risks in IT projects.

- Responsible for overall project delivery, communications, and risk management, contributing to business process improvements through data analytics.

Sept 2021 – Nov 2021

Project Manager for Capital One's Cyber Network Segmentation Program – implementing zero-trust architecture to reduce risk of cyber-attacks.

- Managed overall program management utilizing Agile SAFe methodology, overseeing PI Planning events, sprints, and other PMO activities.

- Proficient in Jira and Confluence, tracking and managing risks and dependencies, and creating automated and ad hoc reports/presentations for different audiences.

- Supported the director of the cyber division in monthly budget deliverables and forecasting.

- Identified opportunities for business process enhancement and efficiency improvement.

- Worked closely with stakeholders to streamline workflows, eliminate bottlenecks, and improve operational effectiveness, driving continuous process improvement initiatives.

Jan 2008 – Nov 2021

Program Director, Advanced Engineering Associates Int'l, Washington DC

Strategized, developed, backstopped, and managed programs and projects in the international development sector. Performed program-level data analytics, developed financial models as well as KPIs for our US Government-funded projects.

Chief of Party (COP)—$32M USAID-funded "SGGA" project; 2011-2012

- Formulated an overall strategy for the gas-to-power program in Afghanistan; secured about $750M in funding from donor organizations, international financial institutions (IFIs) and private sector for the overall program implementation.

- Managed the $750M program, interacting with senior USAID leadership as well as International Financial Institutions, and Ministerial-level host-government officials.

Chief of Party (COP)/Deputy COP—$5.4M USAID-funded "SGFDP" project ;2009-2011

- Predecessor to the SGGA program; Designed a roadmap for the development of gas fields and financing of a 200 MW gas-fired power plant in Afghanistan.

- Established a Project Management Unit to coordinate about $750 million in donor/IFI funding for program execution.

Achievements:
- $50M in US government contracts (USAID) – From proposal phase to execution.
- $127M in winning proposals (USAID, USTDA, and ADB).

From 2008 to 2012 performed various roles at AEAI.

2005 - 2008

Lead Business Analyst, Fannie Mae, Capital Markets, Washington DC

- Improved business processes and generated new revenue-generating solutions through data analytics.

- Re-engineered business process flows to strengthen internal audit, business controls, and risk mitigation.

- Assisted in budget management, consolidating vendor invoices, preparing accrual requests, and supporting market spend re-forecasting efforts.

- Collaborated with Finance and Accounting teams to ensure timely and accurate payment approvals and monitored expenses to optimize financial resources.

Achievements: Created $3M/year in net-new income; and developed and executed a roadmap for the division's SARBOX audit.

Business Process Manager, Capital One (contractor), Richmond, Virginia

- Developed new business processes and re-engineered existing ones to track division budget, resources, and headcount.

- Served as the primary point of contact for internal and external partners, fostering open lines of communication and ensuring adherence to operational processes.

- Effectively communicated client's expense report policies and production credit card guidelines to stakeholders while building strong cross-functional relationships.

- Supported the Customer Talent team by providing operational contract and onboarding support.

- Utilized data analysis skills to assess project performance, identify areas for improvement, and generate comprehensive reports.

Achievements: Developed and executed division's risk valuation process which was duplicated across the organization.

CELESTE SHAO	SENIOR DATA WAREHOUSE SPECIALIST

Ms. Shao has a total of 7 years' experience in Cloud. She has strong hands-on experience in the implementation of AWS DataLake projects with ASCENDING's clients. She worked as Senior Data Analyst in GoDaddy Revenue API project, where she implemented DataLake on AWS and ingested a variety of data from upstream applications. She also worked as a Big Data Analyst in Information Builders Inc project, where she migrated huge chunks of data to the cloud & Performed the OLAP analytics.

Technical Skills	EXPERIENCE WITH SCOPE OF WORK

Technical Skills

- Programming Language: Java, Scala, Python, R, SQL, Unix/Bash shell
- Operating Systems: Windows, MacOS, Linux
- Database: SQL - Oracle 11g, MySQL 5.x, Microsoft, SQL Server 13.0, PostgreSQL 8.x; NoSQL - MongoDB 3.2, Cassandra 1.2, HBase 1.4.x
- AWS: EC2, EMR, VPC, Kinesis, Lambda, S3, RDS, Redshift, DynamoDB, Glue, Data Pipeline, Athena, IAM, MSK, CloudWatch, Elasticsearch
- Package: Python - NumPy, pandas, scikit-learn, SciPy, Matplotlib, seaborn, plotly, Beautiful Soup, re, NLTK, TensorFlow
- Hadoop/Spark Ecosystem: Hadoop 2.8.x/3.1, MapReduce, YARN, Spark, 2.3.x/2.4.x/3.1, Sqoop 1.4.x, Pig 0.17.0, Hive, 2.3.x, Impala 1.4.x, Kafka 0.10.x/2.2, Zookeeper 3.4.x
- Visualization/Analysis: SPSS, Tableau 2018.x/2019.x, PowerBI, Excel, PowerPoint, Google Analytics, Google Tag Manager
- Environment/IDE: Big Data Vendors - Cloudera (CDH), Hortonworks (HDP); IDE - IntelliJ IDEA, Eclipse, Visual Studio, PyCharm, RStudio.
- Other: Git, Jira, Confluence.

Business and Communication Skills

- Strategic Planning
- Professional Client Engagement

Licenses/Certifications/Training

- AWS Certified Solution Architect (Professional)
- AWS Certified Data Analytics – Specialty

Education

- M.S., Business Analytics, University of Maryland, USA, 2016
- B.Sc., Business Admin, Hong Kong University, China, 2014

EXPERIENCE WITH SCOPE OF WORK

- ✔ Analytical, problem-solving and result-oriented Big Data Analyst with in-depth knowledge and hands-on experiences in Big Data Technology.
- ✔ Understanding relational data modeling for OLTP (ER-Model, RDBMS, 3NF), dimensional data modeling for OLAP (Star Schema, Snowflake Schema), NoSQL and their relevance in Big Data and SDLC.
- ✔ Expert in understanding the data and designing/Implementing the enterprise platforms like Hadoop Data Lake and Huge Data warehouses.
- ✔ Familiar with AWS applications or services such as EC2, EMR, Kinesis, Firehose, Lambda, Step Functions, Athena, Glue, Data Pipeline, S3, RDS, Redshift, DynamoDB, SQS, CloudWatch, etc.

WORK EXPERIENCE

Oct 2020 – Present

Senior Cloud Data Analyst, ASCENDING Inc., Fairfax, VA

Working on Revenue Recognition—Revenue API in AWS for GoDaddy. The standardization of a single interface to support the recognition of all Revenue across the many GoDaddy entities is critical to enabling the growth and scaling of GoDaddy. With this in mind the team is introducing an API standard which will be the singular way Revenue is recognized within GoDaddy. This project is now in the critical stage of introducing Snowflake for the ETL and analysis works.

Environment: AWS Glue 2.0, Spark 2.4, Python 2.7/3.8, S3, Amazon RDS Aurora (MySQL 5.7), EC2, CloudWatch, CloudTrail, AWS Lambda, Git, JIRA, Jenkins

- Establishing an ETL processing system with AWS Glue to collect and transform finance data from S3 and RDS.
- Implementing Data Lake on AWS and ingested a variety of data from upstream applications.
- Developing and maintaining data pipelines and workflows in Snowflake to automate data ingestion and processing tasks.
- Developing transformation programs using Apache Spark in Glue Job based on business requirements and logics, writing ad-hoc SQL queries in RDS Aurora.
- Writing SQL queries and performing advanced data analysis using Snowflake to derive insights and make data-driven decisions.
- Building the connections between data sources and data stores such as S3 and RDS with Glue Connection, implementing Glue Crawler to gather data schema and metadata.
- Developing Lambda function triggered by CloudWatch event to update Glue Connection once Secret Manager secret rotation.
- Testing and debugging the Glue batch processing program on a daily basis.
- Supporting overall AWS cloud architecture design and working on Proof-of-Concept when necessary.
- Using Git for version control, JIRA for project tracking, Jenkins for system deployment, Confluence for documentation collaboration.
- Attending daily stand-up meetings, discussing and tackling technical problems, understanding business and technical requirements and converting to viable solutions.

Jan 2020 – Oct 2020

Big Data Analyst, Information Builders Inc, Piscataway, NJ

Information Builder, one of the top Big Data Integration Platforms in the industry, helps enterprises leverage big data technologies and data science methods to drive competitive advantage on decision making and business strategies. The project is working for an apparel retailer to migrate and integrate data into decision support systems based on such as Apache Hadoop and AWS technologies. The systems provide the solution for syncing records in multiple systems, connecting data from suppliers or partners, creating marketing

dashboard and near-real-time analyses so that better demonstrate daily operations and optimize future decisions.

Environment: AWS EMR 5.28.0, Hadoop 2.8.5, Spark 2.4.4, Scala 2.11, Python 2.7/3.0, Hive 2.3.6, Pig 0.17.0, Sqoop 1.4.7, S3, EC2, Amazon RDS, AWS Glue, Amazon Redshift, Kinesis, Amazon Data Pipeline, Amazon DynamoDB, AWS Lambda, Git, JIRA

- Migrated data and applications to AWS platform implementing such services as RDS, EMR, Kinesis, Glue, Redshift, Data Pipeline, S3, etc. for cloud computation, storage and transfer.
- Data Ingestion and ETL in AWS Glue from datastore such as RDS and S3 and third-party industrial data from IRI and Numerator, modified ETL script in PySpark or Scala, triggering the process using Lambda function.
- Crawled and collected real-time data from multiple sources, for example, app data from mobile devices, website user data and third-party/partner (Adobe Analytics) web analytics data, then pushed into AWS Kinesis Stream.
- Analyzed data from Kinesis Stream in Kinesis Analytics using SQL, some would be directly passed in Lambda, and EMR cluster for further processing.
- Implemented Kinesis Firehose to transfer (e.g.: to ORC and Parquet) and sink data into RedShift and AWS RDS in S3.
- Conducted programming using different Spark APIs such as Scala, RDD, PySpark and SQL to transform data for further processing on generating predictive analyses.
- Collaborated with the Application Development team to build and develop customized dashboard connecting with the data from S3, Kinesis, DynamoDB and data warehouses such as Redshift.
- Used Git for version control, JIRA for project tracking, Confluence for documentation collaboration.
- Demonstrated progress and provided constructive feedback during daily stand-up meetings and weekly iterative review meetings.

Dec 2018 – Jan 2020

Data Engineer, GoStart, Washington DC
Helped several local small and medium start-ups, such as RugRats, a rug retailer, and SuperStar, an online ticket seller, implement data analytics and Google Analytics techniques to better support marketing mix. Experimentally, Big data technologies and tools represented by Hadoop were applied to collect, integrate, process, and analyze in order to compare the improvements on performance of these clients before and after applying Google Analytics. The result shows Google Analytics and real-time data analysis could help small businesses to generate more traffic and conversions such that increase revenue and profit.

Environments: Hadoop 3.1.2, Confluent 5.2.1, Kafka 2.2.0, Zookeeper 3.4.14, Spark 2.4.7, Scala 2.12, Hive 2.3.3, Pig 0.17.0, Oracle 11g, Python 2.7/3.6, R 3.6.1, Tableau Prep Builder 2019.4, Google Analytics, Google Tag Manager

- Built and configured Hadoop cluster with such modules or tools as HDFS, MapReduce, YARN, Zookeeper, Sqoop, Hive, Pig, Spark, Kafka, etc.
- Gathered, imported and connected the clients' data from multiple sources such as web, Google Analytics accounts Snowflake and RDBMS using tools such as Sqoop and Kafka with source and sink connectors provided by Confluent.
- Based on the hypotheses planned to test, designed data mining and processing in Hive, Pig, Spark (e.g.: PySpark and SQL APIs) to conduct ETL procedure, as a preparation for further statistical and modeling analyses.
- Tracked real-time data via Google Analytics from accounts of multiple clients, then pushed the data into Kafka cluster with Confluent REST Proxy.
- Implemented Spark Streaming to filter out data and process using PySpark, SQL API and Scala API, connected with Tableau using Spark SQL database generating an integrated dashboard to visualize the data, guide marketing and operational decisions.
- Conducted A/B Test and Hypothesis Test, trained and tuned predictive models (e.g. stepwise regressions, random forest, boosting, XGBoost), summarized and demonstrated findings using Python (pandas, numpy, scikit-learn, matplotlib, seaborn) and R (Tidyr, Glmnet, randomforest, XGboost).
- Used the data from real-time dashboard and Google Analytics to guide Google Ads campaign on such as bidding strategy, budget strategy and conversion funnel to create value for clients.
- Delivered client-facing interaction, such as asking for permission on usage of their data, weekly reporting progress of the project, timely providing feedback and support, etc.

Feb 2018 – Dec 2018

Data Scientist, RoofStock, Washington DC

Roofstock is the #1 marketplace for buying and selling single-family investment properties, helping the customers build lasting wealth and diversify their investment portfolios through real estate by making real estate investing as simple as investing in stocks. The goal of the project is to come up with a model that will communicate the relationship between the choice of a listing price for a particular property and how quickly a matching offer is likely to come in, based on the Roofstock marketplace's history. The model requires to consider data from multiple sources and the size was big so that a Hadoop cluster based on Amazon EMR was configured and implemented in the project.

Environments: Amazon EMR 5.17.1, S3, EC2, Amazon RedShift, Hadoop 2.8.4, Spark 2.3.1, Hive 2.3.3, Pig 0.17.0, Scala 2.11, Python 2.7/3.4, R 3.5.2, Tableau Prep Builder 2019.1, Jupyter Notebook, Microsoft Office PowerPoint

- Utilized Amazon EMR service to create and manage fully configured, elastic clusters of EC2 instances running Hadoop and other applications (e.g. such as Hive, Pig, Spark) in the Hadoop ecosystem with EMRFS connector allowing Hadoop to use S3 as storage layer.
- Imported structured data from Snowflake into S3 then processed the data using Spark (Python, Scala, RDD and SQL APIs) and HiveQL in EC2 instances.
- Developed data pipeline using AWS Data Pipeline to transfer and process data across Redshift, S3, and EMR. • Merged and cleaned several datasets in PySpark to get targeting variable "time-to-sell" and do Feature Engineering, as a preparation for descriptive and predictive analyses.
- Considered and developed proper assumptions on the concept of "reasonable offer" and selected key features (e.g. year_built, bedroom_bathroom_ratio, cap_rate) to do EDA and visualized in Tableau connecting with Amazon RedShift database.
- Built models for both numerical (duration of a good offer will come up) and categorical problems (whether a good offer will occur within 7 days) using machine learning methods such as linear regression, logistic regression, LASSO, bagging, random forest, gradient-boosted trees, etc. in Spark ML.
- Trained and tuned the models, finally both the best numerical (RMSE: 28) and categorical models (Accuracy: 84%) could beat the baseline (RMSE: 43.67, Accuracy: 53%).
- Demonstrated and reported the result to the client in PowerPoint, Jupyter Notebook and visualizations in Tableau, telling a good story on how the models could potentially help them on pricing, market liquidity, user experience, and customer satisfaction.

Jul 2016 – Feb 2018

Data Analyst, Google App Store, Washington DC

This project is about data mining for Google App Store (GAS), aims to have a deeper understanding of the mobile app market, and help app developers find business opportunities, make decisions and adjust the app in time. The project mainly focuses on three key objects: rating, pricing and comments which are also the app developers care most when they design and launch their products. And the associated objective questions and descriptive/predictive analysis relevant to these three objects are generated accordingly. Methods and techniques including EDA, NLP on consumer review, Machine Learning, Data Visualizations, etc. are implemented in the Python environment.

Environments: MySQL 5.7, Python 3.6/3.7, R 3.4.3, Tableau Prep Builder 2019.1, Jupyter Notebook

- Crawled data using beautiful soup from GAS to Python environment.
- Data cleansing, data processing, data imputation, data transformation and reshaping, and data visualization (EDA) in Python using such packages as numpy, pandas, matplotlib, seaborn, re, NLTK, etc.

- Implemented statistical methods for example, correlation analysis to discuss relationships among variables, and one-way ANOVA to verify whether there are any statistically significant differences between aggregated values (e.g. mean) of different app categories.
- Applied pivot table, merge and group by methods to aggregate variables in order to dig out valuable and meaningful findings.
- Performed Text Mining on consumer reviews to explore what are the targeting consumer complaints or appreciate most, and sentiment analysis by creating Word Cloud and NLP.
- Built and tuned models for the variables of "rating" and "pricing" using machine learning methods including linear regressions, forward selection, stepwise selection, PCA, decision trees, random forest, etc.

Aug 2014 – Jul 2015

Data Analyst, BlueFocus Communication Group Co. Ltd., Beijing, China
Client: CRC

C'estbon (Yibao), a beverage brand affiliated to CRC, had the second largest market share of mineral water in China, with an annual turnover of over 12.6 billion RMB. The project aims to promote its new sports drink product, Mulene (Moli), introduced in 2017, in China using digital marketing and data Analysis technologies. By scanning the QR code on the bottle, consumers can interact with the brand in various forms, such as lottery, games, contests and so on. The project not only promotes its products stimulating consumptions, but also collects meaningful consumer data, which can analyze consumer behaviors and guide future advertising strategies and other marketing mix.

- Monitored activity operations, observed real-time data, delivered issues and feedback to the software development team to resolve technical issues.
- Collected KPI data such as Average Screens Per Visit, Daily Active Users (DAU), Social Shares, New User Rate, User Growth Rate, etc., and imported them in R Studio, Power BI and Excel, and delivered reports to the client.
- Cleaned and processed data in the R environment, conducted EDA by grouping, merging, transforming, and visualizing the data.
- In order to deliver the data analysis in a more understandable way, some analyses would be in Excel using pivot tables, VLOOKUP functions, etc.
- Demonstrated and reported findings for tech/non-tech persons using Power BI and PowerPoint.

Yuan Zhao, a data enthusiast with 12+ years of experience, is a strong fit for James Madison University's Data Analytics/Visualization/Warehouse/Lake project. Co-founder of Intellinum Analytics, Yuan has excelled in digital marketing, finance, telco, and healthcare industries. His expertise in AWS, Spark, Python, and machine learning, combined with successful project leadership, make him an invaluable asset for driving data-driven innovations and optimizations. Yuan's profound insights from complex data models and geospatial analysis align perfectly with JMU's pursuit of technological advancement and data-driven decision-making.

Technical Skills	EXPERIENCE WITH SCOPE OF WORK
- Core Big Data Techs: AWS/ Azure / Spark / Hadoop/ Data science/Machine learning in AD-Tech - Industry experience: Digital marketing, Financial Services, Telco, Healthcare and Retail - Programmatic Advertising: RTB, Custom bidding models, User segmentation, Supply Chain optimization, KPIs (CPA/CPC/vCPM) optimizations. - Geospatial analysis: large scale spatial joins, Geospark, Geomesa, Hexagonal Hierarchical Geospatial Indexing. - Customer analytics: Identification, Segmentation, Sentiment, Churn Prediction, Propensity (Lookalike) modeling. - Artificial intelligence: NLP(Bert/transformers), Object detection (YOLO), - Big data: AWS, Azure, GCP, Spark, Databricks, Qubole, Kafka, ELK. - Machine learning: Pandas/NumPy/Scikit- learn, Spark MLlib, Tensorflow, Pytorch, MLflow, Kubeflow. - Data warehouse: Hive, Cassandra, Redis, Postgres, Mongo, Redshift, Athena, Delta Lake, Snowflake, AWS Neptune. - Programming Language: Python, Scala, Java, R, MATLAB	- Extensive experience in various industries, such as Digital Marketing, Financial Services, Telco, and Healthcare, makes him well-suited to tackling diverse data challenges. - Expertise spans a vast range of technical skills, including AWS, Azure, Spark, Hadoop, Data Science, Machine Learning, and a host of other core big data technologies. - Skills in geospatial analysis, real-time analytics, and machine learning enable him to drive data-driven optimizations and provide data-driven business process solutions. - Yuan has demonstrated leadership capabilities, having led multi-million-dollar projects for prominent clients like Etisalat, Singtel, and Time Warner Cable during his tenure at IBM Research.
Business and Communication Skills	
- Strategic Planning - Data-driven Business-Process Optimization/Efficiency - Client Consultancy - Client Engagement	
Licenses/Certifications/Training/PUBLICATION	
- DING X., YAN C., ZHAO Y., YANG Z. (2018) EFFICIENT PROCESSING OF TOP-K DOMINATING - QUERIES ON INCOMPLETE DATA USING MAPREDUCE. (ICCCS 2018) - Cloud Computing and Security pp 478-489	
Education	
- M.S. IN COMPUTER SCIENCE from New York University - B.S. IN COMPUTER SCIENCE from Donghua University	

Feb 2023 – Present

Lead Data Engineer/ Scientist, ASCENDING Inc, Fairfax, VA

- Gather and integrate data from various sources, including databases, spreadsheets, APIs, and external datasets, into the data analytics platform like AWS Athena and Power BI.
- Cleanse, transform, and preprocess data to ensure its quality, consistency, and suitability for analysis using Python, Spark and SQL.
- Conduct exploratory data analysis to identify patterns, trends, and insights that can provide valuable information for decision-making.
- Use Power BI to create visualizations and dashboards to present data analysis results in a clear and understandable manner to stakeholders.
- Develop and implement machine learning models and predictive analytics to make data-driven predictions and recommendations.
- Ensure data security, compliance, and privacy measures are in place to protect sensitive information.
- Manage data analytics projects, including defining project scope, timelines, and deliverables, and ensure successful project execution.

Feb 2017 – Feb 2023

Technical Co-founder, Intellinum Analytics Inc, New York, NY
Intellinum Analytics Inc empowers businesses with data engineering, data science, and AI technology.

- Designed Behavioral Clustering models that segment customers by demography, purchase behavior, campaign responses, and channel preferences.
- Designed Customer Sentiment models that 1) sift through large amounts of social media data to determine customer perception of products and 2) identify policies that positively or negatively impact consumer sentiment.
- Designed the Product/Consumer Fit models that 1) understand what products each customer segment is purchasing and 2) leverage market basket analysis to identify brand affinity and determine cross-selling opportunities.
- Derived insights from analysis showing which channels and campaigns have driven the highest ROI among specific gender and/or age groups. This helped marketing teams allocate the appropriate budget to specific channels and campaigns and fine-tune the targeted audiences.
- Developed a Click-Through Rate prediction solution using Deep Interest Network.
- Designed and implemented custom bidding models that support various formats (including standard/rich IAB display, video, native) and are capable of optimizing towards various KPIs (such as CPA, CPC, completion rate, and viewability).
- Architected and implemented a Matillion/Spark/Snowflake based data synchronization pipeline that integrates with leading Demand Side Platforms (DSPs) to pull log-level raw data into the client's data warehouse.

- Analyzed signals generated by the advertiser's programmatic buying stacks, from impression-level data forwarded by the DSPs to attributed-conversion data files from the ad servers, and created ensemble models to extract the most discerning combination of variables (site, ad format, publisher, supply vendor, geo, time of day, etc.) for each campaign.
- Delivered performance uplift of up to 112% compared to the advertiser's current campaign setup in the A/B test.
- Presented post-campaign reports to the client and identified advertisers/campaigns that have the potential to be upsold on higher-margin media-planning based services.
- Built and led a team of machine learning engineers, developing technologies for advertisers, agencies, and technology vendors to achieve optimal allocation of marketing budgets. Led end-to-end planning, research, and execution of various projects, including Identify Graph, Audience Generation, Real-time Attribution, and Campaign optimizations.
- Designed and implemented an identity graph solution that assimilates hundreds of terabytes of Real-Time Bidding (RTB) advertising auction data and SDK geolocation data to find the human relationship between smartphones, desktops, laptops, tablets, connected TVs, gaming consoles, and other IoT devices. The identity graph is a foundational part of the platform, powering many of their measurement, targeting, and optimization capabilities.
- Developed a Spark/Neo4j based clustering framework to detect individuals within household clusters using graph-based community detection algorithms.
- Led the implementation of the ad's measurement offering that attributes multi-channel ad exposure to footfall store visits, purchases, and sign-ups.
- Developed machine learning approaches for audience segmentations using K-Means, DBScan, GMM, and Topic-based modeling (LDA).
- Designed, prototyped, and tested pre-bid ad fraud prevention module that uses machine learning and advanced bot fingerprinting to identify and block non-human traffic in real-time (Impressions, Clicks, Conversions).
- Developed innovative ML-based solutions for ad campaign (CPI, CPA, CPC) optimizations that assess 15+ dimensions (e.g., OS, connection type/speed, device type, user segments, and more) and pick the most effective data points for optimization, creating optimal targeting for each campaign.

Feb 2015 – Feb 2017

Data Scientist Researcher at IBM Research, Yorktown Heights, NY
Key Achievements: Successfully led multi-million-dollar projects for Etisalat, Singtel and Time Warner Cable.

- Delivered the ETL component that ingests 3rd party hyper-local data, such as weather and neighborhood demographics and customer's product, transaction and location data.

- Worked with BI analysts on surfacing demand patterns and drivers in an interactive dashboard Keywords: Spark, GeoSpark, IBM BigInsights Apache Hadoop, ElasticSearch.
- Delivered the location analytics component of the City Analytics project that analyzes users' geolocation data (The Weather Channel app) provided by Time Warner Cable (TWC) to profile audience segments based on the understanding of dwell-time/frequency at locations.
- Designed the overall data platform based on Spark and ElasticSearch to handle the volume of data generated by TWC at a global level.
- Developed the data ETL pipeline and analyzed the data using Spark-based analytics to compute home/work and point-of-interest locations.
- Created enriched customer segments using attributes derived from Mobile, IPTV, Browsing data, social media, and Billing Data.
- Developed the real-time analytics platform based on Lambda architecture for analyzing the data from Etisalat's data warehouse, which contains customer account information, Call Detail Records (CDRs), billing information, and real-time logs from different cellular network switches (ADR, IuCS, IuPS).
- Designed and implemented the solution that triggers real-time campaigns on geofence enter/exit.
- Implemented algorithms to learn user interests and demographics by analyzing location traces, weblogs, social network activity, and TV viewing records.
- Implemented the following machine learning offerings: Geospatial Analysis of Home and Work locations, Brand Affinity, Time of Day Analysis for each Visit, Dwell Time and Frequency of Visits, Trends by Time of Day/Week/Month, and Correlation Between POIs Visited.

✔

Jan 2014 –
Feb 2015

SOLUTIONS ARCHITECT atEMC, New York, NY
Keywords: VMWare vCenter, vSphere, ESXi, Cisco Nexus, Vblock 300/700

✔

Oct 2010 –
June 2012

PRINCIPAL SOFTWARE ENGINEER at Yucheng Technologies Ltd Shanghai, China
Keywords: Java, OSGi(Equinox), Redis

✔

Jul 2009 –
Oct 2010

SOFTWARE ENGINEER at Camelot Information Systems Inc., Shanghai, China
Keywords: JQuery, Google GWT, Java and OSGi(Equinox)

XUE KE	MICROSOFT 365 ADMINISTRATOR

BS degree in Computer Science and PhD degree in Mathematics. Mr. Ke is a self-motivated and interest-driven problem solver who has developed diverse applications demanded by the automation necessities of research projects. Mr. Ke is experienced with most of the MS tools including Microsoft Azure, Microsoft Exchange, Microsoft Teams and Microsoft SharePoint and

has used & managed them in his daily work. Mr. Ke also played a role as the bridge between IT team and business owners to transfer the business requirements into functional requirements then designed the system's infrastructure to ensure productive and consistent application life cycle enhancement and adjustments.

Technical Skills	EXPERIENCE WITH SCOPE OF WORK
● Cloud Computing: Amazon Web Services, Microsoft Azure ● ERP: Dynamics 365 ● Microsoft: Office 365, SSO, Exchange, SharePoint, OneDrive, Azure AD, Intune, Zsure ● User management: MFA, Conditional Access ● Management Tools: Jira, GrayLog ● Source Control: Git, Bitbucket ● Operating Systems: Windows, MacOS, Linux ● Language: Python, Bash, SQL, JavaScript ● Build Tools: Maven, Ant, Gulp, Grunt, Bash	✔ Experience in Microsoft Products, Apps and Services. Expert of installation and administration of MS Exchange, Office 365. ✔ Experience with AD, SSO, and MFA ✔ Experience in designing, planning, securing, and operating of the Azure and Office 365 cloud technology. ✔ Professional cloud experience with AWS and Azure. ✔ Experience in enterprise level resource planning & management.
Business and Communication Skills	
● Strategic Planning ● Data-driven Business-Process Optimization/Efficiency ● Client Consultancy ● Client Engagement	
Licenses/Certifications/Training	
● AWS Certified DevOps Engineer Professional ● Microsoft Certified Azure Solutions Architect	
Education	
● Ph.D, Mathematics, University of Maryland College Park ● B.Sc., Computer Science, Zhejiang University	

WORK EXPERIENCE

May 2022 – Present

Microsoft Support Engineer, ASCENDING Inc, Fairfax, VA

- Design, Installation & Administration of Exchange 2010/2013 Mailbox & Client access servers.
- Transition messaging services from Microsoft Exchange Server 2010. 2013 to Microsoft Office 365 as well as implementation of Azure AD Sync for users to enjoy rich logon access.
- Serve as the Exchange Administrator. configure and troubleshoot Exchange 2010/2016 Hybrid Server and Exchange Online (Office 365 Enterprise).
- Administer Office 365 mailboxes via the Office 365 portal and management console Demonstrated extensive understanding and implementation of O365 security services.

- Establish user accounts in both Windows AD and O365 portal. Install, configure, and troubleshoot directory synchronization tools such as DirSync, Azure AD sync, and Azure AD Connect.
- Carry out Office 365 to on-premises server integration & troubleshooting, utilizing Active Directory Federation (ADFS) and AD Connect tool Addressed Mail flow & Mailbox Provisioning issues promptly and effectively.
- Handle certificate renewal across the application (including Exchange/Skype). Implement changes on platforms including Exchange 2010, Exchange 2016, Skype for Business, O365, and Symantec Gateway.
- Perform restoration of mailboxes, databases, and purged mailboxes when necessary.
- Eliminate duplicate contacts, emails, and appointments, improving organization and user experience.
- Experience managing & supporting Office 365 users.
- Migration of on-premises Exchange 2010 mailboxes to Exchange online.
- Install and configure IIS web server on Microsoft Windows 2012/2012R2 /2016 server accordingly.
- Optimization of existing Active Directory (AD) and Network Infrastructure to accommodate a larger user - base after a merger/acquisition process.
- User and computer management and control by designing and implementing new Microsoft Windows Server 2012 R2 Active Directory (AD) and Network Infrastructure.
- Perform primary administrative tasks for MS Exchange 2010/2016 messaging system.
- Configure Azure Virtual Networks (VNets), subnets, Azure network settings, DHCP address blocks, DNS settings, security policies and routing.

Nov 2019 – May 2022

Site Reliability Engineer, American Institutes for Research, Allington, VA

- Implemented SSO Authentication method with Office 365 and configured DirSync for Active Directory Synchronization.
- Implemented Enterprise-grade highly available, messaging solution using Microsoft Office 365 to scale small and medium businesses.
- Successfully migrated about 300 user mailboxes from Exchange 2013 to Office 365 by creating a hybrid deployment for the business.
- Used PowerShell Scripting and automation to move workloads and improve operations and support.
- Configured Auto Reply and Out of Office messages for users, ensuring clear communication of their availability and managing expectations of internal and external stakeholders.
- Analyzed and rectified Mail Flow issues, ensuring seamless communication for users by diagnosing issues in routing, filtering, and delivery of emails.

- Coordinated mail forwarding rules on shared mailboxes and user mailboxes, facilitating the efficient rerouting of emails and ensuring the continuity of information flow.
- Troubleshoot and correct issues related to Free Busy statuses and Duplicate entries in calendars, thereby enhancing the efficiency of scheduling and minimizing scheduling conflicts.
- Restored emails from the server following data loss incidents, thus preserving the integrity and continuity of data, and minimizing disruption to user activity.
- Managed the process of granting access to terminated mailbox users to relevant managers following stringent legal and HR protocols, ensuring the secure transition of responsibilities and proprietary information.
- Dealt with mail flow issues across various platforms including Exchange Online, FOPE/EOP, and On-premises Exchange server, diagnosing and rectifying problems to ensure seamless email communication.
- Addressed and resolved connectivity problems associated with various client protocols such as OWA, MAPI, Exchange Active Sync, IMAP, POP & SMTP, thereby ensuring optimal accessibility and function.
- Identified and solved issues pertaining to Client Access, Mailbox & Hub Transport Server for Exchange 2010, 2013, enhancing overall system performance.
- Rectified ADFS/Single Sign-On, and authentication issues while accessing Office 365 Services, providing reliable access for users while maintaining robust security protocols.
- Managed high availability (Cluster, DAG) issues and performed Exchange Database/Server recovery tasks to maintain optimal system uptime and availability.
- Carefully scoped scenarios, determined potential causes, and outlined troubleshooting steps, leading to a robust and efficient problem-solving process.
- Customized Office 365 applications like Word, Excel, OneNote, Skype for Business, Outlook, OneDrive, PowerPoint, and MS Team to cater to the specific needs of individual users and teams.
- Orchestrated Office 365 Tenant implementation with Azure AD Connect and ADFS for Single Sign-On, enhancing user convenience and system security.
- Created, managed, and regularly monitored policies for Microsoft 365 E5 Compliance suite, ensuring compliance with regulatory standards and corporate policies.
- Configured required connectors in Exchange Online in accordance with mail flow requirements, optimizing the path and delivery of emails.
- Administered system for Exchange, SharePoint, OneDrive, and Yammer, ensuring optimal functionality and user experience.
- Assigned and revoked licenses to user accounts for services within Office 365, managing service accessibility according to individual user needs and organizational policies.

- Established user accounts, assigned group rights, established distribution lists, and managed windows folder security, thereby controlling access and securing proprietary information.
- Created and deleted mailboxes in Exchange Online, effectively managing the lifecycle of user email accounts.
- Performed ADFS certificate renewal tasks, and configured the ADFS service, ensuring secure and reliable identity services.
- Monitored and managed M365 Licenses, and assigned the necessary licenses to specific users, effectively managing software assets and controlling costs.
- Developed another app on a daily timer trigger that obtains COVID-19 data from public websites by web-scraping and REST API call, transforms the data, and loads them into an Azure SQL database.
- Managed Exchange environment for email retention and the recovery of mail for litigation.
- Created and maintained Dynamic Distribution lists.
- Used Active Directory to manage user accounts, computers, groups, objects, and containers.
- Provided support and maintenance of Microsoft Office Outlook Web Access and Microsoft Office Outlook Email, Calendaring & Scheduling in full hybrid exchange environment.
- Developed an Azure Functions app on a 24-hour timer trigger that queries an Azure SQL database using PYODBC, generates HTML checklists based on the query results using Jinja2, and uploads the checklists to BOX by calling it REST API.

HONORS AND AWARDS

2018 – 2022	· Department of Mathematics, University of Maryland College Park
	● James C. Alexander Prize for Graduate Research in Mathematics
	● Aziz Osborn Gold Medal in Teaching Excellence

As a Program Manager with a strong technical background in both software and hardware, Mr. Adams has 25+ years of hands-on experience in organization management, technical solutions and management of Information Technologies projects. He has managed multiple IT projects with budgets of up to $22 million with expertise in Strategic Planning, Risk Assessment Analysis and BPR. Mr. Adams also has experience in managing a number of projects for state and federal government agencies such as Maryland Department of Transportation, Maryland Public Service Commission, and some educational institutions like Baltimore County Public School and University of Maryland.

Technical Skills

- Program-Project Management: Successful rollouts of many high-profile technical solutions and management of resources of up to 75 technical resources
- Infrastructure Hardware: Dell, HP, SUN and AS/400 servers, Ciena, Juniper, Cisco routers and switches 5xxx and Hitachi AMS500 Storage. Symantec Netbackup Disk to Disk backup, Bluecoat web Filtering Appliance, Cisco UCCE switches and Avaya switches
- Cloud: AWS, Azure, PaaS, IaaS, Salesforce and PaaS
- Software: SIP, TCP/IP, IP, NTFS, affluent with various technologies and operating systems: Smartsheet, Azure, Meraki, Windows server 2003, 2008, 2012 and 2014, , Windows XP, 7, 8.x AND 10, Symantec Encryption, VMware 4,x and 5.x, Citrix 4.5 and 6.5, RDP, Telnet, Microsoft Suite Office 2003, 2007, 2010 and Office 365. Outlook 2007, 2010 and 365, LINUX Red Hat and SUSE. Juniper, Microsoft and Cisco VPNs.
- Applications: Ocularis, AMAG, Avaya Communication Manager, Cisco UCCE, Service Now, Remedy, Nagios, SolarWinds, Opsview, GMS, COPS, Kronos, Lawson, eClinicalWorks, Meditech and Optimus EMR, Merge PACs, WhatsApp Gold, GE Fetal Monitoring, Heat and Keane

Business and Communication Skills

- Data-driven Business-Process Optimization/Efficiency
- Professional Client Engagement

Patents/ Certifications

- Microsoft Exchange 2007 Server certification
- Cisco- CCNA
- Six Sigma- Project Management Certification
- Nortel-CNA

Education

- B.Sc. - Elon College- Information Engineering Management

EXPERIENCE WITH SCOPE OF WORK

- ✔ Demonstrated leadership skills, with the ability to motivate teams to increase productivity with successful results.
- ✔ Managed IT budgets of up to $22 million and profit & loss control.
- ✔ Excellent written, presentation and verbal communications.
- ✔ Ability to manage and implement large Infrastructure and Application delivery projects.
- ✔ Experience with public sector data migration and data visualization projects.
- ✔ Experienced manager for business and IT systems with extensive experience in business relationships, security, business resilience and continuity, emergency management and development in legacy and cloud environments.

WORK EXPERIENCE

August 2021 - Current	**Industry Consulting Manager – Program Manager, Scalable Solutions, Silver Spring, MD**

- Manage infrastructure projects for MedStar.
- Ensure strategic alignment of IT projects by establishing project goals and objectives that are consistent with stated goals.
- Manage SIP migrations for 7 hospitals and 15 clinics.
- Advise and direct Cloud migration projects for legacy applications and databases to Cloud systems.
- Perform IT assessments, cost reduction analysis, strategy development and system efficiency reviews.
- Write and manage large scale project plans with complex needs and time frames.
- Initiate and manage IT rationalization projects for consolidation of data centers for Mergers & Acquisitions.
- Provide leadership to team members for project and business requirements.
- Manage vendor relations and communications with stakeholders.
- Conduct scrum and staff meetings for monitoring and continuous workflow of agile projects.
- Assess risks and review technical risk assessments of an IT project including subsystem designs, architectures, and computer systems in terms of their impact on costs, benefits, schedule and technical performance.
- Manage budgets for PD and Capital projects.
- Work closely with the Enterprise Architecture team to ensure best practice Manage vendor relations and services.
- Review and evaluate quotes from vendors.

December 2019 - March 2021	**Center Engineering Manager – Program Manager, Mastech, Silver Spring, MD**

- Managed large scale Cisco, Ciena and Juniper infrastructure projects in the Mid-Atlantic.
- Analyzed the operational, technical and economic risks of reengineering efforts.
- Functioned as the bridge between functional business units and IT.
- Collaborated with clients and SMEs to scope out project requirements and scheduling for seamless integration.
- Evaluated eMOP's, detailed engineering design and implementation.
- Reviewed and evaluated quotes from vendors and iSpecs.
- Managed timelines for projects up to 2 years in advanced planning.
- Managed SIP services for customers.

- Mentored and coached team members on agile best practices that consisted of story planning, estimating, feature and story writing, and acceptance criteria.
- Led Ultra Long-Haul data installs Interfaced with cross-functional teams on major infrastructure projects.

January 2019 – December 2019

Technical Program Manager - Program Manager-Sr Technical, Consultant LT Infotech, Cloud and Infrastructure Services | Orlando, FL on site in Frederick, MD

- Managed Infrastructure move for acquired offices.
- Managed and implemented Juniper, Cisco Meraki network switches and firewall.
- Designed and managed change management system for a complete change of infrastructure and software tools.
- Moved local storage and email to IaaS Azure cloud services.
- Administrate accounts for local services and SaaS cloud services from old to new accounts.
- Integrated phone system to cloud services.
- Managed eLearning for the user community.
- Planned and implemented virtual server farm to replace old existing servers.
- Planned and managed PC replacements with new image.
- Managed Java applications for integration software products to integrate 3rd party software to Salesforce.
- Managed and maintained Sophos virus protection for servers and PC's.
- Moved server applications to AWS Created cloud email accounts and security with Mimecast.
- Redesigned websites with new company info.
- Provide incident management for Tier one, two and three issues.

February 2018 – January 2019

Technical Program Manager - Network Manager, Sona Networks | White Marsh, MD on site in Arlington, VA

- Management of Infrastructure projects and incidents for the county judicial system including courthouse, detention center and county offices for 450 users.
- Designed a new data center including environmental, power and backup needs and successfully moved server farm and the County Core Network to the new location.
- Project managed and implemented large scale infrastructure refresh including servers, software, cameras, network switches, AMAG and PLC systems.
- Planned replacement and operations plan for Physical Access Control System.
- Designed and implemented network refresh from old unsupported infrastructure to new Cisco core and edge switches.
- Implement and operate Ocularis 5 software for security cameras.
- Manage PLC system replacement.

- Manage security systems for the detention facility.

- Created new secure storage for video on AWS.

- Implemented Palo Alto firewalls for external communications with NOC and support vendors.

October 2016 – February 2018

Technical Program Manager, Knight Point | Annapolis, MD

- Management of Video upgrades for Anne Arundel County.

- Planned, designed and managed implemented for a new courthouse camera system for Maryland courts.

- Project management of gate security and building access.

- Data design of storage solution for over 500 TB of storage with replication to cloud services.

- Managed, implemented and operated network refresh from old unsupported infrastructure to new Cisco switches.

- Implemented Layer 3 switching.

- Managed new court reporting system.

- Implemented Palo Alto firewall and VPN solution for NOC and patrolman visibility.

- Replacement and modernization of coax camera system to IP cameras for Police, Fire, Correctional and County buildings.

- Manage server farm refresh to handle over 1500 cameras for the county.

February 2015 – February 2016

Technical Program Manager-Infrastructure Delivery, Avaya – Apex | Columbia, MD

- Technical leadership of all IT related projects for Health and Human Services.

- Detailed reporting of IT projects and break fix issues on a weekly and monthly basis.

- Managed a team of 12 NOC Engineers in a 24X7 NOC for HHS and SSA.

- Provided enhancement services support for Network Monitoring solutions and ensured the monitor tools are reporting accurate information and being optimized.

- Ensured the NOC is addressing tickets in a timely fashion and meeting SLAs

- Determined root cause and defined action plans through monitoring tools to prevent future application outages.

- Managed AWS storage for systems and backup.

- Managed SIP and SDP services for managed services for clients needs.

- Participated in Reviewed Calls and make recommendations where necessary

- Interfaced with Client ensuring that correct non sensitive information is effectively communicated.

- Led critical incident management problem calls for outages.

April 2014 – October 2014

Senior Program Manager, PPS Inc | Annapolis, MD

- Designed and implemented Infrastructure Monitoring System for Servers, Cisco Routers, remote network devices and Cisco Access Points for the FAA.

- Performed network activities including monitoring and troubleshooting WAN, LAN and 3G devices.

- Managed Cisco and Microsoft Gold relationships.

- Wrote Infrastructure Monitoring Manual Build out RHEL Linux servers in a clustered VM Ware environment.

- Wrote Python scripts to automate Nagios functions for in flight tools.

- Managed changes for all systems involved and documented in ServiceNow.

November 2011 – April 2014

Technology Infrastructure Delivery Program Manager and Engineer, Ascension Health Inc | Washington, District of Columbia

- Managed 24 x 7 hospital service and incident management for Tier two and three operations, telecom and data center.

- Prepared and managed budget of 22 million per year.

- Designed and implemented Cloud environment to service two hospitals and 36 clinics for EMR software and distributed systems.

- Managed eLearning and local training for EMR software package systems to a high profile user community.

- Managed conversion from the traditional Siemens Rolm telephone system to a modern Avaya VOIP system that served over 5000 users.

- Detailed design of all systems to comply with HIPAA and NIST.

- Detailed reporting of IT projects and break fix issues on a weekly and monthly basis.

- Overall responsibility for system and physical security.

- Led Change Management efforts and held weekly on-line meetings for local and national change management using ServiceNow Change Management.

- Managed WAN/LAN/MAN circuits for 8 remote locations with Juniper VPN Served as Enterprise Architect for two hospital facilities and over 40 clinics.

- Program Manager for virtualization of the server farm, managing efforts to go from 100% hardware to 90% virtual bringing the server count from over 180 physical servers to 20 physical servers in a mixed VMware and Hyper-V farm.

- Program Manager for Meditech upgraded from version 5.61 to 5.65 for a system that serviced over 4000 medical professionals.

- Acted as Subject Matter Expert for IT related projects Managed conversion of the network from the legacy Cisco switched network to Avaya.

- Overall leadership and management for engineering operations and maintenance group of 18 engineers/technicians, 16 national resources and 12 sub-contracted Dell Resources.

- Designed, managed project and implemented Citrix 6.x solution resolving both legacy software security issues and access to the three ministry EMR packages Manage Juniper Secure access VPN for Vendor and hospital access.

- Developed and Managed Vendor relations.

- Managed customization of EMR integration with Java scripting.

- Managed mixed server environment of 200 servers that includes Linux, AS/400 and Microsoft 2003, 2008 and 2012.

- Program Manager for ICD-10 compliance projects including security and system replenishment.

- Managed SolarWinds WAN and server monitoring system.

- Led design and implementation of Microsoft SCOM for application and system performance.

- Managed Microsoft SCCM for system updates and patch cycles.

- Designed and managed four load balanced systems using both F-5 and Citrix Netscalers

April 2001 - May 2011

Program-Program Manager, Centrum-Department of Justice OJP-Executive Office of the Attorney General | Washington, District of Columbia

- Directly reported to CIO as advisor on IT projects using Capital Planning & IT Governance Division (CPI TGD) methodologies.

- Managed 75 Sun Servers in a three-tiered Oracle database environment.

- Managed 25 RHEL Linux servers for custom applications using Apache.

- Managed major websites to a new data center and hosting environment Customize NexisUni for 240 Justice attorneys.

- Reported weekly on Tier one, two and three engineering activities.

- Managed Network Operations Center (NOC) using Big Brother and Nagios.

- Received level one performance ratings every quarter on the DOJ-OJP contract.

- Enterprise Architect for the OJP modal.

- Managed eLearning for all software packages including LEO agencies outside of Justice.

- Managed 24 x 7 Tier I, II and III IT operations department with Microsoft XP, Office XP, Outlook in a clustered Microsoft 2003 and Exchange network on Dell and HP servers.

- Project Manage, design and implement new websites for the Department of Justice.

- Act as Subject Matter Expert for IT related forensic cases for Congress, US Courts and the GAO.

- Led Exchange upgrade from Exchange 2000 to Exchange 2003 cluster.

- Managed Cisco Infrastructure using 7xxx routers, 65XX redundant core switches and ATM.

- Overall leadership and incident management for engineering operations and maintenance group of 18 engineers/technicians, 8 tier one technicians, 12 tier two software/hardware technicians and in a multi-contractor environment.
- Designed and implemented Citrix solution resolving both legacy software security issues and internal user remote technology.
- Designed Network Management System and Advanced Help Desk for the network infrastructure, Sun and Dell servers and domain controllers.

OTHER EXPERIENCE:

- Program Project Director January 2000 - March 2001, DSM, INC | Lanham, Maryland Telecommunications Services

- Senior Project Engineer/Manager International June 1999 - January 2000, GTS Infotek | Denmark, Sweden, Norway, Germany and Iceland

- Deputy Program Manager May 1997 - June 1999, Infopro-Ingenium Corporation | Silver Spring, Maryland

- Program Manager-Lead Engineer May 1990 - May 1997, Alliance Computer Services | Silver Spring, MD

Highly skilled Azure Cloud Engineer with over 8 years of experience and a PhD in Information Technology and a master's in computer science. Expertise in cloud architecture planning, deployment, and management, coupled with a proven ability to transform business requirements into efficient IT solutions. Proven record in streamlining operations and enhancing system efficiency for large-scale companies like the FDA, Ctel, and Select Computing Inc.

Technical Skills

- Software Engineering, Web Application Design & Development, Technology Integration, Requirements Management Client Consulting, Object Oriented Programming, Coding & Debugging, Problem Solving, Front-End Architect Design, Application Testing, Technology Support, Technical and Functional Specification
- Languages: C#, VB.NET, ASP.NET, Java, C, PHP, JavaScript, Oracle9i, ColdFusion, Solidity, R
- Web: ASP.NET Framework 3.5, 5, Oracle 9i, Visual Studio 2008/2012/2013, SQL Server 2005/2008, PHP, MySQL, JavaScript, jQuery, AJAX, Angular JS, CSS3, HTML5, DHTML, XML, WCF, WPF, LINQ.
- Databases: Oracle 9i, SQL Server 2005 / 2008, MySQL, T-SQL
- Tools: MS Visual Studio 2010/2012/2013, Macromedia Dreamweaver 8, Adobe Dreamweaver CS5, Crystal Reports XI, Adobe Photoshop CS3, StarUML, Visual Paradigm, Notepad, Wire shark, Net Beans, Eclipse, Scrum (Rally), VISIO
- Servers: Apache Glassfish, Tomcat, Wampp, Xampp
- Frameworks: .NET Core, jQuery, MVC 4/ MVC 5 (Razor), Entity Framework (.NET3.5/4.0) 6, Spring-Hibernate (Java), Angular 5, Angular 9
- Platforms: Windows XP / 7 / Server 2008, Linux
- Design Patterns: Integrator, Observer, MVC, Composite, State, Strategy, Singleton, Façade, Mediator, Factory
- SDLC: Waterfall, Iteration, Agile, Dependency Injection
- Testing: QA, N Unit Testing, X Unit Testing, Karma and Jasmine, Performance Testing (Load Runner, JMeter).
- Version Control/Repository: TFS, GIT, GITLAB, BITBUCKET, CI/CD

Patents/ Certifications

- Microsoft Certified Professional (MCP), .Net Framework – August 2017
- Certified Professional Scrum Master - 2023
- Microsoft Certified Solution Associate (MCSA) – October 2017

EXPERIENCE WITH SCOPE OF WORK

- ✔ Spearheaded cloud architecture planning and deployment at the FDA, enhancing data processing efficiency, regulatory compliance, and security.
- ✔ Managed cloud migrations, optimized resources, and ensured robust disaster recovery plans at Ctel, leading to increased operational efficiency and reduced total cost of ownership.
- ✔ Contributed significantly to the cloud strategy at Select Computing Inc., designing and implementing scalable cloud solutions to ensure high availability and performance of their cloud infrastructure.
- ✔ Successfully led the transition to a full Azure-based cloud system, enabling faster application delivery, streamlined operations, and improved cost efficiency.
- ✔ While at Reliable Software Resources, drove the adoption of Infrastructure as Code practices, significantly reducing configuration errors and accelerating the speed of deployment.
- ✔ Implemented robust Azure security measures, including Azure Active Directory and Azure Security Center, which drastically improved the overall security posture and compliance with industry regulations.

- Programming in HTML5 with JavaScript and CSS3 70-480 – August 2017
- Developing ASP.NET MVC Web Applications 70-486 – October 2017
- Windows Azure and Web Services 70-487 – October 2018
- MCSD: App Builder – October 2018
- Developing Microsoft Azure Solutions 532 – October 2018
- Microsoft Dynamics 365 customer engagement Online Deployment MB2-715 (CRM) – November 2018
- Microsoft Dynamics 365 Customization and Configuration Exam MB2-716 (CRM) –October 2018
- CRM: Dynamics 365 - Certified 2018 (MCSA) – November 2018
- Certified Ethical Hacker (Cyber Security)
- Certified Blockchain Professional (CBCP)
- Exam 463: Implementing a Data Warehouse with Microsoft SQL Server 2012/2014 - August, 2017

Education

- PhD in Information Technology, University of Cumberland 2023
- M.Sc. in Information System Security, University of Cumberland 2019
- M.Sc. in Computer Science, Maharishi University 2017
- M.Sc. in Computer Science, Darul Islam University 2011
- B.Sc. in Computer Science, Darul Islam University

✔ Designed and deployed Azure Kubernetes Services (AKS) for container orchestration, enhancing scalability, and improving the resilience of business-critical applications.

✔ Contributed to the University at Maharishi by developing an Azure-based data analytics solution, which improved the university's capability to make data-driven decisions and enhance student experiences.

✔ Drove the migration of large-scale databases to Azure SQL, optimizing data accessibility, security, and storage costs, enhancing the overall operational efficiency.

WORK EXPERIENCE

June 2020 - Current

Software Engineer - Sr. Azure Cloud Engineer, Select Computing Inc., Columbia, MD

- Implement Infrastructure as Code (IaC) through Azure Blueprint and other tools, ensuring efficient, repeatable, and error-free infrastructure deployment.
- Oversee integrations with ExpressRoute, Identity Management, MFA, VPN, Azure App Service, AKS, etc., ensuring proper setup, functionality, and security.
- Drive Azure Security and compliance implementation in both commercial and government clouds, including Zero-Trust blueprint development and management.
- Manage Azure Kubernetes Service (AKS/ACR) and Azure Container instances, ensuring proper configuration, efficiency, and user satisfaction.
- Configure Azure Kubernetes Service, ACI, ACR, and RedHat OpenShift for Application Developers, providing resources, training, and troubleshooting support.
- Utilize RedHat OpenShift 4.5, Ansible Tower, Blueprints, and Terraform for implementation, requiring deep technical understanding and strategic use.
- Strategically plan, set technical standards, and guide the adoption of Azure technologies across various projects.
- Design, build, and maintain Azure Infrastructure for managing customer cloud networks, including setup, configuration, monitoring, and troubleshooting.
- Continuously improve the managed service environment through regular assessments, enhancements, and automation of tasks.

- Execute feasibility studies and proposals for migrating workloads to Azure, assessing existing systems, and outlining potential migration strategies.
- Create and consolidate Reference Architectures to strengthen the Cloud Architecture practice, ensuring robust, adaptable designs in line with industry standards. Lead compliance and application portfolio assessments with customers on Cloud architecture, ensuring adherence to regulations and optimization for performance.

June 2017 - May 2020

Software Engineer - Sr. Azure Cloud Engineer, Mastech Digital Inc., Pittsburgh, PA

- Built solutions using Azure managed services such as StorSimple and Blob storage to archive on-premises data to the cloud. Collaborate with Azure SQL Data warehouse for the migration of system databases.

- Utilized Azure services, including Azure Blob storage, Azure Data Lake, Azure Data Factory, Azure SQL DB, Azure DW, Azure Event Hub, and Azure Stream Analytics.

- Implemented Azure API Management modules for public-facing, subscription-based authentication.

- Created and configured Azure Virtual Networks, subnets, DHCP address blocks, DNS settings, Security policies, and routing.

- Created Web App Services and deployed Asp.Net applications through Microsoft Azure Web App services.

- Design a system for tracking CR, bug fixes, and enhancements using a win form desktop application in VB.NET 2015 and MS-SQL 2012 database.

- Update and redesign several internal tools from VB.NET 2008 to VB.NET 2015, thereby bringing current software standards that facilitate automation.

- Gather requirements and write use cases based on those requirements. Develop and consume WCF Services to build Application server components, with experience implementing APIs and RESTful services.

- Extensively apply Object-Oriented Concepts in building the application, including inheritance, polymorphism, data encapsulation, abstraction, aggregation, association, and generic collections.

- Develop and maintain an Angular-power platform written in Typescript. Implement the Router Module of Angular 9 to make the whole project a Single Page Application and add routers according to the requirements.

- Handling ASP.NET client-side state management (view state, cookies, and query strings) and server-side state management (application state and session state).

- Design, develop, test, publish, and maintain mobile applications using Xamarin (C# for iOS and Android).

- Manage software version control via Subversion (SVN) and Team Foundation Software. Debug, resolve and assist in production issues/deployment of the department of finance property management system (PILOT) and supporting other property applications.

- Develop and maintain windows application utilities to verify the inbound data in XML and to create automated SQL scripts, utilizing LINQ, Lambdas expression, Service-Oriented Architecture (SOA).

- Implement scalable enterprise SQL Server Database Architecture. Developing web applications using JavaScript, JQuery, Angular 5, JSON, XML, Telerik, Kendo UI, AJAX, HTML5, CSS3, Bootstrap, and Razor.

- Use CRM 2016 features like Project Service, Field Service, Customer Self-Service Portal, and Analytics Feature for Power BI Integration, Excel Template.

- Configure CRM aspects (Entities, Workflows, Business Process Flow, Business Rules, Security Roles) and carry out Requirements Analysis, Design, and Documentation.

- Consume CRM API for the development of Custom API Libraries for front-end development.
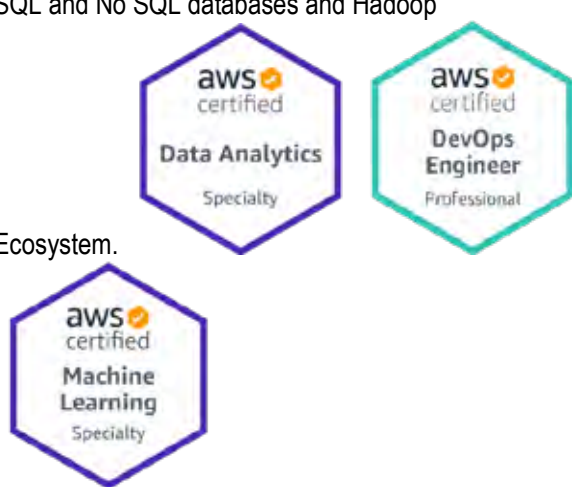
September 2014 - May 2017

Software Engineer - Azure Cloud Engineer, Ctel Inc., Baltimore, MD

- Constructed a solution utilizing Azure managed services StorSimple and Blob storage, archiving on-premises data to the cloud.

- Collaborated on Azure SQL Data warehouse projects to migrate system databases. Possessed extensive experience in Azure services such as Azure Blob storage, Azure Data Lake, Azure Data Factory, Azure SQL DB, Azure DW, Azure Event Hub, and Azure Stream Analytics.

- Utilized Queues and Containers for persistent data storage on Azure and implemented Azure API Management modules for public-facing subscription-based authentication.

- Developed and configured Azure Virtual Networks, subnets, DHCP address blocks, DNS settings, Security policies, and routing. Created Web App Services, deploying Asp.Net applications through Microsoft Azure Web App services.

- Designed a system for tracking CR, bug fixes, and enhancements using a win form desktop application in VB.NET 2015 and MS-SQL 2012 database.

- Updated and redesigned several internal tools from VB.NET 2008 to VB.NET 2015, introducing current software standards which automated processes.

- Participated in the full Software Development Life Cycle, adopting agile methodologies to deliver a high-quality software model using N-Tier Architecture.

- Gathered requirements and authored Use case documents for the requirements. Developed and utilized WCF Services for constructing Application server components and implemented APIs and RESTful services.

- Employed Object-Oriented Concepts extensively in application development (Inheritance, Polymorphism, Data encapsulation, Abstraction, Aggregation, Association, and Generic Collections).

- Undertook development and maintenance of an Angular-powered platform written in Typescript. Implemented Router Module of Angular 9, transforming the project into a Single Page Application and adding routers as per the requirements.

- Managed ASP.NET client-side and server-side state management (view state, cookies and query strings, application state, and session state). Designed, developed, tested, published, and maintained mobile applications using Xamarin (C#: iOS and Android).

- Administered software version control via Subversion (SVN) and Team Foundation Software. Debugged, resolved, and aided in production issues/deployment of the Department of Finance Property Management System (PILOT), and supported other property applications.

- Developed and maintained Windows application utilities to verify the inbound data in XML and to create automated SQL scripts. Utilized LINQ, Lambda expressions, Service Oriented Architecture (SOA), debugging and fixed bugs of applications using tools like Visual Studio 2017.

- Architected SQL Server Database and implemented a scalable enterprise database. Proficiently developed web applications using JavaScript, JQuery, Angular 5, JSON, XML, Telerik, Kendo UI, AJAX, HTML5, CSS3, Bootstrap, and Razor.

BS degree in Software Engineering, MS degree in Data Science. Mr. Yu has a total of 5 years IT experience. He has worked on Identity Access Management, SSO, web development, integration and data validation in the past with ASCENDING's clients using Python, AWS, Azure and big data technologies. He has extensive DevSecOps experience on AWS from 2018 such as EC2, ELB/ALB, ECS, SQS, AutoScaling, CloudFormation, CloudFront, Lambda and IAM etc. He also has been working with Microsoft Azure for years.

Technical Skills	Experience with Scope of Work
- Operating Systems: Mac, Amazon Linux, Centos, Ubuntu - Access Management: Okta, AWS IAM, SSO - Language: Python, Bash, SQL, PySpark - Distributed System: Hadoop, Spark - Cloud Computing: Amazon Web Services, Microsoft Azure, M365 - Proxy: Nginx, Apache - Backend Framework: Flask, SpringMVC, Django, JQuery - Database: Postgres, MySQL, DynamoDB - Management Tools: Jira, GrayLog - Containerization: Docker, DockerHub, ECS, Kubenetes. - Testing: Junit, Mockito, Jasmine, Cucumber, Selenium, CasperJs, PhantomJS - Configuration: Puppet, Chef, CloudFormation, Jenkins, Code Pipeline, CI/CD - Source Control: Git, Bitbucket - Build Tools: Maven, Ant, Gulp, Grunt, Bash	- Hands-on experience with AWS services. - Hands-on experience with MS Azure services. - Solid industrial hands-on experience in Web application development and database support. - Experience in working with AWS EC2, S3, RDS, Glue, Lake Formation, Athena, QuickSight, Lambda and other core AWS services. - Experience in Apache Spark, Spark Streaming, Spark SQL and No SQL databases and Hadoop
Business and Communication Skills	
- Strategic Planning - Data-driven Business-Process Optimization/Efficiency - Client Engagement	Ecosystem.
Licenses/Certifications/Training	
- AWS Certified DevOps Engineer Professional - AWS Certified Data Analytics-Specialty - AWS Certified Machine Learning-Specialty	

Education

- M.Sc., Data Science & Computer Science, The George Washington University, USA, 2017
- B.Sc., Software Engineering, Sichuan University, 2015

WORK EXPERIENCE

Aug 2019 – Present

Software Engineer ASCENDING Inc., Fairfax, VA

- Lead the integration of multiple ICAM/IAM technologies for Federal IT projects, ensuring seamless access control and secure identity management.
- Implement SSO/Federated authentication methods (SAML, OIDC) and developed components for identity and access management solutions.
- Design and maintain Okta-based IAM products, configuring and optimizing systems to meet clients' specific security and compliance requirements.
- Utilize AWS CloudFormation to create infrastructure as code templates for IAM-related resources, ensuring consistency and scalability across environments.
- Develop custom Python scripts to automate identity-related tasks and data analysis, improving overall efficiency and accuracy.
- Utilize SQL to query and analyze user access data, generating reports for compliance and audit purposes.
- Work closely with clients to understand their IAM requirements and provide tailored solutions to meet their business needs.
- Collaborate with distributed teams, leveraging virtual communication tools to support clients' IAM applications across multiple locations.
- Design and implement IAM workflows using Okta, Lambda functions, and AWS Step Functions to automate user lifecycle management processes.

Sep 2017 – Aug 2019

Data Engineer, WPA Intelligence, Washington DC

- Conducted functional testing of systems in the development phase and designed test plans for data warehouse projects.
- Transformed J2EE, Django, and Laravel applications to containerized applications for improved deployment and management.
- Automated AWS deployment processes through AWS Python SDK and CloudFormation, enhancing deployment efficiency.
- Utilized Spark SQL for Python interfaces to program ETL (Extract, Transform, Load) processes for data integration.
- Converted existing cron-jobs to Lambda services using Python and AWS Python SDK, resulting in reduced hosting costs.
- Migrated existing services like Redis and mem-cache to AWS Redis and ElastiCache for improved performance and scalability.

- Implemented IAM Policies in CloudFormation to automate role permissions in AWS Console, enhancing security controls.
- Streamlined development processes with continuous integration tools in CodePipeline for efficient development and deployment.
- Developed automation frameworks for application deployments to cloud environments, improving deployment speed and consistency.
- Wrote IAM Policy in CloudFormation to automate role permission in AWS Console. With managed IAM policy, it tightened the security control of the AWS account.
- Streamlined development process with 'continuous integration' tool in CodePipeline.
- Automated deployment and operation through (CloudFormation, Docker, ECS, CodePipeline).
- Developed automation framework for Application Deployments to cloud environments.

Aug 2015 – Aug 2016   **Research Assistant, Information Security Lab of Sichuan University, China**

- Designed a protocol for an anomaly information detection system to enhance security measures.
- Developed both front-end and back-end components of a website with a video detection module to protect youth from accessing restricted contents.
- Migrated the application stack from a private data center to AWS, ensuring a secure and scalable infrastructure.
- Automated partial build and deployment processes in AWS using AWS CodePipeline, increasing deployment efficiency.
- Utilized SQL in Athena to process, clean, analyze data, and formulate business metrics for reporting purposes.

THOMAS BEN	OKTA SOFTWARE ENGINEER

Innovative Engineer with 8+ years of experience in application design, development,

testing, and deployment. Highly experienced in writing codes and algorithms as well as building complex neural networks through various programming languages. Constantly eager to grow and

be part of an innovative and creative team that develops technology platforms and products for various components.

Technical Frameworks	Experience with Scope of Work
- Identity and Access Management (Okta, Federation Services - Shibboleth, OpenID) - Cloud Technologies (Microsoft Azure, M365) - Project Management Methodologies and Tools - Oracle Identity Management Suite and Oracle Core Technologies (optional) - Microsoft, Microsoft Azure, and Oracle - Laravel, Flask, Express.js, Node.js, - Apache, Bootstrap. - Django, FastAPI, CherryPy Vue.js, React.js, Angular.js.	✔ Emphasize knowledge transfer and provide comprehensive training to empower clients' IT staff in effectively managing Okta solutions independently. ✔ Ensure continuous support throughout project durations, maintaining consistent communication and collaboration with all stakeholders. ✔ Facilitated change management activities and provided hands-on training to clients' teams to ensure smooth adoption and effective use of Okta solutions. ✔ Hands-on experience with M365.
Languages	
- C, C++, Python, Java, JavaScript, React Native - HTML/CSS, SQL, PHP, Dar	
Education	
B.Sc., Computer Science, Columbia University, 2016	

WORK EXPERIENCE

Nov 2022 – Present

Senior Software Engineer, Scalient LLC, Pittsburg

- Design, test, and deploy new artificial intelligence functionalities for 5 major projects of the company, totaling $1.6M in value.
- Conduct in-depth research, analyze technical issues, and provide expert-level support to resolve complex challenges related to Okta implementation and maintenance.
- Facilitate change management activities and provide hands-on training to clients' teams to ensure smooth adoption and effective use of Okta solutions.
- Develop a recommendation system that provides personalized URLs and job recommendations to users based on their web activities through web scraping.
- Successfully led multiple Okta identity and access management implementations for various clients, ensuring seamless integration and effective utilization of Okta solutions.
- Collaborate with clients' IT staff and technology teams to gather requirements, propose solutions, and design tailored Okta configurations that align with their business needs.
- Provide continuous support and expertise throughout project durations, ensuring consistent availability and a seamless experience for clients.

June 2020 – Nov 2022

Senior Software Engineer, Intel Corporation, Santa Clara

- Explored real-time object detection using YOLOv4 for implementation in vehicles, achieving an accuracy of 98%.
- Improved nighttime vehicle license plate detection recall and reduced OCR misclassification rate by 30% through tonal enhancement on Edge with image-specific sensor to pixel value curve estimation (based on the Zero Reference Deep Curve Estimation Algorithm) in C++ along with lux gating and interpolation.
- Built a highly efficient person + vehicle occupancy and object detection pipeline in C++ for object tracking using YOLOv6 (for detection) and Byte Track (for tracking) with an accuracy of over 94%.
- Integrated ONNX Runtime models converted from Torch and TfLite with frame fetchers using YUV to RGB converter to run platform-agnostic tracking.
- Led a team of 5 employees, conducted hiring and training, managed meetings to resolve performance issues using Agile methodology, and reported project status daily.
- Collaborated with senior leadership to develop and implement digital marketing strategy, improving campaign performance by 50% and resulting in a 250% increase in revenue from search marketing campaigns.

May 2017 – June 2020

Software Engineer, Cedars Sinai, Los Angeles

- Played a key role in the development of Melody Connect, a music-based social network, from the initial design phase to its successful launch.
- Architected the user interface, ensuring an intuitive and user-friendly experience for Melody Connect's members.
- Designed and optimized the database using MongoDB, enabling efficient storage and retrieval of user data and media content.
- Implemented robust user registration and login features, ensuring seamless and secure access for Melody Connect's growing user base.
- Integrated OAuth with popular platforms like Facebook and SoundCloud, simplifying the registration process and enhancing user convenience.
- Developed an innovative ad-serving component that allowed dynamic addition and serving of adverts based on various parameters such as advert type, user location, user type, and screen size.
- Successfully integrated the jPlayer plugin to enable seamless music streaming from SoundCloud within the Melody Connect platform.
- Led the design and implementation of social networking features, empowering users to connect with others, rate songs and videos, post comments, and send private messages.
- Collaborated with a diverse team of developers, designers, and testers to ensure the timely delivery and quality of Melody Connect.

Aug 2016 - Apr 2017---Intern Software Engineer, Columbia University, New York

- Participated in the design and implementation of CI/CD and DevOps processes for agile projects, working with technologies and platforms such as Python, JavaScript, GIT, Linux, Docker, Kubernetes, Nginx, Jenkins, and AWS.

- Developed molecular dynamics simulations using NumPy and TensorFlow to identify protein-DNA interactions with up to 95% fidelity.
- Designed and completed analysis systems to extract information from large-scale data using PyTorch and scikit-learn.

Results-driven and highly skilled Engineer with extensive experience in Okta engineering, Client Consultation and Project Management. Proven ability to architect, implement, and maintain IAM solutions, ensuring robust security measures and privileged access management. Possesses a deep understanding of SSO/Federated authentication methods, SCIM, JIT provisioning, and on-premises application integration. Excels in fast-paced, distributed team environments, multitasking, and delivering innovative solutions to meet clients' unique needs.

Technical Skills	EXPERIENCE WITH SCOPE OF WORK
• Okta Identity and Access Management (IAM) Solutions • User Lifecycle Management • Okta API Integration and Okta Workflows • ICAM/IAM technologies • SCIM • JIT • SailPoint and ForgeRock	✔ Excellent communication and client management skills ✔ Time management and organizational proficiency ✔ Collaborative team player with the ability to work across diverse teams. ✔ User Access and Entitlements Management ✔ Identity Analytics and User Behavior Analysis ✔ Okta Identity and Access Management (IAM) Solutions ✔ Knowledge of Okta API Access Management and API Gateway capabilities
Business and Communication Skills	
• Data-driven Business-Process Optimization/Efficiency • Client Engagement	
Licenses/Certifications/Training	
• CompTIA Security+ • CISSP (Certified Information Systems Security Professional)	
Education	
• M.B.A., Master of Business Administration, Lewis University, 2020 • B.Sc., Computer Science, University of Illinois 2018	

WORK EXPERIENCE

Nov 2022 – Present

IT Project Manager: Okta, Bombas LLC, New York

- Conduct workflows designs on vendor approval process, Customer management process.
- Conduct business process analysis and make recommendations on how to optimize client business processes and performance.
- Support clients in privileged account onboarding and management across diverse network environments, enhancing security posture and risk mitigation.
- Develop technical SDLC documentation, ensuring comprehensive documentation of system architecture, design, and implementation processes.
- Create and deliver presentations on technical concepts, project work plans, delivery approach, milestones, and results to stakeholders.

Feb 2020 – Nov 2022

Okta Engineer, Panduit, Remote, Illinois

- Played a key role in designing, architecting, and implementing Okta solutions for federal, state, local, and higher education clients, enabling advanced authentication and privileged access management.
- Successfully integrated on-premises applications with SSO solutions, streamlining access to critical resources while enhancing security controls.
- Utilized SCIM and JIT provisioning to efficiently manage user access and entitlements, reducing administrative overhead and improving operational efficiency.
- Provided expert technical and functional support for production and maintenance of IAM applications, ensuring the resolution of technical challenges and optimization of system performance.
- Collaboration with Distributed Teams: Collaborated effectively with distributed teams, leveraging virtual communication tools to support clients' IAM applications across multiple locations.

June 2018 – Feb 2020

Okta Engineer Consultant, BodyArmor., Ashland, MA

- Acted as a subject matter expert (SME) in Okta identity and access management, providing consulting services to clients seeking cutting-edge IAM solutions.
- Conducted in-depth evaluations of clients' existing IAM and technology risks, identifying opportunities for internal control improvement and risk mitigation.
- Designed, installed, and configured Identity & Access Management products (Okta, SailPoint, ForgeRock) tailored to meet specific client requirements.
- Communicated complex IAM aspects at both technical and functional levels to maintain or resolve technical situations.
- Leveraged technology-based tools and methodologies to review, design, and implement IAM products and services, ensuring optimal outcomes for clients.

Mr. Mu has 13 years of professional experience in IT with strong knowledge of Software Design & Implementation. He is an experienced IT software developer with expertise in Oracle Core Apps (Databases/Data Warehouses/ERPs), AWS, Azure, Java, Python and JavaScript, as well as background with DevOps, testing and data modeling. He has Strong experience of Software Development Life Cycle (SDLC), extensive background in team collaboration for software to meet quality standards and solutions.

Technical Skills	Experience with Scope of Work
Automation tools: Selenium Web driver, Selenium Grid, Cucumber, TestNG. **Version Control System:** Git, GitHub. **Programming Languages Java,:** **Python**, R, Perl, Java, **JavaScript**, HTML/CSS **Cloud:** AWS (CloudFormation, Lambda, Elastic Beanstalk, EKS, S3, DynamoDB, RDS, Glue, Redshift), Azure **Databases:** Oracle, MS SQL Server 2008/2012, MySQL, PostgreSQL. **Tools:** Oracle Apps,, ALM, HP Quality Center, HP Quick Test Pro/UFT, Selenium, Eclipse, Jenkins, TestNG, JUnit, SoapUI, LoadRunner, Teradata **Big Data:** ETL, AWS Redshift, SPARK, Snowflake **Microsoft BI tools:** SSAS, SSIS and SSRS	✔ Architect Supply Network Planning, Demand Planning, Production Planning applications, benchmarking against applications like SAP SCM, ATS like Taleo, brass ring, iCiMS, HRMS Workday, SAP SuccessFactors, PeopleSoft HRMS, CRM systems like Salesforce.com SAP CRM, and many others. ✔ Distribution, and other industries encompassing ERP SAP, Oracle, PeopleSoft on Order Management, Finance, Logistics/SCM, HRMS, Procurement, and Production domains. ✔ Hands-on experience with Oracle and cloud computing. ✔ CS degrees from top universities. ✔ FinTech background. ✔ Experience with Big Data Technologies (Spark and Snowflake) and Cloud Computing Environment.
Business and Communication Skills	
Strategic Planning **Client Engagement**	
Education	
M.Sc., Computer Science, PEKING UNIVERSITY, China, 2009 B.Sc., Information Science, TSINGHUA UNIVERSITY, China, 2006	

WORK EXPERIENCE

Jan 2021 – Till Date	Solution Architect, ASCENDING Inc., Fairfax, VA

- Generated set of key SQL Scripts for database analysis with **Peoplesoft** Portal.
- Build **Snowflake Data Warehouse** and migrate data from multiple sources, such as **Oracle DB, AWS S**3 external stage, using **Snowpipe** to ingest data from **Oracle DB, SAP ERP, PeopleSoft,** and other applications.

- Complete SDLC with API and Data integration with **PeopleSoft** and SAP SuccessFactors.
- Design, configure, and architect Oracle Data Integrator and BICS for cloud base Business Intelligence and migration of **Oracle BI** to Cloud.
- Stay up to date with **Snowflake** features and enhancements, and recommend innovative solutions to improve data analytics processes.
- Plan and Execute Enterprise PMO activities Gather Business Requirements from Stakeholders, Management, third parties, multi department agreements for HRIS reporting and Plan deliverables, Oracle Cloud Services Infrastructure Set-up, and dates / timeline.
- Utilize databases like **CouchDB** and **Postgres** with seamless integration into numerous Enterprise application databases, including **Oracle** and **Teradata**.
- Design and requirement gathering workshops for Informatica ETL with **PeopleSoft HRMS** big data migration to Hadoop and Spark for different business units.
- Integrate automated tests into the **CI/CD** pipeline, enabling continuous testing and deployment for enhanced software delivery.
- Troubleshoot data-related issues, investigate data anomalies, and provide timely resolution in collaboration with data engineers and stakeholders.
- Document data analytics processes, data dictionaries, and data lineage using **Snowflake** metadata and documentation features.
- Design, plan, and execute ETL activities plan to migrate data from old system to a new system.
- Design detailed Migration Plans for Workloads from on-prem to AWS.
- Monitor the activities of data quality, data profiling and **Metadata**.
- Master reviewer for all the new and reverse engineering data models.
- Design **AWS Landing Zones** that are safe and secure.
- Use **Docker** to build, test, and deploy applications locally and also run docker on **AWS ECS**. Work with Release Engineers using **CircleCI** to automate **CI/CD** processes, monitor **Jenkins** job health, track and fix branch build failure.
- **Lead** a team of 7 testers and developers & organize the daily meeting.
- Test all small API on **AWS** with the correct data and verified results with standalone applications which already exist.
- Implement **SparkSQL** in **AWS Glue** to build **ETL** pipeline for the Data Validation purposes for the team.
- Develop and streamlined **CI/CD** process for windows workloads.
- Work closely with the development team to ensure all acceptance criteria is tested and passes required thresholds.

| Sep 2019 – Till Date | BI Architect, ATTAIN, Washington, DC |

- Design Data Model Star Schema, Kimball matrix and requirement gathering workshops for integrated **Oracle Business Intelligence Cloud Services**, Data model RPD Logical model design Star schema creation of dimensions and fact tables.
- SCRUM master for Business Intelligence expertise across gamut of tools like **Cognos, SSRS, SAP Business Objects, Oracle OBI / BICS** besides ETL tools like **Oracle Data Integrator, Informatica** and strong data modeling experience building data warehouse's using **OLTP** systems for effective **OLAP** reporting.
- Plan Infrastructure as a Service, **Oracle** Business Intelligence Cloud Services, and integration with Taleo Cloud **SaaS ATS** software using **Taleo** Connect.
- Revamped government employee activity reports with **Tableau's** advanced technology: segmentation, predictive analysis and external services integration.
- Used puppet to manage application standardized server configuration management. Implemented infrastructure automation scripts in python. It helps the team to implement infrastructure as Code (**IaC**) which allows the team to rebuild the environment again and again in minimal operation effort.
- Development of Diversity Dashboard project. Completed **ETL**, designed schema and dashboard visualization.
- Transformed legacy data warehousing hosted on premise in **Microsoft SQL Server** onto cloud-based **Redshift** instance on **AWS**. This renovation helped the client to have faster deployment and save cost.

Aug 2009 – Sep 2019

Senior Software Engineer, MICROSTRATEGY, Tyson Corner, VA

- Design, and execute SQL Queries on multiple data sources like P**eopleSoft HRMS, Workday and MicroStrategy integration for HRIS reports.**
- Infrastructure Management - Maintain & Migrate Infrastructure architecture on **Oracle Cloud Service – Infrastructure as a Service (IaaS)**, Database as a Service (**DBaaS**), Platform as a Service (**PaaS**), and Host **Oracle BICS and ETL ODI app**s.
- Developed automated test scripts using **NodeJS** and **Selenium** to ensure the quality of web applications.
- Developed and maintained **Node.js**-based automation frameworks to streamline testing processes and improve overall test efficiency.
- Tested web app and mobile app s across for both Android and IOS.
- Performed functional/regression tests on **Jenkins CI/CD** pipeline.
- Reviewed offshore code and trained junior testers.
- Investigated and updated **Perl** scripts for **ETL** process after metadata upgrade applied to customer's database server.
- Developed **Python** scripts for parsing Excel/HTML/PDF data files and reforming datasets with **Pandas** library. Converted as delimited files sent to data ingestion by **ETL** process with **SQL** stored procedure scripts created by me.

- Provisioned **Redshift** databases hosting **ETL** scripts upon new feature/patch release. Worked on **Python** scripts on **Lambda** to allow automatic format converting with data uploaded to **S3**.
- Created documentation templates in MS Word for use by the entire Testing Team, and generated test summary reports.
- Extensively involved in performing the Backend testing of the application to develop and execute various **SQL** queries. Defining and performing the test strategies and associated scripts for the verification and validation of the application and ensuring that it meets all defined business requirements and associated functionality.
- Automated **AWS** deployment process through **AWS, Python, Ruby, SDK, CloudFormation.**
- Streamlined development process with 'continuous integration' tool in both webs and mobile. (**Jenkins**).

Possesses a thorough knowledge of project management and program planning principles and practices, including the Project Management Book of Knowledge (PMBOK) and methodologies. In addition, has a master's degree in project management, as well as at least 10 years of experience as a project manager. Moreover, has a deep understanding of the processes, methods, and techniques used to analyze and evaluate business operations, and the principles and practices of planning, developing, implementing, and supporting computer information systems and programs.

Technical Skills

- MS Word, Excel, PowerPoint, Visio, and MS Project
- Knowledge of programming concepts and the Systems Development Lifecycle (SDLC)
- Oracle database systems.

Business and Communication Skills

- Presentation Skills
- Client Engagement

Licenses/Certifications/Training

- Project Management Professional (PMP)
- Professional in Business Analysis (PMI-PBA)
- Agile Certified professional (PMI-ACP)
- Disciplined Agile Senior Scrum Master (DASSM)
- SAFe Advanced Scrum Master 5.0
- CompTIA Security+
- CompTIA Linux+
- MD Insurance Producer License – Life & Health

Education

- M.Sc., Project Management – Morgan State University, 2023
- B.Sc., Accounting - University of Ilorin, Nigeria, 2001

EXPERIENCE WITH SCOPE OF WORK

- ✔ Proven customer service skills
- ✔ Ability to build and establish effective working relationships.
- ✔ Knowledge and understanding of the application and system programming.
- ✔ Skill in designing and documenting automated processes.
- ✔ Experience in a couple of project management related to Oracle's database and infrastructure

WORK EXPERIENCE

Jan 2018 – Present

IT Project Manager, Mariner Finance, LLC, Baltimore, MD

- Work with the Online Lending Development team, a soft development team to help the team self-organize & ensure it delivers functionally shippable increments.
- Coordinate Status reporting, manages, tracks and communicates through weekly/daily reports, project milestones and deliverable progress.
- Help identify and remove impediments, preventing distractions that interfere with the ability of the team to deliver the sprint goal. Coordinates the Project Management Office (PMO).
- Facilitate discussion and conflict resolution, identify risks, issues and roadblocks and facilitate resolution.

- Consumer Credit Finance and Credit Card enablement on the Customer Account Centre (CAC).
- Energetic, efficient, organized, resourceful, highly productive, a true self-starter.
- Leading a globally distributed, cross-functional team through agile ceremonies such as daily stand-ups, backlog refinement sessions, sprint planning sessions, and sprint retrospective sessions.
- SDLC experience. Lean Enterprise Systems Integration Projects. Act as primary liaison with on-shore and off-shore outsourced development Team. Coordinate all phases of the project (requirements, design, development, SIT, UAT, deployment).
- Worked on SAFe framework with other scrum teams, Attended Scrum of Scrums to coordinate dependencies across various other scrum teams in Agile Release train, worked with Release Train Engineer, System Architects and system Team for Infrastructure requirements and to support integration testing.
- Identify project scope and deliverables and project constraints and ability to manage scope creep, stakeholder management, and resolve issues/problems.
- Strong experience with agile project management tools such as JIRA, Confluence, MS Project, Wrike, Trello, Smart sheet. Deployment plans and dependencies, CI/CD tools – Bamboo, Jenkins, Bitbucket.
- Plan projects and develop project schedules and work breakdown structures (WBS) and milestones with task dependencies and execute critical path analysis.
- Managing multiple technology projects, JAVA based developments, with offshore development teams.
- Manage project budget, conduct earned value analysis (EVA). Participates in the Annual Budget Planning Process and Monthly Budget Review.
- Identify, manage and mitigate project risk. Consistently manage stakeholder expectations.
- SEO implementation and website development and redesign project. SAP Knowledge. Active Directory Migration.
- I created all project artifacts e.g., communications plan, risk management plan, quality plan, project plan, change management plan, human resource plan, stakeholder analysis. Liaison with third party vendors and internal providers.
- Good presentation skills – ability to present and demo effectively to technical and non-technical colleagues at all levels. Planning task, allocating resources; risk, time, issues and financial management.
- Great facilitation skills, flexibility in dealing with people and situations, high level of maturity and being level-headed under pressure – able to deal with and exploit uncertainty.

- Good organization and prioritization skills in the context of conflicting priorities and tight deadlines, drives implementation of agile best practices.
- Understanding of governance and finance standards, knowledge of project planning tools and software (Microsoft Project, Visio).
- Knowledge of multiple Agile Frameworks, including Scrum, Kanban, SAFe, or XP.
- Able to build relationships across organizations, collaborate effectively, and motivate teams in a multi-vendor environment.

Oct 2016 – Dec 2017

IT Project Manager, Ugele Insurance, Baltimore, MD

- Ensured delivery of project value, manages day-to-day direction and coordination of projects.
- Removed barriers to project delivery and is responsible for project status reporting.
- Oversaw the full project life cycle and managed project communication channels.
- Responsible for risk management across the projects and creating & maintaining the master risk register.
- As part of the wider team, works with owners of the process or service to understand current practices and identify areas for improvement.
- A good understanding of Agile project management and scrum master experience.
- Experience of performance management in business operations, and understanding of the firm's various operating models and cross functional contact.
- Supporting knowledge transfer activities and training.

Oct 2003– Sep 2016

IT Project Manager/Scrum Master, Sterling Bank Plc, Nigeria

- Facilitated Sprint Planning meetings, Daily scrum, sprint review, product backlog refinement meetings and sprint retrospective meetings.
- Strong attention to detail with a professional commitment to high quality deliverables.
- Strong ability to act independently and contribute to a team environment with sound business judgment, professional and emotional maturity.
- Strong coaching skills. Ability to step outside the role confines and help teach and enable/ empower other team members.
- Strong analytical, planning, and organizational skills with an ability to manage competing demands, IAM.
- Good presentation skills – ability to present effectively to technical and non-technical colleagues at all levels including C-level executives.
- Coordinated between various business and IT stakeholders and other scrum master's and Project Managers.

- Excellent listening skills and ability to build cross-functional relationships and influence without authority across all levels and functions.
- Ability to work on multiple priorities and/or projects simultaneously without impact to quality of work, strong ability to meet deadlines.

Rene Cooper is an accomplished Oracle Database Developer with expertise in cloud computing and database management. Her B.Sc. in Computer Science and multiple certifications demonstrate her strong foundation in data analytics and technology. Currently at CGI GROUP, INC, Rene supports major projects from development to production, ensuring data availability and protection on IBM AIX. Her proficiency in Oracle, MySQL, SQL Server, and cloud platforms like AWS and Azure makes her a valuable asset. Rene excels in Oracle RAC, Standby Database, Clustering, and Data Guard setup, with experience in capacity planning and disaster recovery. Her technical skills include Oracle Enterprise Manager, SQL*Plus, RMAN, and remote tools like Cisco VPN. Previously at LabCorp, she provided 24x7 support, conducted successful database migrations, and implemented standby databases using Data Guard features.

Technical Skills	EXPERIENCE WITH SCOPE OF WORK
- Cloud Computing: Amazon Web Services, Microsoft Azure - Databases: Oracle, MySQL and SQL Server - Database Tools: Oracle (Oracle Enterprise Manager, SQL*Plus, DB Configuration Assistant) Toad, OEM Grid, RMAN, SQL*Loader, Exp/Imp/Data Pump, Log miner, Statspack/AWR, Top, DBCA, DBUA, ADDM, Remedy, Oracle 10g (9.2.0.8), DBMS STATS, Data pump, SQL TRACE, TKPROF, EXPLAIN PLAN, Oracle 10.2.0.1, HP-UX 11, Sun Solaris 10.0, RAC, Oracle Streams - Operating Systems: UNIX (Solaris 8/9/10, AIX, HP-UX), LINUX - Remote Tools: Cisco VPN, Checkpoint VPN, Remote Admin, VNC, Remote Desktop, VMware Virtualization.	✔ Extensive experience with Oracle 9i/10g/11g/12c RAC, Standby Database, Clustering and Data Guard Setup, Automatic Storage Management (ASM) and Configuration and Tuning. patching, performing multi-platform database version UPGRADE, cross-platform migrations and bug fix/interim patch implementations in UNIX platform, Backup/Recovery monitoring and reporting using both BMC SQL Backtrack and Oracle RMAN.
Business and Communication Skills	✔ CS Degree
- Strategic Planning - Data-driven Business-Process Optimization/Efficiency	✔ Hands-on experience with Oracle Applications - Database, Warehouse, ERP and Data Analytics.
Licenses/Certifications/Training	
- Oracle Database 11g SQL Fundamentals - Oracle Cloud Infrastructure 2019 Architect Associate	
Education	
B.Sc., Computer Science, Virginia Tech	

WORK EXPERIENCE

Mar 2019 – Present	Oracle Database Developer, CGI GROUP, INC, Crystal City, VA Supports three major projects from Development to Production involving daily configuration, administration to ensure that data is available, protected from loss and corruption, and easily accessible as needed. InTech-Test, ODS & EDW environments, all running on IBM AIX 5.2 & 5.3. Database sizes range from 4GB to 2TB.

- Performing capacity planning required for migrating databases/schemas from Oracle 8i, 9i, 10g to Oracle 12c environment. Planned Installation, Configuration and Maintenance & disaster recovery scenarios with different recovery procedures and methods like Data Guard & Standby Database. Technical documentation of all configurations, installations, implementations, monitoring and testing projects for future utilization.
- Working closely with Systems Analysts, Systems Engineers/Admins & Application Developers through the SDLC from Development to Production, via Tech-Test in Needs Assessment, Requirements Gathering (Server hardware/OS specifications for Oracle Installs), Database Designing (Physical & Logical) and Implementation, database user creation and database access both at role & table levels, as well as final Project Performance Assessment/Evaluation.
- Implementing physical standby database for maximum availability using Oracle Data Guard 11g with Oracle Enterprise Manager (OEM) 12C cloud Control. Experience in implementing 10g Data guard with one physical database. Responsible for analyzing and designing the process to implement the available oracle patch sets, installed and configured.
- Availability Oracle GoldenGate (OGG) systems on Oracle 11gR2, Configure and build heartbeat monitoring in Golden Gate, working on Backup & Recovery online/offline using RMAN, User- Managed physical/logical backups using Import/Export/Datapump, DB refreshes and cloning using RMAN.
- Working closely with DEV teams to create database objects (tablespaces, schemas, tables, views, indexes, triggers, stored procedures etc) as per the business needs. Interacting with the Storage team for adding mount points to complete database/schema migration activities. Create database Objects, Tablespaces, Schemas as needed.

| Aug 2018 – Feb 2019 | Oracle Database Administrator, LabCorp, Newton, MA |

- Provided 24X7 supports for all the production and development databases. Used to run the scripts to check the status of databases such as growing table sizes, extent allocation, free space, used space, fragmentation etc. Performed space management, capacity planning, disaster recovery and overall maintenance of the databases.
- Performed installation and configuration of Oracle 10.2.0.1 database on HP-UX platform.
- Logical backups were scheduled for Development, QA and UAT databases using export/import and Data Pump. Successfully performed migrations from Oracle 10g/11g to 11gR2 RAC (Real Application) Database. Implemented Logical and Physical Standby Databases for RAC cluster on Sun Solaris platform using Data Guard feature of Oracle 11g R2. Successfully performed data replication using Materialized views and Oracle Streams in Oracle 11gR2. Cloned/Migrated databases using RMAN and traditional Data Pump

export/import utilities in Oracle 11gR2. Implemented recovery strategies whenever required and successfully recovered databases in case database crash, media/disk failures by using RMAN.

- Worked with different middleware & IDM teams to resolve their issues from the database side. Refreshed non-production environment with production using Datapump & RMAN. Applied patches and database reorganization using Oracle Enterprise Manager (OEM). Rebuilding indexes when needed to avoid fragmentation and improve performance, monitoring index usage and removing unused indexes.
- Implemented disaster recovery system, using RMAN and custom written shell scripts. Create and maintain Oracle Data Guard configuration. Experienced working on non-prod databases which are resided on Virtual Machines and understanding the working process.

Jordan has a total of 5 years IT experience. 3+ years of experience of DevSecOps assisting in AWS cloud environment. Certified AWS Associate Developer. Involved in many application development and data project support in the last few years.

Technical Skills	EXPERIENCE WITH SCOPE OF WORK
- Operating Systems: Mac, Amazon Linux, Centos, Ubuntu, Windows, Microsoft (365), Oracle - Language: Python, Bash, SQL, PySpark, Shell - Tools: AWS (S3, Lambda, Glue, RDS, IAM, Kinesis, CloudFormation, CDK, ECS, Athen), Git, Postman - Configuration: CloudFormation, CDK, Code Pipeline - Containerization: Docker, DockerHub, ECS, Kubenetes. - Build Tools: Pip, Bash - Database: MySQL, Teradata, Postgres	✔ Experience in working with AWS EC2, S3, RDS, Glue, Lake Formation, Athena, Lambda and other core AWS services. ✔ DevOps experience on the AWS from 2017 such as EC2, ELB/ALB, ECS, SQS, AutoScaling, CloudFormation. ✔ 5 years of experience implementing Python code.
Business and Communication Skills	
- Data-driven Business-Process Optimization/Efficiency - Client Engagement	
Licenses/Certifications/Training	
AWS Certified Developer – Associate	
Education	
B.Sc., Computer Science, GMU 2018	

WORK EXPERIENCE

Aug 2020 – Present

DevSecOps Engineer, ASCENDING, Fairfax, VA

- Implement functionalities with Python, including core business logic, asymmetric encryption/decryption, data access layer, and helper functions for AWS resources for the team.
- Create event-driven, asynchronized workflows to process payloads using AWS Lambda function, combining SQS, S3, ElastiCache, and RDS.
- Create secure, event-driven, and asynchronized workflows to process payloads using AWS Lambda function, combining SQS, S3, ElastiCache, and RDS.
- Support and enhanced the security of enterprise AWS infrastructure, contributing both as a team member and individual contributor to various automation projects involving AWS CloudFormation, CodePipeline, Lambda, CDK, etc.
- Utilize CloudWatch to monitor and secure resources such as EC2, CPU memory, Amazon RDS DB services, DynamoDB tables, and EBS volumes.
- Develop MapReduce/Spark Python modules with a focus on security for predictive analytics & machine learning in Hadoop on AWS.

- Utilize Docker to securely deploy AWS resources from the local environment and build and update Jenkins pipelines for secure CI/CD processes.
- Secure DevOps migration/automation processes for build and deploy systems. D Service Catalog templates for AWS resources, including API Gateway, RDS, Glue, KMS, SSM, SNS, using CloudFormation.
- Utilize CloudWatch to monitor resources such as EC2, CPU memory, Amazon RDS DB services, DynamoDB tables, and EBS volumes.
- Work in an Agile Team environment to efficiently produce valuable products in a timely manner.
- Involved in DevOps migration/automation processes for build and deploy systems.

Sep 2018 – Aug 2020

DevOps Engineer, GoDaddy, Tempe, AZ

- Built secure web applications for clients using AWS Lambda, CloudFront, API Gateway, DynamoDB, S3, and Route53.
- Designed and implemented secure CI/CD pipelines using tools such as Jenkins and GitLab CI for Oracle-based applications, enabling faster and more reliable secure software releases.
- Automated secure database schema changes and migration scripts using Oracle SQL Developer and Liquibase, streamlining the secure database deployment process and minimizing manual errors.
- Coded secure Python scripts with AWS SDK to auto-scale application worker tiers based on total queue counts.
- Deployed API Gateway integrated with Lambda functions and other services, using AWS Signature as the secure authorizer method and encrypting all sensitive information with KMS.
- Implemented secure Spark SQL code logic to join multiple data frames and generate application-specific aggregated results.
- Utilized Terraform to define and provision secure Oracle Cloud Infrastructure (OCI) resources, reducing provisioning time by 50% and enhancing scalability and repeatability.
- Implemented secure Ansible playbooks for automating configuration management tasks on Oracle Linux servers, ensuring consistent and standardized secure server setups.
- Created secure event-driven jobs using S3, DynamoDB, SNS, and SQS with Python.
- Moved data securely stored in S3 and integrated with AWS Elasticsearch.

**Aug 2015 –
Aug 2016**

Software Engineer, Tencent Ltd., China

- Developed parts of the Admin UI to manage providers and patients and create forms and surveys in React.js and Python.
- Designed and developed CI/CD pipelines using Azure DevOps (formerly VSTS) to automate the build, test, and deployment processes for Microsoft 365 solutions.
- Orchestrated deployment automation for SharePoint Online customizations, allowing for quick and reliable updates to intranet sites and collaboration features.
- Implemented Python scripts on AWS EC2 instances, building ETL pipelines for project data ingestion solutions.
- Packaged applications using container technologies like Docker and Kubernetes.
- Migrated JavaScript apps to containerized deployments using Elastic Container Service in AWS.
- Engaged in full-stack web development, version controlling (GitHub/Bitbucket), and deployment.
- Utilized Azure Resource Manager (ARM) templates to define and deploy Azure Active Directory configurations, Microsoft Teams settings, and other M365 services, ensuring version-controlled infrastructure changes.
- Implemented PowerShell Desired State Configuration (DSC) to manage configuration drift and enforce consistent settings across Azure and Microsoft 365 resources.
- Supported code builds by integrating with a continuous integration tool (Jenkins).
- Worked with development/testing, deployment, systems/infrastructure, and project teams to ensure continuous operation of build and test systems.

VINH PHAM	CLOUD AND SECURITY ENGINEER

Dedicated Cloud and Security Engineer with extensive experience in delivering AWS solutions using DevOps methodologies. Experience developing solutions to automate and scale infrastructure, as well as improve processes to enhance workflow for both the team and client. Skilled in building relationships with colleagues and clients and passionate about leveraging technology to create scalable and reliable solutions.

Technical Skills	EXPERIENCE WITH SCOPE OF WORK

Technical Skills

- Lambda, CloudFormation Stacksets, SCPs, CodePipeline, Transit & API Gateways, EC2, ECS, Kubernetes, Elastic Load Balancers, S3, Auto-Scaling Groups
- CI/CD
- AWS
- ServiceNow
- Microsoft: Azure, M365
- Citrix XenApp 5/6.5 and Citrix Web servers

Business and Communication Skills

- Cloud Security
- Team Development
- Client Engagement

Licenses/Certifications/Training

- AWS Certified Solutions Architect Associate
- AWS Certified Developers Associate
- HashiCorp Certified Terraform Associate

Education

- B.S., Computer Science and Business Information Systems, Virginia Polytechnic and State University, 2007

EXPERIENCE WITH SCOPE OF WORK

- ✔ Hands-on experience with AWS services.
- ✔ Hands-on experience with MS Azure services.
- ✔ Solid industrial hands-on experience in Web application development and database support.
- ✔ Experience in working with AWS, Microsoft Azure, M365
- ✔ Experience in Spark SQL and No SQL databases.

WORK EXPERIENCE

Dec 2021 – Present

Cloud Security Engineer, Rackspace Technology, Remote

- Design and maintain cloud-based solutions for clients in the public and government sectors, with a strong focus on security federation services.
- Implement and optimize AWS infrastructure using CloudFormation templates and terraform, ensuring seamless integration with existing resources.
- Leverage Infrastructure as Code (IaC) practices to deploy Lambda functions, CloudFormation Stacksets, SCPs, CodePipeline, Transit & API Gateways, EC2, ECS, Kubernetes, Elastic Load Balancers, S3, Auto-Scaling Groups, and various Content Delivery Network (CDN) tools such as CloudFront.

- Implement automated CI/CD pipelines to facilitate continuous delivery and deployment of cloud-based applications, ensuring smooth integration with the cloud infrastructure.
- Utilize CloudWatch and CloudTrail metrics in AWS to troubleshoot issues and determine permanent solutions, enhancing the security and reliability of cloud-based services.

June 2016 – Dec 2021

Senior AWS Windows Administrator, Rackspace Technology, Remote

- Managed multiple client infrastructures across AWS, Microsoft Azure, and private-cloud systems, specializing in Windows administration and security federation services.
- Ensured high reliability and uptime with robust high-availability solutions, implementing measures to reduce vulnerability exploitations and maintain compliance across all devices.
- Leveraged Amazon AWS and Microsoft Azure to procure new instances, analyze and troubleshoot issues using CloudWatch and Azure Monitor, and perform updates for optimal uptime and performance.
- Successfully led multiple migrations and upgrades in operating systems and software deployments, ensuring seamless transitions and minimal downtime.
- Collaborated with cross-functional teams, including Unix, Monitoring, Security, and Networking departments, to deploy tools and streamline workflows for enhanced efficiency.
- Provided hardware recommendations to optimize workload performance while keeping operating costs low and within budgetary constraints.
- Conducted weekly vulnerability report reviews to identify best practices for mitigation and presented recommendations to clients.
- Generated and shared weekly performance reports with clients, highlighting areas for improvement and optimizing system performance.
- Utilized ServiceNow to record operations, tasks, and incidents, providing comprehensive weekly reporting on trends and incidents to track progress and efficiency.

June 2007 – May 2016

Senior Server Administrator, Precise Systems, Inc., Maryland

- As a Windows Server Administrator for the Department of Defense, performed hardware and software maintenance, ensuring the secure and reliable operation of sensitive data housed on server racks at military locations worldwide.
- Developed and executed comprehensive tests to validate system performance, ensuring compliance with documented user requirements and maintaining the highest level of security.
- Provided specialized training and technical guidance to personnel, empowering them to effectively operate and maintain the systems in accordance with security protocols.
- Devised and executed software deployment implementation plans, leveraging Citrix XenApp 5 and 6.5 to optimize system performance and securely deliver applications to end-users.
- Skillfully installed and configured Windows Server operating systems on mobile and rack-mounted hardware, establishing a robust foundation for secure and efficient data processing.
- Set up and configured Citrix XenApp 5/6.5 and Citrix Web servers with Secure Gateway, facilitating secure remote access to critical applications and data.
- Ensured compliance of all Navy and Marine systems with IAVA/IAVB vulnerability reports, proactively identifying and addressing potential security risks.
- Utilized DISA STIGS to harden systems, enhancing their security posture and safeguarding against potential threats.
- Expertly integrated various ground station platforms, including VMWare, Citrix, Oracle, and others, to run concurrently, streamlining operations and maximizing system efficiency.

IT PROJECT MANAGER

Highly motivated and results-driven IT Professional with 11 years of diverse experience in leading large-scale IT projects for 60+ professional organizations. Recognized for exceptional project management skills, successfully overseeing projects from inception to implementation while achieving a 100% client satisfaction record. Proven track record of maintaining & upgrading network systems, analyzing & mitigating security risks, troubleshooting technical issues and providing high level customer service. Expert in formulating and implementing business continuity plans that helped clients respond to major disruptions & minimize downtime. Adept at innovation-centric problem solving with the strategic vision to customize technical support in line with the business goals. Exceptional client/vendor management skills with the ability to tailor communication to all levels of the hierarchy.

Technical Skills

- Virtualization Technologies: VMWare, Hyper-V.
- Network Management: TCP/IP, LAN/WAN config, and Firewall Management: IDS/IPS, Gateway Antivirus, Content Filtering
- Systems Administration and Cloud Technologies & Services (AWS, Azure GCP).
- DNS/DHCP Server Configuration & Management, Windows Server & Domain Controller (DC) Environment
- Knowledge of personal computers, Microsoft Office suite of tools including Word, Excel, PowerPoint, Visio and MS Project.
- Knowledge of programming concepts and the Systems Development Lifecycle (SDLC).

Business and Communication Skills

- Effective verbal and written communication skills
- Project Management: Team Leadership, Agile and Waterfall Technologies.
- Project Planning, Scheduling, Budgeting, Resource Allocation, Risk Analysis & Mitigation.
- Management (Change, Performance, Management.
- Ability to develop needs assessments and prepare administrative reports.

Licenses/Certifications/Training

- Project Management Professional (PMP)
- ITIL Foundations (ITIL-F) | Axelos | In Progress
- SonicWall Network Security Administrator (SNSA) | SonicWall | In Progress

Education

- B.S. Towson University, 2011

EXPERIENCE WITH SCOPE OF WORK

- ✔ Thorough knowledge of the principles and practices of Project Management and program planning.
- ✔ Knowledge of programming concepts and the Systems Development Lifecycle (SDLC).
- ✔ Thorough knowledge of the principles and practices of planning/ developing, implementing, and supporting computer information systems and programs
- ✔ IT System Maintenance, IT Security & Compliance, Incident Response Management, IT Asset Management, IT Operations Optimization, OS Patch & Update Management
- ✔ Ability to adapt to a changing environment and multi-task assignments.
- ✔ Goals Communication, Product Life Cycle Management

WORK EXPERIENCE

**Jan 2016 –
Present**

IT Project Operations Manager, 3P Technology Services, Inc.

- Manage 15 to 30 projects/month including project proposals, technical escalations, IT planning & audits.
- Enact effective Business Continuity Plans that reduced the financial losses from unexpected events by85%, and improved efficiency to 95% by streamlining the processes and access to critical IT resources.
- Demonstrate a 100% success rate in passing cybersecurity audits for SEC/IRS compliance within the NIST framework.
- Coordinated with the internal team and over 30 third-party vendors to meet outlined project goals; performed quality control checks and ensured project completion as per scope.
- Implement IT Asset Management planning overseeing firewalls, servers, workstations, and network equipment. Performed quarterly/annual reviews of system ages, OS status, end of life/support info for replacement/upgrade.
- Prevent 100% data loss from malware and cybersecurity attacks while maintaining 99% uptime; achieved a 100% success rate in recovering data from accidental deletion.
- Showcase a 95% annual employee retention rate and a 98% annual client retention rate.
- Review logs and alerts of servers and firewalls; troubleshot the highlighted issues with the team.
- Implement updated management systems to ensure clients' Operating Systems, software, and firmware to the latest versions to avoid missing critical security and performance updates.
- Suggest improvements in the IT systems/support to provide a better end-user experience including disaster recovery strategies with minimal local & cloud backup requirements.
- Train employees in Hosted Exchange Administration, Active Directory Administration, DNS and DHCP administration, N-Able RMM administration, Backup and Restoration, and Firewall administration.
- Formulate Security and Response SOPs for patch management administration, firewall administration, and incident response for clients with a reduction of business downtime by >40%.
- Devise KPIs for server uptime, incident response time, and backups which led to a 40% reduction in downtime, a 50% increase in the application of security patches and increase in response time by 25%.
- Deploy enterprise-level firewall solutions to all clients.

**June 2013 –
Jan 2016**

IT Administrator/Loan Distribution Processor, Pollard & Associates

- Worked with a 3rd party IT provider on a hosted VDS environment. Acted as the key person of this "Third-Party Administrator" to manage client plan sponsors/participants and process 401(k) loans and distributions.
- Implemented improvements within Citrix XenApp environment and local network to reduce system outages by 75% leading to increased business uptime (from about once a week to once a month).
- Minimized time to resolution for end-user issues by over 90%; from roughly a 24-hour turnaround to a 1-hour turnaround.

- Processed approximately 40 loans/week.
- Scrutinized 401(k) plan documents in terms of contributions, distributions, vesting, and loan availability.
- Ensured plan compliance in coordination with clients' HR teams and financial institutions.

Jan 2012 –
Jun 2013

IT Support Technician, Helion Technologies

- Involved in Active Directory management, Exchange Management, DNS & DHCP server administration, and CRM administration for clients.

- Administered 700+ business locations and 20,000 end units including workstations, servers & laptops.
- Troubleshooting clients' IT issues with over a 95% customer satisfaction feedback score.
- Attained more than 90% ticket resolution score with less than one hour of resolution time on the help desk.
- Executed five major projects for clients that included onboarding and system replacements.

Request for Proposal

RFP# FDC-1175

Information Technology Consulting Services

June 15, 2023

ANSWER/INQUIRY SUBMISSION FORM
DEADLINE FOR SUBMISSION OF QUESTIONS: <u>Thursday, July 20, 2023 @ 5:00 p.m.</u>

PROCEDURE FOR SUBMITTING QUESTIONS

All questions and inquiries shall be formally submitted on this document. Questions shall be submitted in writing and shall reference, whenever possible, the Page, Section, Item number within the Statement of Needs specifications of this document that the question is in reference to.

Questions shall be submitted to: Doug Chester at the following e-mail address: chestefd@jmu.edu.

Answers to all questions received will be issued through a written addendum (if applicable) and become a part of the permanent record of this solicitation.

Date: _____

Project Location: James Madison University
Project # & Title: FDC-1175 Information Technology Consulting Services

The following question concerns: (indicate)

    RFP Document: Section (number) _____, Page _____, Paragraph _____,

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Question submitted by:

_____
    Name   Organization   E-mail Address

REQUEST FOR PROPOSAL
RFP# FDC-1175

Issue Date: **June 15, 2023**

Title: **Information Technology Consulting Services**

Issuing Agency: **Commonwealth of Virginia**
                        James Madison University
                        Procurement Services MSC 5720
                        752 Ott Street, Wine Price Building
                        First Floor, Suite 1023
                        Harrisonburg, VA 22807

Period of Contract: From Date of Award Through One Year (Renewable)

Sealed Proposals Will Be Received Until <u>2:00 PM on August 3, 2023</u> for Furnishing the Services Described Herein.

SEALED PROPOSALS MAY BE MAILED, EXPRESS MAILED, OR HAND DELIVERED DIRECTLY TO THE ISSUING AGENCY SHOWN ABOVE.

All Inquiries For Information And Clarification Should Be Directed To: Doug Chester, Buyer Senior, Procurement Services, <u>chestefd@jmu.edu</u>; 540-568-4272; (Fax) 540-568-7935 by July 20, 2023 by 5:00 PM EST.

NOTE: THE SIGNED PROPOSAL AND ALL ATTACHMENTS SHALL BE RETURNED.
In compliance with this Request for Proposal and to all the conditions imposed herein, the undersigned offers and agrees to furnish the goods/services in accordance with the attached signed proposal or as mutually agreed upon by subsequent negotiation.

Name and Address of Firm:

<table>
<tr><td></td><td>By:</td><td>_____</td></tr>
<tr><td>_____</td><td></td><td>(Signature in Ink)</td></tr>
<tr><td>_____</td><td>Name:</td><td>_____</td></tr>
<tr><td></td><td></td><td>(Please Print)</td></tr>
<tr><td>_____</td><td></td><td></td></tr>
<tr><td>Date: _____</td><td>Title:</td><td>_____</td></tr>
<tr><td>Web Address: _____</td><td>Phone:</td><td>_____</td></tr>
<tr><td>Email: _____</td><td>Fax #:</td><td>_____</td></tr>
</table>

ACKNOWLEDGE RECEIPT OF ADDENDUM: #1_____ #2_____ #3_____ #4_____ #5_____ (please initial)

SMALL, WOMAN OR MINORITY OWNED BUSINESS:
☐ YES; ☐ NO; *IF YES* ⇒⇒ ☐ SMALL; ☐ WOMAN; ☐ MINORITY ***IF MINORITY****:* ☐ AA; ☐ HA; ☐ AsA; ☐ NW; ☐ Micro

Note: This public body does not discriminate against faith-based organizations in accordance with the *Code of Virginia*, § 2.2-4343.1 or against an offeror because of race, religion, color, sex, national origin, age, disability, or any other basis prohibited by state law relating to discrimination in employment.

REQUEST FOR PROPOSAL

RFP # FDC-1175

TABLE OF CONTENTS

I. PURPOSE

The purpose of this Request for Proposal (RFP) is to solicit sealed proposals from qualified sources to enter into a contract to provide information technology consulting services for James Madison University (JMU), an agency of the Commonwealth of Virginia. Initial contract shall be for one (1) year with an option to renew for four (4) additional one-year periods.

II. BACKGROUND

James Madison University is a comprehensive university in Harrisonburg, Virginia and is part of the statewide system of public higher education in the Commonwealth. The university offers programs at the bachelor's, master's and doctoral levels with its primary emphasis on the undergraduate student. JMU's current enrollment is approximately 22,000 full and part-time students. The university employs approximately 4,000 faculty and staff. Further information about the University can be found at the following website: www.jmu.edu.

James Madison University's Office of Information Technology is responsible for technology initiatives for campus. JMU was an early adopter of PeopleSoft/Oracle's Campus Solutions product, serving as a beta for its development and implementation. Additionally, the University uses Oracle's PeopleSoft Financials, Human Resources, and the Interaction Hub for JMU's self-service portal. The University also currently uses Oracle's Identity Management suite. JMU actively manages Windows and Macintosh computer systems. The University's network is powered by Cisco technologies. A series of NEC Private Branch Enterprises (PBX's) and gateways constitute the Voice network.

James Madison University is currently utilizing the following technologies:
- Oracle Identity Management Suite 11g R2 P3
- Oracle/PeopleSoft Campus Solutions 9.2; PeopleTools 8.55.x
- Oracle/PeopleSoft Human Resources 9.2; PeopleTools 8.55.x
- Oracle/PeopleSoft Financial Management 9.2; PeopleTools 8.55.x
- Oracle/PeopleSoft Enterprise Application Portal 9.2; PeopleTools 8.55.x
- WebLogic
- Desktop Management: Microsoft Windows and Macintosh (SCCM, JAMF, Apple Enterprise Connect)
- Microsoft 365 (A5 license)
- Microsoft Active Directory
- Federation Services (Shibboleth, OpenID)
- Cisco technologies (including but not limited to network and video conferencing)
- Virtualization technologies (VMWare)
- Cherwell ITSM
- Salesforce (Enterprise CRM)
- NEC Voice and Collaboration Technologies
- Boomi

Additionally, JMU is engaged in a multi-year initiative ("Reengineering Madison") that will include implementing significant technology platforms such as an enterprise Customer Relationship Management (CRM) platform (Salesforce) and new data solutions for managing and visualizing JMU's data. Reengineering Madison will also involve replacing JMU's current PeopleSoft ERP (Enterprise Resource Management) platform, including Finance, Human Resources, and Student Administration applications, as well as current applications used for

managing the identities of JMU's constituents. For more information on Reengineering Madison, see https://www.jmu.edu/computing/projects/reengineering-madison/index.shtml.

The University is aware of other cooperative contracts awarded by higher education institutions in the Commonwealth. Firms currently on a cooperative contract with these institutions are not required to respond to this solicitation. The University reserves the right to request quotes from firms on other cooperative contracts, when it is deemed in the best interest of the University.

James Madison University reserves the right, when not in the best interest of the university, to decline award to any firm already on an existing VASCUPP cooperative contract in order to avoid duplication of contracts.

III.   SMALL, WOMAN-OWNED AND MINORITY PARTICIPATION

It is the policy of the Commonwealth of Virginia to contribute to the establishment, preservation, and strengthening of small businesses and businesses owned by women and minorities, and to encourage their participation in State procurement activities. The Commonwealth encourages contractors to provide for the participation of small businesses and businesses owned by women and minorities through partnerships, joint ventures, subcontracts, and other contractual opportunities. Attachment B contains information on reporting spend data with subcontractors.

IV.   STATEMENT OF NEEDS

James Madison University desires to contract with qualified firms to provide expertise and a range of services to support technologies used by the University. Contractor shall serve on special projects as a technology expert when requested and as needed. Reports shall be provided back to the University summarizing options and providing recommendations. Contractor shall serve as a technology advisor to understand, communicate, and propose solutions as requested. Contractor shall serve as a resource of research, implementation, troubleshooting, and other technical tasks to support the efforts of James Madison University Information Technology (JMU IT) staff. Functional consultants shall be represented by the Contractor as experts in the tasks and functions assigned. The University reserves the right to accept or reject any proposed or assigned consultant, without cause, at any time during the duration of the contract.

1. Describe your corporate competencies/experience providing IT consulting services for one or more of the technologies listed below.

   a.   Oracle Core Technologies

   b.   Oracle/PeopleSoft Enterprise Solutions

   c.   Desktop and Mobile Device Management

   d.   Microsoft Azure and M365

   e.   Okta

   f.   Data Analytics/Visualization/Warehouse/Lake

   g.   Change Management Training, Services, & Certification

   h.   Security and Federation Services

   i.   Cisco Technologies, Infrastructure Support, and Virtualization

   j.   Audio Visual Technologies

k. Secure Research Enclaves

  l. Other Technology

2. Describe approach and methodology that will be used to provide IT consulting services to James Madison University. Include how your firm would manage the scope of projects.

3. Provide the names, qualifications, and experience of personnel to be assigned to James Madison University. Designate who would be assigned as the primary contact for the account.

4. Describe the ability to provide continuity of consultants throughout the duration of a project.

5. Describe IT consulting services available from your firm. Examples of services may include, but are not limited to, the following:

  a. Implementation

  b. Development

  c. Project Management

  d. Architecture and Design

  e. Capacity Planning

  f. Installation and Configuration

  g. Performance and Scalability

  h. Conversion

  i. Monitoring, Administration and Upgrades

  j. Training Development

  k. Operations Metrics

6. Describe training options and specify associated costs in *Section X. Pricing Schedule*. Include a catalog of training offerings and differentiation between technical staff and end-user training.

7. Provide examples of recent projects at higher education institutions comparable to James Madison University. Describe the project, time frame, end result, etc.

8. Describe the ability to provide for a thorough transfer of knowledge to JMU IT on any given project.

9. Describe your approach to project management.

10. Describe how your firm would propose a functional staffing plan indicating the number, characteristics, and schedule for the consultants.

11. Describe the functions that may be provided by a subcontractor of your firm. Specify the expertise and credentials required from the subcontractor.

V. PROPOSAL PREPARATION AND SUBMISSION

    A.   <u>GENERAL INSTRUCTIONS</u>

To ensure timely and adequate consideration of your proposal, offerors are to limit all contact, whether verbal or written, pertaining to this RFP to the James Madison University Procurement Office for the duration of this Proposal process. Failure to do so may jeopardize further consideration of Offeror's proposal.

1. RFP Response: In order to be considered for selection, the **Offeror shall submit a complete response to this RFP**; and shall submit to the issuing Purchasing Agency:

   a. **One (1) original** <u>and</u> **four (4) copies** of the entire proposal, INCLUDING ALL ATTACHMENTS. Any proprietary information should be clearly marked in accordance with 3.f. below.

   b. **One (1) electronic copy in WORD format or searchable PDF** (*flash drive*) of the entire proposal, INCLUDING ALL ATTACHMENTS. Any proprietary information should be clearly marked in accordance with 3.f. below.

   c. Should the proposal contain **proprietary information**, provide **one (1) redacted hard copy** of the proposal and all attachments with **proprietary portions removed or blacked out**. This copy should be clearly marked "*Redacted Copy*" on the front cover. The classification of an entire proposal document, line-item prices, and/or total proposal prices as proprietary or trade secrets is not acceptable. JMU shall not be responsible for the Contractor's failure to exclude proprietary information from this redacted copy.

   No other distribution of the proposal shall be made by the Offeror.

2. The version of the solicitation issued by JMU Procurement Services, as amended by any addenda, is the mandatory controlling version of the document. Any modification of, or additions to, the solicitation by the Offeror shall not modify the official version of the solicitation issued by JMU Procurement services unless accepted in writing by the University. Such modifications or additions to the solicitation by the Offeror may be cause for rejection of the proposal; however, JMU reserves the right to decide, on a case-by-case basis in its sole discretion, whether to reject such a proposal. If the modification or additions are not identified until after the award of the contract, the controlling version of the solicitation document shall still be the official state form issued by Procurement Services.

3. Proposal Preparation

   a. Proposals shall be signed by an authorized representative of the Offeror. All information requested should be submitted. Failure to submit all information requested may result in the purchasing agency requiring prompt submissions of missing information and/or giving a lowered evaluation of the proposal. Proposals which are substantially incomplete or lack key information may be rejected by the purchasing agency. Mandatory requirements are those required by law or regulation or are such that they cannot be waived and are not subject to negotiation.

b. Proposals shall be prepared simply and economically, providing a straightforward, concise description of capabilities to satisfy the requirements of the RFP. Emphasis should be placed on completeness and clarity of content.

c. Proposals should be organized in the order in which the requirements are presented in the RFP. All pages of the proposal should be numbered. Each paragraph in the proposal should reference the paragraph number of the corresponding section of the RFP. It is also helpful to cite the paragraph number, sub letter, and repeat the text of the requirement as it appears in the RFP. If a response covers more than one page, the paragraph number and sub letter should be repeated at the top of the next page. The proposal should contain a table of contents which cross references the RFP requirements. Information which the offeror desires to present that does not fall within any of the requirements of the RFP should be inserted at the appropriate place or be attached at the end of the proposal and designated as additional material. Proposals that are not organized in this manner risk elimination from consideration if the evaluators are unable to find where the RFP requirements are specifically addressed.

d. As used in this RFP, the terms "must", "shall", "should" and "may" identify the criticality of requirements. "Must" and "shall" identify requirements whose absence will have a major negative impact on the suitability of the proposed solution. Items labeled as "should" or "may" are highly desirable, although their absence will not have a large impact and would be useful, but are not necessary. Depending on the overall response to the RFP, some individual "must" and "shall" items may not be fully satisfied, but it is the intent to satisfy most, if not all, "must" and "shall" requirements. The inability of an offeror to satisfy a "must" or "shall" requirement does not automatically remove that offeror from consideration; however, it may seriously affect the overall rating of the offeror' proposal.

e. Each copy of the proposal should be bound or contained in a single volume where practical. All documentation submitted with the proposal should be contained in that single volume.

f. Ownership of all data, materials and documentation originated and prepared for the State pursuant to the RFP shall belong exclusively to the State and be subject to public inspection in accordance with the Virginia Freedom of Information Act. Trade secrets or proprietary information submitted by the offeror shall not be subject to public disclosure under the Virginia Freedom of Information Act; however, the offeror must invoke the protection of Section 2.2-4342F of the Code of Virginia, in writing, either before or at the time the data is submitted. The written notice must specifically identify the data or materials to be protected and state the reasons why protection is necessary. The proprietary or trade secret materials submitted must be identified by some distinct method such as highlighting or underlining and must indicate only the specific words, figures, or paragraphs that constitute trade secret or proprietary information. The classification of an entire proposal document, line-item prices and/or total proposal prices as proprietary or trade secrets is not acceptable and will result in rejection and return of the proposal.

4. Oral Presentation: Offerors who submit a proposal in response to this RFP may be required to give an oral presentation of their proposal to James Madison University. This provides an opportunity for the Offeror to clarify or elaborate on the proposal. This is a fact-finding and explanation session only and does not include negotiation. James Madison University will schedule the time and location of these presentations. Oral presentations are an option

of the University and may or may not be conducted. Therefore, proposals should be complete.

B. SPECIFIC PROPOSAL INSTRUCTIONS

Proposals should be as thorough and detailed as possible so that James Madison University may properly evaluate your capabilities to provide the required services. Offerors are required to submit the following items as a complete proposal:

1. Return RFP cover sheet and all addenda acknowledgements, if any, signed and filled out as required.

2. Plan and methodology for providing the goods/services as described in Section IV. Statement of Needs of this Request for Proposal.

3. A written narrative statement to include, but not be limited to, the expertise, qualifications, and experience of the firm and resumes of specific personnel to be assigned to perform the work.

4. Offeror Data Sheet, included as *Attachment A* to this RFP.

5. Small Business Subcontracting Plan, included as *Attachment B* to this RFP. Offeror shall provide a Small Business Subcontracting plan which summarizes the planned utilization of Department of Small Business and Supplier Diversity (SBSD)-certified small businesses which include businesses owned by women and minorities, when they have received Department of Small Business and Supplier Diversity (SBSD) small business certification, under the contract to be awarded as a result of this solicitation. This is a requirement for all prime contracts in excess of $100,000 unless no subcontracting opportunities exist.

6. Identify the amount of sales your company had during the last twelve months with each VASCUPP Member Institution. A list of VASCUPP Members can be found at: www.VASCUPP.org.

7. Proposed Cost. See Section X. Pricing Schedule of this Request for Proposal.

VI. EVALUATION AND AWARD CRITERIA

A. EVALUATION CRITERIA

Proposals shall be evaluated by James Madison University using the following criteria:

1. Quality of products/services offered and suitability for intended purposes

2. Qualifications and experience of Offeror in providing the goods/services

3. Specific plans or methodology to be used to perform the services

4. Participation of Small, Women-Owned, & Minority (SWaM) Businesses

5. Cost

Allocation of points for evaluation criteria will be published to the eVA solicitation posting prior to the closing date and time.

AWARD TO MULTIPLE OFFERORS: Selection shall be made of two or more offerors deemed to be fully qualified and best suited among those submitting proposals on the basis of the evaluation factors included in the Request for Proposals, including price, if so stated in the Request for Proposals. Negotiations shall be conducted with the offerors so selected. Price shall be considered but need not be the sole determining factor. After negotiations have been conducted with each offeror so selected, the agency shall select the offeror which, in its opinion, has made the best proposal, and shall award the contract to that offeror. The Commonwealth reserves the right to make multiple awards as a result of this solicitation. The Commonwealth may cancel this Request for Proposals or reject proposals at any time prior to an award and is not required to furnish a statement of the reasons why a particular proposal was not deemed to be the most advantageous. Should the Commonwealth determine in writing and in its sole discretion that only one offeror is fully qualified, or that one offeror is clearly more highly qualified than the others under consideration, a contract may be negotiated and awarded to that offeror. The award document will be a contract incorporating by reference all the requirements, terms and conditions of the solicitation and the contractor's proposal as negotiated.

VII. GENERAL TERMS AND CONDITIONS

A. PURCHASING MANUAL: This solicitation is subject to the provisions of the Commonwealth of Virginia's Purchasing Manual for Institutions of Higher Education and Their Vendors and any revisions thereto, which are hereby incorporated into this contract in their entirety. A copy of the manual is available for review at the purchasing office. In addition, the manual may be accessed electronically at http://www.jmu.edu/procurement or a copy can be obtained by calling Procurement Services at (540) 568-3145.

B. APPLICABLE LAWS AND COURTS: This solicitation and any resulting contract shall be governed in all respects by the laws of the Commonwealth of Virginia and any litigation with respect thereto shall be brought in the courts of the Commonwealth. The Contractor shall comply with applicable federal, state and local laws and regulations.

C. ANTI-DISCRIMINATION: By submitting their proposals, offerors certify to the Commonwealth that they will conform to the provisions of the Federal Civil Rights Act of 1964, as amended, as well as the Virginia Fair Employment Contracting Act of 1975, as amended, where applicable, the Virginians With Disabilities Act, the Americans With Disabilities Act and §10 of the Rules Governing Procurement, Chapter 2, Exhibit J, Attachment 1 (available for review at http://www.jmu.edu/procurement). If the award is made to a faith-based organization, the organization shall not discriminate against any recipient of goods, services, or disbursements made pursuant to the contract on the basis of the recipient's religion, religious belief, refusal to participate in a religious practice, or on the basis of race, age, color, gender, sexual orientation, gender identity, or national origin and shall be subject to the same rules as other organizations that contract with public bodies to account for the use of the funds provided; however, if the faith-based organization segregates public funds into separate accounts, only the accounts and programs funded with public funds shall be subject to audit by the public body. *(§6 of the Rules Governing Procurement).*

In every contract over $10,000 the provisions in 1. and 2. below apply:

1. During the performance of this contract, the contractor agrees as follows:

a. The contractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex, sexual orientation, gender identity, national origin, age, disability, or any other basis prohibited by state law relating to discrimination in employment, except where there is a bona fide occupational qualification reasonably necessary to the normal operation of the contractor. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.

b. The contractor, in all solicitations or advertisements for employees placed by or on behalf of the contractor, will state that such contractor is an equal opportunity employer.

c. Notices, advertisements, and solicitations placed in accordance with federal law, rule, or regulation shall be deemed sufficient for the purpose of meeting these requirements.

2. The contractor will include the provisions of 1. above in every subcontract or purchase order over $10,000, so that the provisions will be binding upon each subcontractor or vendor.

D. <u>ETHICS IN PUBLIC CONTRACTING</u>: By submitting their proposals, offerors certify that their proposals are made without collusion or fraud and that they have not offered or received any kickbacks or inducements from any other offeror, supplier, manufacturer or subcontractor in connection with their proposal, and that they have not conferred on any public employee having official responsibility for this procurement transaction any payment, loan, subscription, advance, deposit of money, services or anything of more than nominal value, present or promised, unless consideration of substantially equal or greater value was exchanged.

E. <u>IMMIGRATION REFORM AND CONTROL ACT OF 1986</u>: By entering into a written contract with the Commonwealth of Virginia, the Contractor certifies that the Contractor does not, and shall not during the performance of the contract for goods and services in the Commonwealth, knowingly employ an unauthorized alien as defined in the federal Immigration Reform and Control Act of 1986.

F. <u>DEBARMENT STATUS</u>: By submitting their proposals, offerors certify that they are not currently debarred by the Commonwealth of Virginia from submitting proposals on contracts for the type of goods and/or services covered by this solicitation, nor are they an agent of any person or entity that is currently so debarred.

G. <u>ANTITRUST</u>: By entering into a contract, the contractor conveys, sells, assigns, and transfers to the Commonwealth of Virginia all rights, title and interest in and to all causes of action it may now have or hereafter acquire under the antitrust laws of the United States and the Commonwealth of Virginia, relating to the particular goods or services purchased or acquired by the Commonwealth of Virginia under said contract.

H. <u>MANDATORY USE OF STATE FORM AND TERMS AND CONDITIONS RFPs</u>: Failure to submit a proposal on the official state form provided for that purpose may be a cause for rejection of the proposal. Modification of or additions to the General Terms and Conditions of the solicitation may be cause for rejection of the proposal; however, the Commonwealth reserves the right to decide, on a case-by-case basis, in its sole discretion, whether to reject such a proposal.

I. CLARIFICATION OF TERMS: If any prospective offeror has questions about the specifications or other solicitation documents, the prospective offeror should contact the buyer whose name appears on the face of the solicitation no later than five working days before the due date. Any revisions to the solicitation will be made only by addendum issued by the buyer.

J. PAYMENT:

1. To Prime Contractor:

    a. Invoices for items ordered, delivered and accepted shall be submitted by the contractor directly to the payment address shown on the purchase order/contract. All invoices shall show the state contract number and/or purchase order number; social security number (for individual contractors) or the federal employer identification number (for proprietorships, partnerships, and corporations).

    b. Any payment terms requiring payment in less than 30 days will be regarded as requiring payment 30 days after invoice or delivery, whichever occurs last. This shall not affect offers of discounts for payment in less than 30 days, however.

    c. All goods or services provided under this contract or purchase order, that are to be paid for with public funds, shall be billed by the contractor at the contract price, regardless of which public agency is being billed.

    d. The following shall be deemed to be the date of payment: the date of postmark in all cases where payment is made by mail, or the date of offset when offset proceedings have been instituted as authorized under the Virginia Debt Collection Act.

    e. Unreasonable Charges. Under certain emergency procurements and for most time and material purchases, final job costs cannot be accurately determined at the time orders are placed. In such cases, contractors should be put on notice that final payment in full is contingent on a determination of reasonableness with respect to all invoiced charges. Charges which appear to be unreasonable will be researched and challenged, and that portion of the invoice held in abeyance until a settlement can be reached. Upon determining that invoiced charges are not reasonable, the Commonwealth shall promptly notify the contractor, in writing, as to those charges which it considers unreasonable and the basis for the determination. A contractor may not institute legal action unless a settlement cannot be reached within thirty (30) days of notification. The provisions of this section do not relieve an agency of its prompt payment obligations with respect to those charges which are not in dispute (*Rules Governing Procurement, Chapter 2, Exhibit J, Attachment 1 § 53; available for review at http://www.jmu.edu/procurement*).

2. To Subcontractors:

    a. A contractor awarded a contract under this solicitation is hereby obligated:

    (1) To pay the subcontractor(s) within seven (7) days of the contractor's receipt of payment from the Commonwealth for the proportionate share of the payment received for work performed by the subcontractor(s) under the contract; or

> (2) To notify the agency and the subcontractors, in writing, of the contractor's intention to withhold payment and the reason.

>> b. The contractor is obligated to pay the subcontractor(s) interest at the rate of one percent per month (unless otherwise provided under the terms of the contract) on all amounts owed by the contractor that remain unpaid seven (7) days following receipt of payment from the Commonwealth, except for amounts withheld as stated in (2) above. The date of mailing of any payment by U. S. Mail is deemed to be payment to the addressee. These provisions apply to each sub-tier contractor performing under the primary contract. A contractor's obligation to pay an interest charge to a subcontractor may not be construed to be an obligation of the Commonwealth.

> 3. Each prime contractor who wins an award in which provision of a SWAM procurement plan is a condition to the award, shall deliver to the contracting agency or institution, on or before request for final payment, evidence and certification of compliance (subject only to insubstantial shortfalls and to shortfalls arising from subcontractor default) with the SWAM procurement plan. Final payment under the contract in question may be withheld until such certification is delivered and, if necessary, confirmed by the agency or institution, or other appropriate penalties may be assessed in lieu of withholding such payment.

> 4. The Commonwealth of Virginia encourages contractors and subcontractors to accept electronic and credit card payments.

K. <u>PRECENDENCE OF TERMS</u>: Paragraphs A through J of these General Terms and Conditions and the Commonwealth of Virginia Purchasing Manual for Institutions of Higher Education and their Vendors, shall apply in all instances. In the event there is a conflict between any of the other General Terms and Conditions and any Special Terms and Conditions in this solicitation, the Special Terms and Conditions shall apply.

L. <u>QUALIFICATIONS OF OFFERORS</u>: The Commonwealth may make such reasonable investigations as deemed proper and necessary to determine the ability of the offeror to perform the services/furnish the goods and the offeror shall furnish to the Commonwealth all such information and data for this purpose as may be requested. The Commonwealth reserves the right to inspect offeror's physical facilities prior to award to satisfy questions regarding the offeror's capabilities. The Commonwealth further reserves the right to reject any proposal if the evidence submitted by, or investigations of, such offeror fails to satisfy the Commonwealth that such offeror is properly qualified to carry out the obligations of the contract and to provide the services and/or furnish the goods contemplated therein.

M. <u>TESTING AND INSPECTION</u>: The Commonwealth reserves the right to conduct any test/inspection it may deem advisable to assure goods and services conform to the specifications.

N. <u>ASSIGNMENT OF CONTRACT</u>: A contract shall not be assignable by the contractor in whole or in part without the written consent of the Commonwealth.

O. <u>CHANGES TO THE CONTRACT</u>: Changes can be made to the contract in any of the following ways:

> 1. The parties may agree in writing to modify the scope of the contract. An increase or decrease in the price of the contract resulting from such modification shall be agreed to by the parties as a part of their written agreement to modify the scope of the contract.

2. The Purchasing Agency may order changes within the general scope of the contract at any time by written notice to the contractor. Changes within the scope of the contract include, but are not limited to, things such as services to be performed, the method of packing or shipment, and the place of delivery or installation. The contractor shall comply with the notice upon receipt. The contractor shall be compensated for any additional costs incurred as the result of such order and shall give the Purchasing Agency a credit for any savings. Said compensation shall be determined by one of the following methods:

   a. By mutual agreement between the parties in writing; or

   b. By agreeing upon a unit price or using a unit price set forth in the contract, if the work to be done can be expressed in units, and the contractor accounts for the number of units of work performed, subject to the Purchasing Agency's right to audit the contractor's records and/or to determine the correct number of units independently; or

   c. By ordering the contractor to proceed with the work and keep a record of all costs incurred and savings realized. A markup for overhead and profit may be allowed if provided by the contract. The same markup shall be used for determining a decrease in price as the result of savings realized. The contractor shall present the Purchasing Agency with all vouchers and records of expenses incurred and savings realized. The Purchasing Agency shall have the right to audit the records of the contractor as it deems necessary to determine costs or savings. Any claim for an adjustment in price under this provision must be asserted by written notice to the Purchasing Agency within thirty (30) days from the date of receipt of the written order from the Purchasing Agency. If the parties fail to agree on an amount of adjustment, the question of an increase or decrease in the contract price or time for performance shall be resolved in accordance with the procedures for resolving disputes provided by the Disputes Clause of this contract or, if there is none, in accordance with the disputes provisions of the Commonwealth of Virginia Purchasing Manual for Institutions of Higher Education and their Vendors. Neither the existence of a claim nor a dispute resolution process, litigation or any other provision of this contract shall excuse the contractor from promptly complying with the changes ordered by the Purchasing Agency or with the performance of the contract generally.

P. <u>DEFAULT</u>: In case of failure to deliver goods or services in accordance with the contract terms and conditions, the Commonwealth, after due oral or written notice, may procure them from other sources and hold the contractor responsible for any resulting additional purchase and administrative costs. This remedy shall be in addition to any other remedies which the Commonwealth may have.

Q. <u>INSURANCE</u>: By signing and submitting a proposal under this solicitation, the offeror certifies that if awarded the contract, it will have the following insurance coverage at the time the contract is awarded. For construction contracts, if any subcontractors are involved, the subcontractor will have workers' compensation insurance in accordance with § 25 of the Rules Governing Procurement – Chapter 2, Exhibit J, Attachment 1, and 65.2-800 et. Seq. of the Code of Virginia (available for review at http://www.jmu.edu/procurement) The offeror further certifies that the contractor and any subcontractors will maintain these insurance coverage during the entire term of the contract and that all insurance coverage will be provided by insurance companies authorized to sell insurance in Virginia by the Virginia State Corporation Commission.

MINIMUM INSURANCE COVERAGES AND LIMITS REQUIRED FOR MOST CONTRACTS:

1. Workers' Compensation: Statutory requirements and benefits. Coverage is compulsory for employers of three or more employees, to include the employer. Contractors who fail to notify the Commonwealth of increases in the number of employees that change their workers' compensation requirement under the Code of Virginia during the course of the contract shall be in noncompliance with the contract.

2. Employer's Liability: $100,000

3. Commercial General Liability: $1,000,000 per occurrence and $2,000,000 in the aggregate. Commercial General Liability is to include bodily injury and property damage, personal injury and advertising injury, products and completed operations coverage. The Commonwealth of Virginia must be named as an additional insured and so endorsed on the policy.

4. Automobile Liability: $1,000,000 combined single limit. (*Required only if a motor vehicle not owned by the Commonwealth is to be used in the contract. Contractor must assure that the required coverage is maintained by the Contractor (or third party owner of such motor vehicle.)*

R. ANNOUNCEMENT OF AWARD: Upon the award or the announcement of the decision to award a contract over $100,000, as a result of this solicitation, the purchasing agency will publicly post such notice on the DGS/DPS eVA web site (www.eva.virginia.gov) for a minimum of 10 days.

S. DRUG-FREE WORKPLACE: During the performance of this contract, the contractor agrees to (i) provide a drug-free workplace for the contractor's employees; (ii) post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition; (iii) state in all solicitations or advertisements for employees placed by or on behalf of the contractor that the contractor maintains a drug-free workplace; and (iv) include the provisions of the foregoing clauses in every subcontract or purchase order of over $10,000, so that the provisions will be binding upon each subcontractor or vendor.

For the purposes of this section, "drug-free workplace" means a site for the performance of work done in connection with a specific contract awarded to a contractor, the employees of whom are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the performance of the contract.

T. NONDISCRIMINATION OF CONTRACTORS: An offeror, or contractor shall not be discriminated against in the solicitation or award of this contract because of race, religion, color, sex, sexual orientation, gender identity, national origin, age, disability, faith-based organizational status, any other basis prohibited by state law relating to discrimination in employment or because the offeror employs ex-offenders unless the state agency, department or institution has made a written determination that employing ex-offenders on the specific contract is not in its best interest. If the award of this contract is made to a faith-based organization and an individual, who applies for or receives goods, services, or disbursements provided pursuant to this contract objects to the religious character of the faith-based organization from which the individual receives or would receive the goods, services, or

disbursements, the public body shall offer the individual, within a reasonable period of time after the date of his objection, access to equivalent goods, services, or disbursements from an alternative provider.

U. eVA BUSINESS TO GOVERNMENT VENDOR REGISTRATION, CONTRACTS, AND ORDERS: The eVA Internet electronic procurement solution, website portal www.eVA.virginia.gov, streamlines and automates government purchasing activities in the Commonwealth. The eVA portal is the gateway for vendors to conduct business with state agencies and public bodies. All vendors desiring to provide goods and/or services to the Commonwealth shall participate in the eVA Internet eprocurement solution by completing the free eVA Vendor Registration. All offerors must register in eVA and pay the Vendor Transaction Fees specified below; failure to register will result in the proposal being rejected. Vendor transaction fees are determined by the date the original purchase order is issued and the current fees are as follows:

Vendor transaction fees are determined by the date the original purchase order is issued and the current fees are as follows:

1. For orders issued July 1, 2014 and after, the Vendor Transaction Fee is:

    a. Department of Small Business and Supplier Diversity (SBSD) certified Small Businesses: 1% capped at $500 per order.

    b. Businesses that are not Department of Small Business and Supplier Diversity (SBSD) certified Small Businesses: 1% capped at $1,500 per order.

2. For orders issued prior to July 1, 2014 the vendor transaction fees can be found at www.eVA.virginia.gov.

3. The specified vendor transaction fee will be invoiced by the Commonwealth of Virginia Department of General Services approximately 60 days after the corresponding purchase order is issued and payable 30 days after the invoice date. Any adjustments (increases/decreases) will be handled through purchase order changes.

V. AVAILABILITY OF FUNDS: It is understood and agreed between the parties herein that the Commonwealth of Virginia shall be bound hereunder only to the extent of the funds available or which may hereafter become available for the purpose of this agreement.

W. PRICING CURRENCY: Unless stated otherwise in the solicitation, offerors shall state offered prices in U.S. dollars.

X. E-VERIFY REQUIREMENT OF ANY CONTRACTOR: Any employer with more than an average of 50 employees for the previous 12 months entering into a contract in excess of $50,000 with James Madison University to perform work or provide services pursuant to such contract shall register and participate in the E-Verify program to verify information and work authorization of its newly hired employees performing work pursuant to any awarded contract.

Y. CIVILITY IN STATE WORKPLACES: The contractor shall take all reasonable steps to ensure that no individual, while performing work on behalf of the contractor or any subcontractor in connection with this agreement (each, a "Contract Worker"), shall engage in 1) harassment (including sexual harassment), bullying, cyber-bullying, or threatening or violent conduct, or 2) discriminatory behavior on the basis of race, sex, color, national origin, religious belief,

sexual orientation, gender identity or expression, age, political affiliation, veteran status, or disability.

The contractor shall provide each Contract Worker with a copy of this Section and will require Contract Workers to participate in training on civility in the State workplace. Upon request, the contractor shall provide documentation that each Contract Worker has received such training.

For purposes of this Section, "State workplace" includes any location, permanent or temporary, where a Commonwealth employee performs any work-related duty or is representing his or her agency, as well as surrounding perimeters, parking lots, outside meeting locations, and means of travel to and from these locations. Communications are deemed to occur in a State workplace if the Contract Worker reasonably should know that the phone number, email, or other method of communication is associated with a State workplace or is associated with a person who is a State employee.

The Commonwealth of Virginia may require, at its sole discretion, the removal and replacement of any Contract Worker who the Commonwealth reasonably believes to have violated this Section.

This Section creates obligations solely on the part of the contractor. Employees or other third parties may benefit incidentally from this Section and from training materials or other communications distributed on this topic, but the Parties to this agreement intend this Section to be enforceable solely by the Commonwealth and not by employees or other third parties.

VIII. SPECIAL TERMS AND CONDITIONS

A. <u>AUDIT</u>: The Contractor hereby agrees to retain all books, records, systems, and other documents relative to this contract for five (5) years after final payment, or until audited by the Commonwealth of Virginia, whichever is sooner. The Commonwealth of Virginia, its authorized agents, and/or State auditors shall have full access to and the right to examine any of said materials during said period.

B. <u>CANCELLATION OF CONTRACT</u>: James Madison University reserves the right to cancel and terminate any resulting contract, in part or in whole, without penalty, upon 60 days written notice to the contractor. In the event the initial contract period is for more than 12 months, the resulting contract may be terminated by either party, without penalty, after the initial 12 months of the contract period upon 60 days written notice to the other party. Any contract cancellation notice shall not relieve the contractor of the obligation to deliver and/or perform on all outstanding orders issued prior to the effective date of cancellation.

C. <u>IDENTIFICATION OF PROPOSAL ENVELOPE</u>: The signed proposal should be returned in a separate envelope or package, sealed and identified as follows:

From: _____

Name of Offeror	Due Date	Time
Street or Box No.	RFP #	
City, State, Zip Code	RFP Title	

Name of Purchasing Officer: _____

The envelope should be addressed as directed on the title page of the solicitation.

The Offeror takes the risk that if the envelope is not marked as described above, it may be inadvertently opened and the information compromised, which may cause the proposal to be disqualified. Proposals may be hand-delivered to the designated location in the office issuing the solicitation. No other correspondence or other proposals should be placed in the envelope.

D. LATE PROPOSALS: To be considered for selection, proposals must be received by the issuing office by the designated date and hour. The official time used in the receipt of proposals is that time on the automatic time stamp machine in the issuing office. Proposals received in the issuing office after the date and hour designated are automatically non responsive and will not be considered. The University is not responsible for delays in the delivery of mail by the U.S. Postal Service, private couriers, or the intra university mail system. It is the sole responsibility of the Offeror to ensure that its proposal reaches the issuing office by the designated date and hour.

E. UNDERSTANDING OF REQUIREMENTS: It is the responsibility of each offeror to inquire about and clarify any requirements of this solicitation that is not understood. The University will not be bound by oral explanations as to the meaning of specifications or language contained in this solicitation. Therefore, all inquiries deemed to be substantive in nature must be in writing and submitted to the responsible buyer in the Procurement Services Office. Offerors must ensure that written inquiries reach the buyer at least five (5) days prior to the time set for receipt of offerors proposals. A copy of all queries and the respective response will be provided in the form of an addendum to all offerors who have indicated an interest in responding to this solicitation. Your signature on your Offer certifies that you fully understand all facets of this solicitation. These questions may be sent by Fax to 540/568-7935.

F. RENEWAL OF CONTRACT: This contract may be renewed by the Commonwealth for a period of four (4) successive one year periods under the terms and conditions of the original contract except as stated in 1. and 2. below. Price increases may be negotiated only at the time of renewal. Written notice of the Commonwealth's intention to renew shall be given approximately 90 days prior to the expiration date of each contract period.

1. If the Commonwealth elects to exercise the option to renew the contract for an additional one-year period, the contract price(s) for the additional one year shall not exceed the contract price(s) of the original contract increased/decreased by no more than the percentage increase/decrease of the other services category of the CPI-W section of the Consumer Price Index of the United States Bureau of Labor Statistics for the latest twelve months for which statistics are available.

2. If during any subsequent renewal periods, the Commonwealth elects to exercise the option to renew the contract, the contract price(s) for the subsequent renewal period shall not exceed the contract price(s) of the previous renewal period increased/decreased by more than the percentage increase/decrease of the other services category of the CPI-W section of the Consumer Price Index of the United States Bureau of Labor Statistics for the latest twelve months for which statistics are available.

G. SUBMISSION OF INVOICES: All invoices shall be submitted within sixty days of contract term expiration for the initial contract period as well as for each subsequent contract renewal period. Any invoices submitted after the sixty day period will not be processed for payment.

H. OPERATING VEHICLES ON JAMES MADISON UNIVERSITY CAMPUS: Operating vehicles on sidewalks, plazas, and areas heavily used by pedestrians is prohibited. In the unlikely event a driver should find it necessary to drive on James Madison University

sidewalks, plazas, and areas heavily used by pedestrians, the driver must yield to pedestrians. For a complete list of parking regulations, please go to www.jmu.edu/parking; or to acquire a service representative parking permit, contact Parking Services at 540.568.3300. The safety of our students, faculty and staff is of paramount importance to us. Accordingly, violators may be charged.

I. <u>COOPERATIVE PURCHASING / USE OF AGREEMENT BY THIRD PARTIES</u>: It is the intent of this solicitation and resulting contract(s) to allow for cooperative procurement. Accordingly, any public body, (to include government/state agencies, political subdivisions, etc.), cooperative purchasing organizations, public or private health or educational institutions or any University related foundation and affiliated corporations may access any resulting contract if authorized by the Contractor.

Participation in this cooperative procurement is strictly voluntary. If authorized by the Contractor(s), the resultant contract(s) will be extended to the entities indicated above to purchase goods and services in accordance with contract terms. As a separate contractual relationship, the participating entity will place its own orders directly with the Contractor(s) and shall fully and independently administer its use of the contract(s) to include contractual disputes, invoicing and payments without direct administration from the University. No modification of this contract or execution of a separate agreement is required to participate; however, the participating entity and the Contractor may modify the terms and conditions of this contract to accommodate specific governing laws, regulations, policies, and business goals required by the participating entity. Any such modification will apply solely between the participating entity and the Contractor.

The Contractor will notify the University in writing of any such entities accessing this contract. The Contractor will provide semi-annual usage reports for all entities accessing the contract. The University shall not be held liable for any costs or damages incurred by any other participating entity as a result of any authorization by the Contractor to extend the contract. It is understood and agreed that the University is not responsible for the acts or omissions of any entity and will not be considered in default of the contract no matter the circumstances.

Use of this contract(s) does not preclude any participating entity from using other contracts or competitive processes as needed.

J. <u>SMALL BUSINESS SUBCONTRACTING AND EVIDENCE OF COMPLIANCE</u>:

1. It is the goal of the Commonwealth that 42% of its purchases are made from small businesses. This includes discretionary spending in prime contracts and subcontracts. All potential offerors are required to submit a Small Business Subcontracting Plan. Unless the offeror is registered as a Department of Small Business and Supplier Diversity (SBSD)-certified small business and where it is practicable for any portion of the awarded contract to be subcontracted to other suppliers, the contractor is encouraged to offer such subcontracting opportunities to SBSD-certified small businesses. This shall not exclude SBSD-certified women-owned and minority-owned businesses when they have received SBSD small business certification. No offeror or subcontractor shall be considered a Small Business, a Women-Owned Business or a Minority-Owned Business unless certified as such by the Department of Small Business and Supplier Diversity (SBSD) by the due date for receipt of proposals. If small business subcontractors are used, the prime contractor agrees to report the use of small business subcontractors by providing the purchasing office at a minimum the following information: name of small business with the SBSD certification number or FEIN, phone number, total dollar amount subcontracted, category type (small, women-owned, or minority-owned), and type of product/service provided.

16

This information shall be submitted to: JMU Office of Procurement Services, Attn: SWAM Subcontracting Compliance, MSC 5720, Harrisonburg, VA 22807.

2. Each prime contractor who wins an award in which provision of a small business subcontracting plan is a condition of the award, shall deliver to the contracting agency or institution with every request for payment, evidence of compliance (subject only to insubstantial shortfalls and to shortfalls arising from subcontractor default) with the small business subcontracting plan. **This information shall be submitted to: JMU Office of Procurement Services, SWAM Subcontracting Compliance, MSC 5720, Harrisonburg, VA 22807**. When such business has been subcontracted to these firms and upon completion of the contract, the contractor agrees to furnish the purchasing office at a minimum the following information: name of firm with the Department of Small Business and Supplier Diversity (SBSD) certification number or FEIN number, phone number, total dollar amount subcontracted, category type (small, women-owned, or minority-owned), and type of product or service provided. Payment(s) may be withheld until compliance with the plan is received and confirmed by the agency or institution. The agency or institution reserves the right to pursue other appropriate remedies to include, but not be limited to, termination for default.

3. Each prime contractor who wins an award valued over $200,000 shall deliver to the contracting agency or institution with every request for payment, information on use of subcontractors that are not Department of Small Business and Supplier Diversity (SBSD)-certified small businesses. When such business has been subcontracted to these firms and upon completion of the contract, the contractor agrees to furnish the purchasing office at a minimum the following information: name of firm, phone number, FEIN number, total dollar amount subcontracted, and type of product or service provided. **This information shall be submitted to: JMU Office of Procurement Services, Attn: SWAM Subcontracting Compliance, MSC 5720, Harrisonburg, VA 22807**.

K. <u>AUTHORIZATION TO CONDUCT BUSINESS IN THE COMMONWEALTH</u>: A contractor organized as a stock or nonstock corporation, limited liability company, business trust, or limited partnership or registered as a registered limited liability partnership shall be authorized to transact business in the Commonwealth as a domestic or foreign business entity if so required by Title 13.1 or Title 50 of the Code of Virginia or as otherwise required by law. Any business entity described above that enters into a contract with a public body shall not allow its existence to lapse or its certificate of authority or registration to transact business in the Commonwealth, if so required under Title 13.1 or Title 50, to be revoked or cancelled at any time during the term of the contract. A public body may void any contract with a business entity if the business entity fails to remain in compliance with the provisions of this section.

L. <u>PUBLIC POSTING OF COOPERATIVE CONTRACTS:</u> James Madison University maintains a web-based contracts database with a public gateway access. Any resulting cooperative contract/s to this solicitation will be posted to the publicly accessible website. Contents identified as proprietary information will not be made public.

M. <u>CRIMINAL BACKGROUND CHECKS OF PERSONNEL ASSIGNED BY CONTRACTOR TO PERFORM WORK ON JMU PROPERTY</u>: The Contractor shall obtain criminal background checks on all of their contracted employees who will be assigned to perform services on James Madison University property. The results of the background checks will be directed solely to the Contractor. The Contractor bears responsibility for confirming to the University contract administrator that the background checks have been completed prior to work being performed by their employees or subcontractors. The Contractor shall only assign to work on the University campus those individuals whom it deems qualified and permissible

based on the results of completed background checks. Notwithstanding any other provision herein, and to ensure the safety of students, faculty, staff and facilities, James Madison University reserves the right to approve or disapprove any contract employee that will work on JMU property. Disapproval by the University will solely apply to JMU property and should have no bearing on the Contractor's employment of an individual outside of James Madison University.

N. INDEMNIFICATION: Contractor agrees to indemnify, defend and hold harmless the Commonwealth of Virginia, its officers, agents, and employees from any claims, damages and actions of any kind or nature, whether at law or in equity, arising from or caused by the use of any materials, goods, or equipment of any kind or nature furnished by the contractor/any services of any kind or nature furnished by the contractor, provided that such liability is not attributable to the sole negligence of the using agency or to failure of the using agency to use the materials, goods, or equipment in the manner already and permanently described by the contractor on the materials, goods or equipment delivered.

O. ADDITIONAL GOODS AND SERVICES: The University may acquire other goods or services that the supplier provides than those specifically solicited. The University reserves the right, subject to mutual agreement, for the Contractor to provide additional goods and/or services under the same pricing, terms, and conditions and to make modifications or enhancements to the existing goods and services. Such additional goods and services may include other products, components, accessories, subsystems, or related services that are newly introduced during the term of this Agreement. Such additional goods and services will be provided to the University at favored nations pricing, terms, and conditions.

P. SUBCONTRACTS: No portion of the work shall be subcontracted without prior written consent of the purchasing agency. In the event that the contractor desires to subcontract some part of the work specified herein, the contractor shall furnish the purchasing agency the names, qualifications and experience of their proposed subcontractors. The contractor shall, however, remain fully liable and responsible for the work to be done by its subcontractor(s) and shall assure compliance with all requirements of the contract.

Q. PRIME CONTRACTOR RESPONSIBILITIES: The contractor shall be responsible for completely supervising and directing the work under this contract and all subcontractors that he may utilize, using his best skill and attention. Subcontractors who perform work under this contract shall be responsible to the prime contractor. The contractor agrees that he is as fully responsible for the acts and omissions of his subcontractors and of persons employed by them as he is for the acts and omissions of his own employees.

R. CONFIDENTIALITY OF PERSONALLY IDENTIFIABLE INFORMATION: The Contractor assures that information and data obtained as to personal facts and circumstances related to students, faculty, and staff will be collected and held confidential, during and following the term of this agreement, and will not be divulged without the individual's and the agency's written consent and only in accordance with federal law or the *Code of Virginia*. Contractors who utilize, access, or store personally identifiable information as part of the performance of a contract are required to safeguard this information and immediately notify the agency of any breach or suspected breach in the security of such information. Contractors shall allow the agency to both participate in the investigation of incidents and exercise control over decisions regarding external reporting. Contractors and their employees working on this project may be required to sign a confidentiality statement.

IX.   METHOD OF PAYMENT

The contractor will be paid based on invoices submitted in accordance with the solicitation and any negotiations. James Madison University recognizes the importance of expediting the payment process for our vendors and suppliers; we request that our vendors and suppliers enroll in our bank's Comprehensive Payable options: either the Virtual Payables Virtual Card or the PayMode-X electronic deposit (ACH) to your bank account so that future payments are made electronically. Contractors signed up for the Virtual Payables process will receive the benefit of being paid Net 15. Additional information is available online at:

http://www.jmu.edu/financeoffice/accounting-operations-disbursements/cash-investments/vendor-payment-methods.shtml

X.   PRICING SCHEDULE

The Offeror shall provide onsite and offsite hourly rates broken down by position type for the proposed services. Onsite hourly rates shall include all billables (e.g. travel, lodging, meals, etc.). See Attachment D.

In addition to completing Attachment D, the Offeror shall also provide pricing for all other services, including training offerings.

Specify any associated charge card processing fees, if applicable, to be billed to the university. Vendors shall provide their VISA registration number when indicating charge card processing fees. Any vendor requiring information on VISA registration may refer to https://usa.visa.com/support/small-business/regulations-fees.html and for questions https://usa.visa.com/dam/VCOM/global/support-legal/documents/merchant-surcharging-qa-for-web.pdf.

XI.   ATTACHMENTS

Attachment A: Offeror Data Sheet

Attachment B: Small, Women, and Minority-owned Business (SWaM) Utilization Plan

Attachment C: Standard Contract Sample

Attachment D: Pricing Schedule

ATTACHMENT A

OFFEROR DATA SHEET

TO BE COMPLETED BY OFFEROR

1. <u>QUALIFICATIONS OF OFFEROR:</u> Offerors must have the capability and capacity in all respects to fully satisfy the contractual requirements.

2. <u>YEARS IN BUSINESS:</u> Indicate the length of time you have been in business providing these types of goods and services.

   Years_____ Months_____

3. <u>REFERENCES:</u> Indicate below a listing of at least five (5) organizations, either commercial or governmental/educational, that your agency is servicing. Include the name and address of the person the purchasing agency has your permission to contact.

CLIENT	LENGTH OF SERVICE	ADDRESS	CONTACT PERSON/PHONE #

4. List full names and addresses of Offeror and any branch offices which may be responsible for administering the contract.

5. RELATIONSHIP WITH THE COMMONWEALTH OF VIRGINIA: Is any member of the firm an employee of the Commonwealth of Virginia who has a personal interest in this contract pursuant to the <u>CODE OF VIRGINIA</u>, SECTION 2.2-3100 – 3131?
   [ ] YES [ ] NO
   IF YES, EXPLAIN:_____

ATTACHMENT B

Small, Women and Minority-owned Businesses (SWaM) Utilization Plan

Offeror Name: _____ **Preparer Name:** _____

Date: _____

Is your firm a **Small Business Enterprise** certified by the Department of Small Business and Supplier Diversity (SBSD)? Yes_____ No_____

   If yes, certification number: _____ Certification date:_____

Is your firm a **Woman-owned Business Enterprise** certified by the Department of Small Business and Supplier Diversity (SBSD)? Yes_____ No_____

   If yes, certification number: _____ Certification date:_____

Is your firm a **Minority-Owned Business Enterprise** certified by the Department of Small Business and Supplier Diversity (SBSD)? Yes_____ No_____

   If yes, certification number: _____ Certification date:_____

Is your firm a **Micro Business** certified by the Department of Small Business and Supplier Diversity (SBSD)? Yes_____ No_____

   If yes, certification number: _____ Certification date: _____

Instructions: *Populate the table below to show your firm's plans for utilization of small, women-owned and minority-owned business enterprises in the performance of the contract. Describe plans to utilize SWAMs businesses as part of joint ventures, partnerships, subcontractors, suppliers, etc.*

<u>Small Business:</u> "Small business " means a business, independently owned or operated by one or more persons who are citizens of the United States or non-citizens who are in full compliance with United States immigration law, which, together with affiliates, has 250 or fewer employees, or average annual gross receipts of $10 million or less averaged over the previous three years.

<u>Woman-Owned Business Enterprise:</u> A business concern which is at least 51 percent owned by one or more women who are U.S. citizens or legal resident aliens, or in the case of a corporation, partnership or limited liability company or other entity, at least 51 percent of the equity ownership interest in which is owned by one or more women, and whose management and daily business operations are controlled by one or more of such individuals. **For purposes of the SWAM Program, all certified women-owned businesses are also a small business enterprise.**

<u>Minority-Owned Business Enterprise:</u> A business concern which is at least 51 percent owned by one or more minorities or in the case of a corporation, partnership or limited liability company or other entity, at least 51 percent of the equity ownership interest in which is owned by one or more minorities and whose management and daily business operations are controlled by one or more of such individuals. **For purposes of the SWAM Program, all certified minority-owned businesses are also a small business enterprise.**

<u>Micro Business</u> is a certified Small Business under the SWaM Program and has no more than twenty-five (25) employees **AND** no more than $3 million in average annual revenue over the three-year period prior to their certification.

<u>All small, women, and minority owned businesses must be certified by the Commonwealth of Virginia Department of Small Business and Supplier Diversity (SBSD) to be counted in the SWAM program. Certification applications are available through SBSD at 800-223-0671 in Virginia, 804-786-6585 outside Virginia, or online at http://www.sbsd.virginia.gov/ (Customer Service).</u>

RETURN OF THIS PAGE IS REQUIRED

ATTACHMENT B (CNT'D)
Small, Women and Minority-owned Businesses (SWaM) Utilization Plan

Procurement Name and Number: _____   Date Form Completed:_____

Listing of Sub-Contractors, to include, Small, Woman Owned and Minority Owned Businesses
for this Proposal and Subsequent Contract

Offeror / Proposer:

_____   _____   _____

Firm   Address   Contact Person/No.

Sub-Contractor's Name and Address	Contact Person & Phone Number	SBSD Certification Number	Services or Materials Provided	Total Subcontractor Contract Amount (to include change orders)	Total Dollars Paid Subcontractor to date (to be submitted with request for payment from JMU)

(Form shall be submitted with proposal and if awarded, again with submission of each request for payment)

RETURN OF THIS PAGE IS REQUIRED

JMU

JAMES MADISON
U N I V E R S I T Y.

COMMONWEALTH OF VIRGINIA
STANDARD CONTRACT

Contract No._____

This contract entered into this_____day of_____20____,by _____
hereinafter called the "Contractor" and Commonwealth of Virginia, James Madison University called the "Purchasing Agency".

WITNESSETH that the Contractor and the Purchasing Agency, in consideration of the mutual covenants, promises and agreements herein contained, agree as follows:

SCOPE OF CONTRACT: The Contractor shall provide the services to the Purchasing Agency as set forth in the Contract Documents.

PERIOD OF PERFORMANCE: From_____ through_____

The contract documents shall consist of:

    (1)   This signed form;

    (2)   The following portions of the Request for Proposals dated _____:
        (a)   The Statement of Needs,
        (b)   The General Terms and Conditions,
        (c)   The Special Terms and Conditions together with any negotiated modifications of those Special Conditions;
        (d)   List each addendum that may be issued

    (3)   The Contractor's Proposal dated _____and the following negotiated modification to the Proposal, all of which documents are incorporated herein.
        (a)   Negotiations summary dated _____.

IN WITNESS WHEREOF, the parties have caused this Contract to be duly executed intending to be bound thereby.

CONTRACTOR:	PURCHASING AGENCY:
By:_____	By:_____
(Signature)	(Signature)
_____	_____
(Printed Name)	(Printed Name)
Title:_____	Title:_____

Attachment D – Pricing Schedule

For each technology/category listed below, provide your company's hourly rate for each of the three roles listed. If you refer to the role by a different name, list it in the space provided next to the corresponding role. Onsite pricing must be inclusive of all billables (travel, lodging, meals, etc.)

***** _The Offeror shall also provide onsite and offsite pricing for all other services/roles not listed below, including training offerings_. *****

	Onsite	Offsite		Onsite	Offsite
Oracle Core Technologies			**Change Management Training, Svcs, & Cert.**		
Project Manager or _____	_____/hr.	_____/hr.	Project Manager or _____	_____/hr.	_____/hr.
Senior Engineer or _____	_____/hr.	_____/hr.	Senior Engineer or _____	_____/hr.	_____/hr.
Engineer or _____	_____/hr.	_____/hr.	Engineer or _____	_____/hr.	_____/hr.
Oracle/PeopleSoft Enterprise Solutions			**Security and Federation Services**		
Project Manager or _____	_____/hr.	_____/hr.	Project Manager or _____	_____/hr.	_____/hr.
Senior Engineer or _____	_____/hr.	_____/hr.	Senior Engineer or _____	_____/hr.	_____/hr.
Engineer or _____	_____/hr.	_____/hr.	Engineer or _____	_____/hr.	_____/hr.
Desktop and Mobile Device Management			**Cisco Technologies, Infrastructure Support, and Virtualization**		
Project Manager or _____	_____/hr.	_____/hr.	Project Manager or _____	_____/hr.	_____/hr.
Senior Engineer or _____	_____/hr.	_____/hr.	Senior Engineer or _____	_____/hr.	_____/hr.
Engineer or _____	_____/hr.	_____/hr.	Engineer or _____	_____/hr.	_____/hr.
Microsoft Azure and M365			**Audio Visual Technologies**		
Project Manager or _____	_____/hr.	_____/hr.	Project Manager or _____	_____/hr.	_____/hr.
Senior Engineer or _____	_____/hr.	_____/hr.	Senior Engineer or _____	_____/hr.	_____/hr.
Engineer or _____	_____/hr.	_____/hr.	Engineer or _____	_____/hr.	_____/hr.
Okta			**Secure Research Enclaves**		
Project Manager or _____	_____/hr.	_____/hr.	Project Manager or _____	_____/hr.	_____/hr.
Senior Engineer or _____	_____/hr.	_____/hr.	Senior Engineer or _____	_____/hr.	_____/hr.
Engineer or _____	_____/hr.	_____/hr.	Engineer or _____	_____/hr.	_____/hr.
Data Analytics/Visualization/Warehouse/Lake			**Other Technology**		
Project Manager or _____	_____/hr.	_____/hr.	Project Manager or _____	_____/hr.	_____/hr.
Senior Engineer or _____	_____/hr.	_____/hr.	Senior Engineer or _____	_____/hr.	_____/hr.
Engineer or _____	_____/hr.	_____/hr.	Engineer or _____	_____/hr.	_____/hr.

July 25, 2023

ADDENDUM NO.: One

TO ALL OFFERORS:

REFERENCE:	Request for Proposal No:	**RFP# FDC-1175**
	Dated:	**June 15, 2023**
	Commodity:	**Information Technology Consulting Services**
	RFP Closing On:	~~**Thursday, August 3, 2023, at 2:00 p.m.**~~
		Tuesday, August 15, 2023, at 2:00 p.m.

Please note the clarifications and/or changes made on this proposal:

James Madison University has extended the RFP closing date to Tuesday, August 15, 2023 at 2:00 p.m.

Due to the volume of questions received, an additional addendum may be posted at a future date.

1. Question – On the 3rd page of the solicitation it states the period of performance is from date of award through one year (renewable). How many renewals periods does JMU expect in terms of being renewable?
   Answer – *Section VII. Special Terms and Conditions, Item F* **states that JMU has the option to extend the original contract for four (4) successive one-year periods.**

2. Question – How many FTEs are estimated to be needed onsite versus remote?
   Answer – This would depend on the nature of the engagement.

3. Question – In order to be awarded this project, does at least one (1) team member need to be SWaM certified? Do sub-contractors need to be small business and SWaM certified?
   Answer – SWaM certification is not a requirement for award; however, JMU tries to work with SWaM vendors whenever possible. Evaluation points will be given to vendors that are a SWaM vendor or that use SWaM sub-contractors. Additionally, all vendors should complete the SWaM Utilization Plan in the RFP document.

4. Question - Is there a page limit to RFP response?
   Answer – No; however, proposals should be prepared simply and economically (see section V.A.3.b.).

5. Question – What industry partner currently performs this work? What is the incumbent contract number and total dollar value if there is one? Please confirm if we can get the previous proposals or pricing of the incumbent(s).
   Answer – The University currently has contracts in place with the following vendors - Unicon, Inc., Sierra-Cedar, Inc., Securance Consulting, HyperGen, Inc, Plante & Moran, PLLC, Cherry Bekaert Advisory

MSC 5720
752 Ott Street, Room 1042
Wine Price Building
Harrisonburg, VA 22807
Office of   540.568.3145 Phone
PROCUREMENT SERVICES   540.568.7935 Fax

LLC, Highstreet IT Solutions, LLC, Nautiquos Business Solutions, LLC, Assura, Inc., and Planet Technologies, Inc. Previous spend can be found at www.eva.virginia.gov. Current contracts with the firms listed above can be found at http://cipag.jmu.edu/cipag/.

6. Question - Is remote only pricing an option? Will proposals be considered if only remote pricing is provided?
   Answer – All proposals will be considered, including remote only pricing.

7. Question – Can vendors only provide pricing for select areas as opposed to all areas?
   Answer – Offerors may provide pricing for one or more of the technologies/categories listed in the RFP (see *Section IV.1.*). Offerors should identify their firm's technology specializations in their proposal.

8. Question – Is hosting included as part of the services required?
   Answer – The scope may include hosting services, depending on the specific project.

9. Question – Is operations and maintenance – patching, vulnerability scanning, remediation, etc. included as a part of the services requested?
   Answer – The scope may include operations and maintenance services, depending on the specific project.

10. Question – Given that Oracle's Identity Management is currently used at JMU, how does JMU anticipate using Okta?
    Answer – The University has selected Okta as its future Identity Management solution.

11. Question – What is meant by Secure Research Enclaves?
    Answer - Using Microsoft's definition, the Secure Enclave for Research (also known as the Secure Research Enclave) is a reference architecture for a remotely-accessible environment for researchers to use in a secure manner while working on restricted data sets.

12. Question – Does the scope of the contract include the design and implementation of any hybrid cloud infrastructure?
    Answer – The scope may include the design and implementation of cloud/hybrid cloud infrastructure, depending on the specific project.

13. Question – What criteria does the University use to accept or reject proposed or assigned consultants, and how does this impact the contractor's role and responsibilities throughout the duration of the contract?
    Answer – Consultants assigned to the University may be rejected based on a variety of reasons including, but not limited to, lack in professionalism, responsiveness, timeliness, knowledge and experience, etc.

14. Question – Is the work expected to be SOW based or hourly based?
    Answer – That will depend on the nature of the engagement; however, it is reasonable to expect that either could apply.

15. Question – It is mentioned that sealed proposals will be received. Is there any that a vendor can submit a proposal online?
    Answer – No. JMU is not set up to receive electronic responses through eVA or emailed proposal responses.

16. Question – What is the annual spend at JMU for IT consulting services?
    Answer – Previous spend can be found at www.eva.virginia.gov.

17. Question – Assuming an offeror currently holds a contract with a VASCUPP higher education institution, such as the University of Virginia or George Mason University, how does that impact our status on this RFP?
    Answer – The last paragraph of the *Section II. Background* section states: "James Madison University reserves the right, when not in the best interest of the university, to decline award to any firm already on an existing VASCUPP cooperative contract in order to avoid duplication of contracts."

18. Question – Will you prefer vendors with a branch office presence in Harrisonburg? We are only present in Northern Virginia.
    Answer – A branch office in Harrisonburg, VA is not required.

19. Question - Are there specific technologies within the listed categories (such as Oracle Core Technologies, Microsoft Azure, etc.) that require specialized expertise or are of higher priority in the context of JMU's Reengineering Madison?
    Answer – See RFP *Section II. Background*.

20. Question - Can you provide more information about the typical scope and size of projects at James Madison University? Are there any specific project management methodologies or frameworks that the university prefers? Do you have any major projects in progress?
    Answer – The University's major technology projects can be found at https://www.jmu.edu/computing/projects-and-initiatives.shtml.

21. Question - What is the expected duration of the projects? Will the assignments be short-term or long-term?
    Answer – The expected duration will depend on the specific project and may be short-term or long-term.

22. Question - Are there any specific certifications or qualifications required for the assigned personnel?
    Answer – Required certifications or qualifications will vary based on the specific project. Offerors should include the qualifications and experience of the personnel who may be assigned to perform work for the University in their proposals (See RFP *Section IV.3.*).

23. Question - Can you provide more details on the expected level of involvement and responsibilities of the primary contact for the account?
    Answer – Expected level of involvement and responsibilities will vary based on the project.

24. Question - Can you provide more information about the evaluation criteria for assessing the similarity of projects at higher education institutions?
    Answer – Offerors should provide examples of recent projects at higher education institutions comparable to James Madison University. See RFP *Section II. Background* for more information about the University.

25. Question - Are there any specific reporting or documentation requirements for IT consulting services?
    Answer – Reporting and documentation requirements will vary depending on the project.

26. Question – Allocation of points for evaluation criteria will be published to the eVA solicitation posting prior to the closing date and time. When will this be posted?
    Answer – The points will be posted the day before the RFP closes.

27. Question - Does the scope include advising and strategic planning support for the technologies listed?
Answer – The scope may include advising and strategic planning support, depending on the specific project.

28. Question - What will be the engagement model for Vendors that are awarded this contract? Will JMU issue statements of work for the selected vendors to compete? Will the statements of work be for hourly staff augmentation or will it also include fixed price strategic engagements? Can you provide additional information on the anticipated level of collaboration and coordination between the successful bidder and JMU IT staff?
Answer – As information technology consulting needs arise, the University will contact a firm(s) on contract to discuss the project for which the University requires assistance. A statement of work will be requested from the vendor based on contract terms and pricing, and additional discussions will occur.

29. Question - What will be the maximum number of awardees under this contract? Please confirm the anticipated number of awards.
Answer – The University does not have an anticipated or maximum number of awards for this RFP.

30. Question – For this RFP, are resources expected to be on-stie or remote in Harrisonburg, VA? Given the skill sets, we're assuming it's fully remote, but wanted to verify
Answer – Remote is usually acceptable; however, it would depend on the nature of the engagement.

31. Question - How many users are on Office 365? What license do they have? Provide a license count.
Answer – Approximately 30,000 accounts. The majority have A5 licenses with a few having A3 licenses.

32. Question - Are the licenses being purchased directly with Microsoft or through a Microsoft Partner?
Answer – SHI.

33. Question - Do you currently use Microsoft Teams and/or Microsoft SharePoint?
Answer – Yes.

34. Question - Is there a software in place currently to manage endpoints remotely? If so, what product(s) are being used?
Answer - JAMF Pro, Microsoft Intune, and Microsoft Endpoint Configuration Manager are used.

35. Question - How often are the devices and endpoints being updated? Monthly/quarterly/etc. basis?
Answer – Endpoint patches are deployed typically the same month they become available.

36. Question - Do you have employees working remotely that use a company device?
Answer – Yes.

37. Question - Do you offer Bring Your Own Device (BYOD) to employees?
Answer – No.

38. Question - Is there a Mobile Device Management (MDM) solution deployed?
Answer – Yes, for JMU owned devices.

39. Question - How many desktops/laptops/mobile devices are you supporting?
Answer – JMU IT actively manages roughly 4,500 Windows devices, 2,500 Mac devices, and 1,000 mobile devices.

40. Question - Which version of Windows are the desktops/laptops running on?
Answer – Primarily Windows 10 22H2.

41. Question - Are user devices being backed up? If so, how often, and do you have retention policies in place?
Answer – User devices are not centrally backed up.

42. Question – Are the servers on-site or on the cloud? Hybrid?
Answer - Servers are onsite.

43. If you have a cloud environment, is it Azure/AWS/other?
Answer – The University has applications in both Azure and AWS.

44. Question - How many servers do you have? What operating system are they on? Do you have any Windows Server 2012/2012R2? Any Linux Servers? Microsoft is sunsetting Windows 2012 servers in October. Is there a plan to upgrade/replace your current 2012 servers? Please provide details.
Answer – The University has approximately 500 servers. Windows and Linux.
- **2012R2 (26 servers - all slated to decom by October, with the potential exception of 3 belonging to Card Services, which they handle on their own and are in discussions with IT-Sec about)**
- **2016 (89 servers)**
- **2019 (93 servers)**
- **2022 (7 servers)**
- **Linux (210 Servers) primarily running RHEL 7 & 8**
- **16 - VMware Host servers, and 3 management servers, running VMWare version 7. (13 normal hosts, 3 VDI hosts, 2 VCenter servers and the VRealize server)**
- **54 - additional servers are being tracked, but are either security servers (OS not maintained by us), Other Linux (CentOS) or OVAs (Virtual appliances)**

45. Question - Is there a Disaster Recovery plan in place? What is the infrastructure at the fail over location?
Answer - Yes. Disaster Recovery plans exist for critical systems. There is geographical, power, and HVAC redundancy at the failover location, as well as off-site backups in the event of whole data center loss.

46. Question - How many databases are you using? Please specify which ones.
Answer – See RFP *Section II. Background.*

47. Question - What are some of the critical applications being used today? Any ERP applications?
Answer – See RFP *Section II. Background.*

48. Question - What is the network topology currently used, and how are these locations communicating to each other?
Answer - On campus locations are serviced via single mode fiber. Off campus locations are a combination of DIA circuits and wireless bridges.

49. Question - Is there a VPN in place for remote access? Is there a firewall?
    Answer - Yes to both.

50. Question - What is the speed of the network connection to the internet? Do you have a backup connection?
    Answer - Two 8Gbs pipes in active/active state.

51. Question - How many Routers, Switches, and Firewalls are in your network?
    Answer - L2 switches: 855
    L3 switches/routers: 10
    Firewalls: 4

52. Question - How many buildings/locations?
    Answer – The University has approximately 185 buildings on 750 acres. The campus is divided by interstate 81 and the C&P railroad.

53. Question - How big is your current IT department, if any?
    Answer - Approximately 150 employees

54. Question - Please provide the brand for the switches, network devices, laptops, desktops, and printers.
    Answer - Cisco Routers and switches for the wired network. The wireless network is Aruba. Laptop/Desktops are a mix of Dell and Apple. Printers vary, but a significant number are leased KM Bizhub devices.

55. Question - Do you have any cameras to support?
    Answer: Yes. Cameras are managed by Facilities Management.

56. Question - Do you currently have a VOIP solution? Who is your VOIP provider? What is the brand of your desktop phones? How many extensions/DID numbers?
    Answer – The University is currently deploying an NEC VoIP solution with Black Box Network Services, and have approximately 8,000 user and service type extensions. Phones are NEC.

57. Question - Do you have ticketing system in place? Estimate of tickets per month/quarter?
    Answer - Yes. The University uses Cherwell as its ITSM ticketing system and receives approximately 49,189 tickets per year.

58. Question - Do you require someone to be on-site all the time?
    Answer - That would depend on the nature of the engagement.

59. Question - Is this a multi-vendor or single vendor award?
    Answer – This is anticipated to be a multi-award contract.

60. Question - Is there Change Management system in place?
    Answer - Technical hardware or software changes are managed through the University's ITSM.

61. Question - Is there an Information Technology Asset Management (ITAM) solution in place?
    Answer – Not as such. The University uses Cherwell ITSM for CMDB, and JAMF Pro and Intune for MDM.

62. Question - What applications are currently in use?
    Answer – See RFP *Section II. Background.*

63. Question - The RFP has some focus on Salesforce in the opening. But I see that Huron was awarded a contract for Salesforce work less than 6 months ago. Is JMU looking to understand other options that can support the Salesforce deployment if needed?
    Answer – Yes, the University is interested in other Salesforce resources and skillset augmentation options.

64. Question – Are there any pain points of issues with the current vendor(s)?
    Answer – No.

Signify receipt of this addendum by initialing *"Addendum #1_____"* on the signature page of your proposal.

Sincerely,

Doug Chester
Buyer Senior
Phone: 540-568-4272

August 3, 2023

ADDENDUM NO.: Two

TO ALL OFFERORS:

REFERENCE:	Request for Proposal No:	**RFP# FDC-1175**
	Dated:	**June 15, 2023**
	Commodity:	**Information Technology Consulting Services**
	RFP Closing On:	**Tuesday, August 15, 2023, at 2:00 p.m.**

Please note the clarifications and/or changes made on this proposal:

1. Question - How far along is the Reengineering Madison project? When is the new system expected to go live?
   Answer - See RFP *Section II. Background.*

2. Question - Can you please share the portfolio of projects/initiatives that will be executed under the Reengineering Madison program?
   Answer - See RFP *Section II. Background.*

3. Question - Can you provide ticket volumes that you are currently experiencing for PeopleSoft for the last one year, preferably by severity?
   Answer - No. Ticket volume alone is not a good indicator.

4. Question - What is the size of the existing support team supporting PeopleSoft?
   Answer – 10 people.

5. Question - Will existing support team members be moved to the Reengineering Madison project?
   Answer - Yes, in part.

6. Question - Can you provide the architecture diagram for your PeopleSoft application and its deployment?
   Answer - This information may be provided depending on the engagement and after the execution of a SOW.

7. Question - What is the current PUM level for each of the PeopleSoft application pillar?
   Answer - This information may be provided depending on the engagement and after the execution of a SOW.

8. Question - What is the number of environments that exist for each PeopleSoft application pillar (example – DEV, TEST, DMO, UAT etc.)?
   Answer – 4 environments.

9. Question - What is the size of the production database for each of the PeopleSoft application pillar?
   Answer - This information may be provided depending on the engagement and after the execution of a SOW.

10. Question - Does Oracle Core Technologies mean the Oracle DBA skill set? If not, please provide more details.
    Answer - Yes.

11. Question - What skills are required in Desktop and Mobile Device Management?
    Answer - Required skills, certifications, or qualifications will vary based on the specific project. Offerors should include the qualifications and experience of the personnel who may be assigned to perform work for the University in their proposals (See RFP *Section IV.3.*).

12. Question - Please provide details of the services expected in the following technologies:
    a. Security and Federation Services
    b. Microsoft 365 (M365)
    c. Audio and Visual Technologies
    d. Secure Research Enclaves
    Answer - Services may vary depending on the nature of the engagement.

13. Question - What is expected from Svcs and Cert in Change Management? What are the roles of Senior Engineer/Engineer in Change Management?
    Answer - See RFP *Section IV. Statement of Needs* and *Section D. Pricing Schedule*. If your firm refers to a specific role by a different name, list it in the space provided next to the corresponding role.

14. Question - Does onsite pricing refer to work specifically performed on campus (in person), and does offsite work pertain to work conducted within the US but off-campus, remote?
    Answer - Yes.

15. Question - What positions are you looking to fill immediately? Is there current or future project you are expecting?
    Answer - See RFP *Section II. Background.*

16. Question - For onsite services, we find that a base billable rate is suitable for most of our clients, and hotel/travel expenses charged as actuals later. Would you still like a single blended hourly charge for these positions including all expenses?
    Answer - Yes.

17. Question - What are the Oracle core technologies focused on consulting services like OBIA, OBIEE, ODI, OAC, etc.?
    Answer – Unavailable at this time.

18. Question - Is there a preferred cloud provider like AWS, GCP, or Azure for a data lake/data warehouse solution?
    Answer - No.

19. Question - Is the data warehouse/data lake solution in place that required migrating to a new tool stack or a new solution is expected?
    Answer - See RFP *Section II. Background.*

20. Question - Is there a preferred visualization tool for analytics?
    Answer - No.

21. Question - Has Fluid UI been implemented in your PeopleSoft Application?
    Answer - No.

22. Question - Is the Boomi atom/molecule installed on-premises or in the cloud?
    Answer – On-premises.

23. Question - What Salesforce modules have been implemented/utilized?
    Answer - Implementation is just beginning. See RFP *Section II. Background.*

24. Question - Is it mandatory to showcase the amount of sales our company had during the last twelve months with each VASCUPP Member Institution? Can we skip this portion if we do not have an existing/ previous VASCUPP cooperative contract? Will the proposal be deemed non-responsive if we do not have sales during the last twelve months with each VASCUPP Member Institution?
    Answer - A response to the question is required. If the answer is none/zero, indicate that as your answer. Previous sales/experience with a VASCUPP Member Institution is not a requirement for submitting a proposal or being awarded a contract.

25. Question - Please confirm whether the "Secure Research Enclave" category includes CMMC readiness testing? Or, is this category meant for the development/implementation of the architecture for these enclaves?
    Answer - Secure Research Enclave could include CMMC readiness or the development/implementation of the architecture for these enclaves.

26. Question - How does JMU define "Consulting Services" and "technology advisor"?
    Answer - See RFP *Section IV. Statement of Needs.*

27. Question - Is this a new requirement or an existing requirement?
    Answer - This RFP is to replace an existing contract with multiple vendors.

28. Question - What are your Key Performance Indicators?
    Answer - Key performance indicators will vary depending on the project.

29. Question - If we have a teaming agreement with a subcontractor, does the subcontractor's experience count as experience for us?
    Answer - The experience of a subcontractor specified in a proposal may be considered in the evaluation of the qualifications and experience of the Offeror.

30. Question - Do we need to submit only one response including the price schedule?
    Answer - Vendors should submit one (1) original and four (4) copies, and electronic copy in WORD format or searchable PDF (*on a flash drive*) of the entire proposal, INCLUDING ALL ATTACHMENTS. The original, copies, and electronic version should all be the same and include the pricing schedule.

31. Question - As a firm registered on eVA, do we have to pay the fees before the submission of the proposal (i.e. this stage) or after award? Please also clarify that the subcontractor also has to pay this fee.
Answer - eVA fees are only paid upon receipt of a purchase order issued through the eVA system. eVA fees are paid by the vendor listed on the issued purchase order. If a subcontractor is issued a purchase order directly, they would have to pay the associated eVA fees; however, if the purchase order is issued to the prime contractor, and the subcontractor is working under the prime contractor, the subcontractor would not pay the associated eVA fees. The University typically issues purchase orders to the prime contractor.

32. Question - Do we need to submit provided RFP Cover Sheet as a Cover Page of the proposal?
Answer - The RFP cover sheet does not need to be submitted as the cover page of a proposal.

33. Question - Is there any local preference for this contract?
Answer - No.

34. Question - Is it mandatory to have experience with higher education institutions?
Answer - Experience with higher education institutions is not required.

35. Question - Please confirm whether security assessment and consulting services are included on this contract. If so, should we price this under the category "Security and Federation Services" on the Pricing Schedule?
Answer - The scope may include security assessment and consulting services, depending on the specific project. In addition to completing *Attachment D*, Offerors should also provide pricing for all other services.

36. Question - Is there any flexibility in the initial contract duration of one year? Is it safe to assume that the same terms and conditions will remain same when the project is renewed? Are there any pre-defined criteria to be met by the vendors to get the renewal of contract?
Answer - JMU typically issues contracts for one year with subsequent one-year renewals. The terms and conditions of existing term contracts are reviewed at the time of renewal. Contract terms may be negotiated and modified as necessary. See RFP *Section VIII.F.*

37. Question - Can you please specify the list of all technologies in each technology area under Section IV? Example: Do we need to consider Oracle Database, Fusinon Middleware, SOA, BPM, Identity Management, MDM, Webcenter-Sites, Portal, Content, Social, OBIEE, Golden Gate and ODI when you refer to Oracle Core Technologies? Similarly, can you call out all technologies under each area?
Answer – See RFP *Section II. Background.*

38. Question - Can you provide more information about the technologies listed in Section II of the RFP, such as Oracle Core Technologies, PeopleSoft Enterprise Solutions, Microsoft Azure, Okta, etc.? What level of expertise and experience is JMU looking for in these areas?
Answer – The level of expertise and experience required will vary based on the specific project. Offerors should include the qualifications and experience of the personnel who may be assigned to perform work for the University in their proposals (See RFP *Section IV.3.*).

39. Question - What are the expected outcomes of the trainings that a vendor needs to provide to the staff? How much training must be provided in a month? What will be the number of attendees in each session? Will it be a virtual or classroom training?
   Answer – Training outcomes, frequency, number of attendees, format, etc. will vary depending on specific training needs and agreed upon SOW.

40. Question - Can you provide more details about the weightage or scoring system that will be used to evaluate proposals based on the criteria stated in the RFP? How will the award decision be made?
   Answer - See RFP *Section IV. Evaluation and Award Criteria*. Allocation of points for evaluation criteria will be published to the eVA solicitation posting prior to the closing date and time.

41. Question - Can you provide more information on the Virtual Payables options mentioned? How can vendors and suppliers enroll in these options?
   Answer - Offerors may contact the JMU Accounts Payable office, at acctspayable@jmu.edu or (540) 568-7397 to discuss payment enrollment options.

42. Question - Please list all the technologies/tools that needs to be replaced/transformed as part of Reengineering Madison program. Are there specific projects the vendor team will be involved if selected?
   Answer - See RFP *Section II. Background.*

43. Question - Does the University anticipate any of its current implementation partners will act as a Systems/Services Integrator and an offeror submitting a proposal in response to this solicitation act as subcontractor if selected?
   Answer - No.

44. Question - Are you engaged with any cloud service provider? What is the scope of cloud-based solutions in this RFP?
   Answer - See RFP *Section II. Background.*

45. Question - What are your expectations for the level of service that you would like to receive from the IT consulting firm? How would you measure the success of the IT consulting project?
   Answer - Expectations and measurements of success will vary depending on the engagement.

46. Question - What are your expectations for the level of security that you would like to have in place?
   Answer - JMU follows the ISO standard. When needed other standards are used depending on the need, regulations, requirements, etc.

47. Question - What are the specific challenges that you are facing with your current IT infrastructure compelling to go through Re-engineering Initiative?
   Answer - See RFP *Section II. Background.*

48. Question - Could you provide more information about the anticipated scope of special projects where the contractor will serve as a technology expert? What are some examples of these projects and their objectives? Can you elaborate the expected deliverables and milestones for the projects covered in the scope this RFP?
   Answer - See RFP *Section II. Background.*

49. Question - Is there any preference for local or regional vendors?
    Answer - No.

50. Question - Is it safe to assume that offsite means offshore?
    Answer - No. For the purpose of this solicitation, offsite means remote work performed not on campus.

51. Question - Resources working offshore need to align with client working hours as per US time zones?
    Answer - Yes.

52. Question - Will JMU provide laptops to the vendor consultants?
    Answer - No.

53. Question - Will any additional travel costs be considered in the pricing?
    Answer - No. See RFP *Section X. Pricing Schedule.*

Signify receipt of this addendum by initialing *"Addendum #2_____"* on the signature page of your proposal.

Sincerely,

Doug Chester
Buyer Senior
Phone: 540-568-4272