Gustave Muhoza

PROFESSIONAL SUMMARY

Experienced data analytics, governance and engineering professional with expertise in developing organizational data strategies, implementing secure data systems, and leading cross-functional data initiatives. Proven track record in data integration, security protocols, and machine learning implementation, with a focus on transforming data into actionable insights that align with organizational objectives.

CORE SKILLS AND COMPETENCIES

Data Governance and Management
- Data strategy development
- Data quality standards and controls implementation
- Cross-system data integration
- AI/ML implementation and monitoring
- Data systems architecture

Technical Expertise
- Cloud infrastructure development
- DevSecOps and security protocols implementation
- Architecting data pipelines
- Container orchestration
- Programming

Leadership and Collaboration
- Cross-functional team leadership
- Stakeholder engagement
- Process optimization
- Project management
- Multi-lingual communication
- Customer relationship management
- Positive communication

PROFESSIONAL EXPERIENCE

Data Engineer, ECS Federal, Fairfax, VA   04/2022-Present

Cross-team data engineer for the Data and AI Services business unit
- Led a Zero-Trust data architecture implementation initiative, enhancing security posture across our systems
- Implemented data quality controls and security protocols, increasing security for cross-domain data transfers
- Created a Sigstore keyless signature system, enabling code and container image integrity verification
- Implemented machine learning code vulnerability scanning frameworks for production deployments
- Automated our data transfer workflow, streamlining cross-team operations

Data Scientist, Child Care Aware of America, Arlington, VA   09/2020-04/2022

Lead project manager for the development and implementation of the organization's data strategy and data science program
- Established and executed the organization's inaugural data strategy, aligning business goals with data governance and decision-making processes
- Founded and led the Data Strategy Council, driving cross-functional collaboration on data governance initiatives
- Architected a serverless end-to-end data analytics pipeline in AWS connecting multi-state childcare datasets, strengthening the organization's nationwide analysis and reporting
- Designed machine learning models and analytical frameworks for childcare research, improving policy advisory and strategic communication
- Advised the research team on data science methodologies, statistical analysis, and data quality standards

Data Specialist, DC Public Schools, Washington, DC   06/2018-06/2020

Lead data architect for the Early Childhood Education (ECE) Division
- Automated data cleaning, improving data quality and timely report delivery from 20% to 100%
- Implemented a statistical monitoring tool for classroom health and safety, integrating data from disparate sources that contributed to the achievement of a 94% improvement in evaluated schools
- Created interactive analytics dashboards, enhancing decision-making in resource management
- Led data analytics working groups of ECE leadership and external stakeholders, improving data sharing and collaboration

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Data Systems Manager, Northern Virginia Family Services, Oakton, VA   08/2012-06/2018

Lead project manager and product owner for the multi-service agency's data system design and implementation

- Spearheaded the successful migration of 42 programs to a cloud-based database system, while demonstrating strategic leadership managing a team of data analysts, data stewards and data owners across the organization
- Orchestrated a robust data system integration process, resulting in standardized data flows and improved cross-departmental information sharing
- Provided technical supervision and training, resulting in strong system adoption across the organization
- Implemented data standardization and quality control measures across the organization, improving reporting efficiency and accuracy

Management Information and Data Systems Associate, EBDI, Inc., Baltimore, MD   11/2008-08/2012

Lead data architect for the Community and Human Services Department

- Led database development and administration initiatives that improved program performance management capabilities, resulting in more efficient tracking and reporting of key outcomes.
- Implemented a metrics monitoring toolkit that enhanced program evaluation and optimization processes
- Established data tracking procedures and trained staff on governance protocols, increasing data quality
- Coordinated cross-departmental data reporting systems that facilitated stakeholder collaboration, supporting program improvements and better alignment with organizational goals.

EDUCATION

- **Chief Data and Analytics Officer Executive Certificate**, George Mason University, Fairfax, VA (March 2025)
- **Master of Arts in International Studies**, Morgan State University, Baltimore, MD (2007)
- **Bachelor of Science in Computer Science**, La Roche College, Pittsburgh, PA (2004)

SELECTED CERTIFICATIONS (LinkedIn)

- AWS Generative AI Applications Professional Certificate, AWS (January 2025)
- AI Strategy and Project Management Specialization, Johns Hopkins University and Coursera (March 2025)
- Microsoft Certified: Azure Fundamentals, Microsoft (2024)
- AWS Certified AI Practitioner, AWS (2024)
- Securing the AI/ML Supply Chain with Chainguard, Chainguard (2024)
- Painless Vulnerability Management with Chainguard, Chainguard (2024)
- Certified Kubernetes Application Developer, The Linux Foundation (2024)
- Kubernetes and Cloud Native Associate, The Linux Foundation (2023)
- Certified SAFe 5 Government Practitioner, Scaled Agile Inc (2023-Up for renewal)
- AWS Partner: Cloud Economics Essentials, AWS (2023)
- Security Plus, CompTIA (2022)
- AWS Certified Solutions Architect Associate, AWS (2022)
- IBM Professional Data Science Certificate, IBM (2020)

SELECTED TECHNICAL PROFICIENCES (GitHub, GitLab)

- **Data Analytics**: Amazon S3, Kinesis, IAM, EC2, Lambda, Glue, Athena, SageMaker, Amazon Bedrock, Amazon QuickSight, Apache Kafka, Databricks, PowerBI, Microsoft Fabric, Amazon QuickSight, ArcGIS, PostgreSQL
- **Programing, Development and DevOps**: Python, Django, FastAPI, Flask, React, JavaScript, GitLab CI, GitHub Actions, PySpark, Jupyter Notebooks, SQL, Kubernetes, Docker, Podman

LANGUAGES

English (Fluent)   French (Fluent)   Spanish (Working Proficiency)