Joshua J. Middagh

Phoenix, AZ • jjmiddagh@outlook.com• 602.694.2863 • LinkedIn: linkedin.com/in/joshua-middagh-it-professional • https://jjmiddagh.github.io/portfolio/

Executive Summary

Vision-driven technology leader with 25 years of experience delivering enterprise-grade data, analytics, and application platforms across Fortune 500 and highly regulated environments. Skilled at orchestrating large-scale programs across IT, business, and vendor ecosystems. Proven record of building and leading high-performance Agile teams, optimizing program execution, and embedding data governance, analytics readiness, and innovation into enterprise delivery pipelines.

Recognized for balancing technical depth with practical leadership, spearheading initiatives in platform modernization, data quality, stakeholder transparency, and advanced analytics adoption. Passionate about responsible AI/ML innovation, data observability, and aligning enterprise systems with real-world impact.

Core Competencies

Data Science • Data Platform Leadership • Program Execution & Roadmapping • Stakeholder Partnership • AI/ML Oversight • Cloud Modernization • Workflow Automation • Agile (SAFe) Delivery • Data Governance • Technical Team Building • Risk & Compliance Alignment • Python • R • SQL • JIRA • Java • AlwaysOn • Legal Hold Platforms

Professional Experience

Director – Enterprise Data Protection & Platform

USAA – Phoenix, AZ | 2024 – Present

Executive IT leader driving enterprise-wide data protection, risk reduction, and platform optimization strategies. Oversee high-impact initiatives in data governance, vulnerability remediation, vendor modernization, and cloud-native architecture alignment.

- Led comprehensive data protection assessments across 200+ systems, mapping sensitive data flows and designing remediation strategies in partnership with legal, compliance, and business teams.
- Developed and sponsored the Vanguard Vulnerability Working Group, a cross-functional program focused on vulnerability remediation, platform patching strategies, and continuous security control improvements.

- Directed the sunset and migration of legacy vendor platforms to in-house cloud-native solutions; reduced software licensing spend by 42% while improving system resiliency and alignment with enterprise architecture standards.
- Managed $15M+ in IT portfolio investments across data tokenization, observability, and analytics platform modernization—including integration of Protegrity and Snowflake.
- Standardized vulnerability response playbooks and security audit cycles, resulting in a 50% reduction in open risk items and increased visibility across technology leadership.
- Implemented Agile roadmap planning tied directly to risk posture tracking, enabling faster prioritization and reduced risk-adjusted backlog by 28%.
- Presented monthly to enterprise risk, audit, and legal functions on progress against regulatory mandates, including audit remediations, third-party decommissioning, and data governance improvements.
- Built a strategic communications framework to synchronize IT, risk, and business leaders on shared platform modernization goals; improved program alignment and budget accuracy.

Senior IT Manager

USAA – Phoenix, AZ | 2021 – Present

Lead Agile development and project teams across enterprise-scale technology initiatives focused on platform modernization, data observability, and business process automation. Oversee strategic delivery of programs aligned to Bank and Enterprise goals, while cultivating strong partnerships across technology, compliance, and risk domains.

- Improved throughput by 33% through a hybrid offshore surge model; minimized cost increase to just 14%, helping clear backlog and close 6 critical bank risk issues.
- Spearheaded 'One IT Planning' initiative—centralizing enterprise and business-funded efforts into a single transparent backlog, improving visibility and coordination across orgs.
- Built two multi-disciplinary Agile teams from scratch (developers, PMs, infrastructure); delivered 7 major epics in 10 months and improved cross-stack team productivity.
- Established and led a Leadership Forum to unify tech vision, platform consumption, and best practice adoption across cross-functional groups.
- Drove JIRA Work Management deployment for 100+ users, increasing project visibility, stakeholder satisfaction, and reporting capabilities.
- Led environment stability initiative, achieving 70% process time improvement and 60% downtime reduction in lower environments.

Senior Software Developer & Integrator

USAA – Phoenix, AZ | 2019 – 2021

Supported the enterprise data reduction initiative by developing automation frameworks, documenting core processes, and upgrading compliance tooling for improved governance outcomes.

Key Accomplishments:

- Built Python-based FTP/compression framework to automate file migration processes, reducing manual effort and increasing reliability.

- Documented remediation workflows in business, technical, and executive formats using internal wiki; enhanced visibility and accelerated process adoption.
- Led Atlas Legal Hold upgrade across environments in partnership with Legal and IBM; established repeatable 3-tier architecture for compliance tooling.
- Facilitated Agile ceremonies and acted as informal scrum coach to guide team process improvements and delivery predictability.

Education

M.S., Data Science (AI/ML concentration) – Eastern University (2024)
B.S., Computer Science and Information Technology Management – Northern Arizona University (2016)

Special Projects & Innovation Initiatives

CertifAI – AI Risk & Compliance Framework
Designed a multi-dimensional AI model audit platform (FastAPI, Docker, Redis, Streamlit) to score models on bias, fairness, explainability, and compliance dimensions. Drafted provisional patent and created multi-stage evaluation workflows.

Smart LLM Router
Built a GenAI cost/latency router to switch between GPT-4, Claude, Mistral based on policy settings. Achieved 55% cost savings with token-optimized fallbacks while maintaining response fidelity**.**

Customer Churn Prediction Engine
Developed a full ML pipeline using SMOTE, ensemble models, and SHAP explainability for telecom churn prediction. Achieved ROC-AUC > 0.90 and deployed Streamlit UI for business end-users.

AI Resume Screening Bias Auditor
Constructed a fairness audit tool using adversarial inputs and fairness metrics to evaluate bias in AI-based resume screening. Delivered risk dashboards with action recommendations.

Airbnb STR Pricing Optimizer
Built a pricing recommendation engine for a Flagstaff short-term rental using seasonal trends and competitor pricing. Delivered optimized nightly rates via dashboard interface.