

DAVID NULL

SOFTWARE ENGINEER & TECHNICAL LEADER

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CAREER SUMMARY

Accomplished Software Engineer and Technical Program Manager with over 5 years of experience architecting scalable, secure digital solutions in complex, high-volume environments. Proven expertise in designing distributed systems and microservices-based architectures, containerizing applications for cloud deployment, and implementing REST APIs that meet stringent security and compliance standards. Adept at driving cross-functional collaboration, mentoring teams, and leveraging Agile methodologies to continuously improve processes and operational efficiency.

TECHNICAL SKILLS

Programming Languages:

- C#, Java, Python, JavaScript, TSQL, PHP, C++, Solidity, HTML, CSS

Frameworks & Libraries:

- .NET, Blazor, Angular, React, ASP.NET, Node.js, Flask

Distributed Systems & APIs:

- Designed scalable, distributed solutions using Azure Databricks, Azure Data Factory, and event-driven triggers
- Developed secure, load-balanced REST APIs with tools like Postman, Flask, and ASP.NET

Containerization & Cloud:

- Hands-on experience with Docker for containerizing backend components.
- Extensive deployment experience in Azure and AWS; familiar with orchestration principles via Azure DevOps and ARM

Databases:

- SQL, PostgreSQL, Oracle, CosmosDB, NoSQL, Graph and Vector

DevOps & CI/CD:

- Azure DevOps, GitHub Actions, JFrog Artifactory, automation in CI/CD pipelines

Agile & Process Improvement:

- Scrum, SAFe; extensive experience in Agile ceremonies, mentoring, and process automation

Security & Compliance:

- Applied Zero Trust principles, risk mitigation, continuous monitoring, regulatory compliance adherence

WORK EXPERIENCE

Software Engineer | FI Consulting

Jan 2020 – Feb 2025

- Distributed Architecture & Microservices:
- PPP Review Solution: Architected and led the implementation of a distributed system to analyze over 12 million loans for fraud and compliance. Designed a scalable cloud-based solution leveraging Azure Databricks, Azure Data Factory, and event-driven triggers to process data in parallel—resulting in a 75% reduction in processing time.
- Modularized components for high availability and seamless integration, embodying core microservices principles even within a predominantly cloud-based ecosystem.
- Containerization & Cloud Deployment:
 - Containerized critical backend data engineering systems using Docker to ensure consistency across development, testing, and production environments in Azure.
 - Deployed containerized applications using Azure Resource Manager and Azure DevOps pipelines, optimizing resource utilization and reducing monthly costs by 15%.

- **API Design & Security:**
 - Designed and implemented REST APIs for secure, real-time data exchange between cloud components and federal client systems.
 - Employed load-balanced endpoints, event-driven triggers, and Zero Trust security measures—including least privilege access and continuous monitoring—to safeguard sensitive data and ensure compliance with federal standards.
- **Stakeholder Collaboration & Architectural Vision:**
 - Collaborated with product managers, business analysts, sales, and federal IT leadership to define and adjust the architectural vision for complex projects.
 - Conducted design sessions and security architecture presentations, aligning technical solutions with business goals and regulatory requirements—leading to a 90% improvement in fraud detection accuracy.
- **Agile Leadership & Process Improvement:**
 - Actively participated in daily stand-ups, sprint planning, and retrospectives as a Certified Scrum Master and SAFe POPM.
 - Instituted regular code review sessions and hands-on mentoring, which elevated team performance and increased overall project velocity by 30%.
 - Evaluated emerging technologies (e.g., Azure Databricks, Azure Data Factory) through proof-of-concept phases, leading to informed adoption decisions that enhanced scalability and cost-effectiveness.

Manager of Tuition Benefits and Financials | American University

Aug 2016 – Sep 2017

- Directed customer success initiatives and integrated technical support with process automation, improving user engagement and reducing manual workloads.
- Developed and implemented BI reporting systems that reduced report generation time by 75% and operational costs by 25%.

Additional roles in Digital Initiatives (2015) and Benefits Operations (2014-15) further developed expertise in cross-functional collaboration, process optimization, and automation.

Corporal, Infantry Platoon Sergeant | United States Marine Corps

Jan 2004 – Dec 2011

- Led logistics and resource management for a team of 60 personnel, ensuring operational readiness and efficient handling of resources valued at \$10 million.
- Coordinated complex operations in high-pressure environments, demonstrating strong leadership and project management skills.

EDUCATION AND CERTIFICATION

Master of Computer Science | Arizona State University

2026 (in progress)

Coursework: Data Processing at Scale, Knowledge Representation and Reasoning, Software Project, Process, and Quality Management, Advanced Software Analysis and Design, Software Verification, Validation, and Testing, Artificial Intelligence, Data Visualization, Advanced Computer Network Security, Data Mining

B.Sc. in Computer Science | University of Maryland Global Campus

2024

Coursework: Computer Systems and Architecture, Data Structures and Analysis, Relational Databases, Advanced Programming Languages, Compiler Theory and Design, Building Secure Web Applications

Certified Scrum Master | Scrum Alliance

Jan 2024 – Jan 2026

Lean Six Sigma | Villanova University

Feb 2010

Certified Back-End Developer | Meta

Mar 2025 (in progress)

Azure Solutions Architect Expert | Microsoft

Mar 2025 (in progress)