

Cloud Engineer with 4+ years of experience, 3+ at Microsoft working under the Azure Compute / Storage division, building large-scale data pipelines and distributed systems with an emphasis on improving service quality and performance of Azure offerings. Strong expertise in Azure, Distributed Systems, Systems Automation, Databricks, and Database Management Systems with a focus on performance optimization and reliability.

Education

Purdue University, West Lafayette, IN

August 2018 - May 2022

B.S. in Computer Science | Minor in Management | Certificate in Entrepreneurship and Innovation

Professional Experience

Microsoft Corporation

August 2022 - March 2026

Software Engineer

- Orchestrated virtual machine and benchmarking workload (DiskSpd, FIO) deployments in **Azure Automation** for storage performance validation prior to feature/SKU releases:
 - Refactored PowerShell runbooks from static to dynamic workflows
 - Achieved ~99% regional/zonal/disk configuration coverage
- Built automated workflows in **Azure Power Automate** along REST APIs in **Azure Functions** to power anomaly detection systems at scale.
- Integrated **Azure AI Anomaly Detector** (f.k.a. Azure Anomaly Detector) and applied regression analysis to storage performance metrics (IOPS, throughput, latency) to identify and flag performance bottlenecks.
- Re-engineered a large-scale **data pipeline** in **Databricks** (Python):
 - ~75% reduction in processing time
- Architected an end-to-end **automated data pipeline**:
 - data collection -> aggregation -> analysis -> incident generation
- Designed, built (0 -> 1), and owned the division's largest Database Management System in **Azure Data Explorer** (Kusto cluster), supporting critical internal services and pipelines:
 - ~500 virtual machine cluster
 - ~100 TB of uncompressed data ingested daily
 - ~3,000 dependent entities monthly
- Optimized **KQL** queries and functions across services:
 - Achieved ~90% reduction in query overhead in critical livesite operations
- Strengthened security of internal resources by implementing and enforcing **Azure Policies**.
- Developed dashboards in **Azure Data Explorer** to monitor system performance and support operational decision-making from stakeholders.
- Partnered with **customer-facing** internal teams to deliver scalable solutions aligned with business requirements.
- Prompt-engineered an **AI agent** in **Azure Function App** using **LangChain** for data retrieval and workflow automation.

Mavenir Systems, Inc.

May 2021 – August 2021

Software Engineer Backend Intern

- Participated in code reviews, testing, and version control following **Scrum** framework.
- Conducted **unit testing** as well as **acceptance testing** using **Mockito**.
- Enhanced testing by reaching ~90% code coverage with **JUnit**.
- Built **REST APIs** and tested endpoints using **Postman**.
- Implemented backend services on MBMP product in **Java** with **Spring Boot**.
- Developed password management service using SHA3/salt combination as **encryption mechanism**.

Goverlan, Inc.

June 2020 – August 2020

Software Engineer Intern

- Analyzed **Win32 APIs**, WinRM specifically and the SOAP-based protocol WSMAN.
- Developed a C++ program for a potential integration of **WinRM** in Goverlan Reach.
- Packaged Goverlan Reach software using **MSIX Packaging Tool**.
- Created test cases in **Azure DevOps** for latest version release of Goverlan Reach.

Certifications

- HashiCorp: Terraform Associate 004 (in progress)
- Google: Professional Machine Learning Engineer (in progress)

Technical Skills

Category	Skills
Prog. Languages	Python · Java · KQL/SQL/NoSQL · JavaScript · C/C++ · Rust* · Go*
Cloud & Infra	Azure · GCP · AWS · Kubernetes* · Terraform*
Data & Storage	Kusto · CosmosDB · MongoDB · Azure Data Explorer · Databricks
Frontend	React · Next.js · Vite.js · Motion · Tailwind
Dev Practices	Git · CI/CD · OOP · REST APIs · PowerShell · DevOps · Agile
Languages	French (native), English (bilingual)

* not in production