

Sam Gerstner

Data & AI Engineer

📍 Phoenix, AZ  <https://linkedin.com/in/sam-gerstner/>  <https://github.com/samgerstner>

About Me

Data and AI Engineer with 4+ years of experience spanning data and AI engineering, software development, and IT support in higher education. I currently work at Northern Arizona University, where I design and manage ETL pipelines, build out Lakehouse architecture, and lead Microsoft Fabric adoption across the organization. I'm equally comfortable diving into technical work and collaborating with business stakeholders — translating complex requirements into scalable, governance-compliant solutions that actually get used. My background is backed by a B.S. in Applied Computer Science and certifications including CompTIA Security+, Network+, A+, Microsoft Azure Data Fundamentals, and Fabric Data Engineer Associate.

Professional Experience

Northern Arizona University

Data & AI Engineer, Senior

04/2026 – Present | Remote

- Act as lead tenant administrator for Fabric Data Lake and associated AI and Azure resources
- Engineer data pipelines, mirrors and other features to feed AI workloads; focus on secure, scalable integration with NAU's Fabric Data Lake.
- Implement Copilot and Fabric features for data transformation, enrichment, and real-time analytics.
- Operationalize AI-ready datasets and integrate them with NAU's analytics and reporting platforms.
- Act as lead architect for data lake and enterprise integrations; focus on semantic tools such as Fabric and Foundry IQ
- Integrate emerging AI and data technologies into NAU's existing platforms, ensuring interoperability and supportability.
- Partner with academic units, IT, and enablement teams to share learnings and best practices.

Data Engineer, Intermediate

09/2023 – 04/2026 | Remote

- Developed and managed ETL pipelines for efficient data transfer and transformation from source systems to Microsoft Fabric.
- Served as an intermediary between IT teams and business users, fostering the adoption of best practices in data integration for various projects.
- Ensured data governance and security compliance through role-based access control and sensitivity labeling in Fabric.
- Developed and optimized Lakehouse architecture leveraging OneLake and Delta tables for unified analytics and storage.

Production Control Specialist

05/2022 – 09/2023 | Flagstaff, AZ

- Coordinated and managed automated job scheduling operations for the University to ensure continuity of business operations.
- Oversaw several procedural changes to improve operational efficiency and reduce manual error in day-to-day work.
- Conducted product research and oversaw product discussions for potential replacement of an existing enterprise system.

Apprentice Software Engineer

03/2021 – 05/2022 | Flagstaff, AZ

- Assisted with development and testing of ASP.NET Core, PHP, and other applications to support the University's mission.
- Assisted with supervision and management of other Apprentice Programmers to ensure timely completion of projects, and provide guidance as needed.
- Acted as a liaison between software development teams and other IT teams to ensure efficient implementation of applications and ensure projects conform to industry best practices.

Student Tech, Senior

08/2020 – 03/2021 | Flagstaff, AZ

- Provided excellent customer service and technical support to students, faculty, and staff via phone, email, and chat.
- Assisted with daily operations of the ITS Service Desk including supervising and mentoring other student techs and training for both new and existing employees.

Education

Applied Computer Science, B.S., Northern Arizona University

08/2019 – 05/2023 | Flagstaff, AZ

Professional Certifications

CompTIA Security+:  April 2025 - April 2028 | **Certification Code:** 66ETH76Y6MBE1N9J

CompTIA Network +:  April 2019 - April 2028 | **Certification Code:** 8RGQ9VD3TPEQQ2G1

CompTIA A+:  June 2021 - April 2028 | **Certification Code:** CBF272KF63R1Q19D

Microsoft Certified: Fabric Data Engineer Associate:  April 2026 - April 2027 | **Certification Number:** C06A33-36B6TD

Microsoft Certified: Security, Compliance, and Identity Fundamentals:  December 2022 - No Expiry | **Certification Number:** 52R45F-6D65AE

Microsoft Certified: Azure Data Fundamentals:  December 2022 - No Expiry | **Certification Number:** 665DU5-8FBC7C