

Zi Feng

[Portfolio](#) | [GitHub](#) | [LinkedIn](#)

Skills

Coding Languages: SQL, Python, Java, JavaScript, TypeScript

Data Engineering: Apache Spark, AWS Glue, Data Modeling, Data Validation, Data Lakes, ETL/ELT, Orchestration

Cloud & Infrastructure: AWS (S3, Lambda, IAM, CloudWatch), Monitoring and Alerting, Automation

Software Engineering: Distributed Systems Design, REST APIs, Backend Services, CI/CD

Experience

Data Engineer – Amazon

August 2025 - Present

- **Architect and lead development of Amazon LEO's first company-wide statistical data platform supporting ~20 cross-functional manufacturing and engineering teams**, owning ~20 Spark/Glue pipelines processing ~120k+ manufacturing records daily
- **Design scalable ETL architecture** performing complex transformations, multi-source joins, validation logic, and environment-based partitioning **ensuring data integrity and improving dataset refresh performance by 50%** (30 minutes to 15-17 minutes)
- **Standardized pipeline architecture and deployment practices reducing analytics development cycles by >90% (1 month to 1-2 days)**
- **Implemented automated data quality validation reducing defective/invalid records by ~5% and improving downstream trust in operational reporting**
- **Built monitoring and alerting systems** utilizing CloudWatch, Grafana, and QuickSight, enabling proactive detection of statistical anomalies **saving 200+ hours annually**
- **Serve as primary escalation point for VP-level and cross-functional quality investigations**, delivering high impact root cause analyses and executive insights under tight timelines
- **Developing predictive statistical models** leveraging SPC data to assist root cause analysis and identify high-risk components before failures occur
- **Co-designed and institutionalized SPC mechanisms**, influencing technical and operational direction across engineering and production
- Mentored team members on SQL, data modeling, and analytics best practices, **raising engineering standards across 3 data and systems teams**

Systems Engineer – Redwood Material

August 2024 – August 2025

- **Owned and administered** enterprise engineering systems including QMS, Jira, Tableau, Grafana, supporting quality and manufacturing operations
- **Led redesign** to the Incident Reporting and Problem-Solving application, reducing operation waste **saving \$50,000+ annually**
- **Built internal engineering tools** (Python, Java, React, FastAPI) **improving lab, chemical, and materials workflows, saving \$35k+ annually**
- Designed dashboards to track 2000+ samples, lab results, material flow, etc. for engineering departments **saving \$20,000+ annually**
- Automated manual tasks using Python and Power Automate, **improving operational efficiency by 15%**

Other roles: Founder - Intsu Studios, **Quality Engineering Technician** – Redwood Materials, **Quality Inspector** – Panasonic Energy of North America

Education

Western Governors University – B.S Software Engineering

April 2023 – May 2025

Truckee Meadows Community College – General Education/Transfer

August 2019 – June 2021

Certifications

AWS Cloud Practitioner Certification

August 2024

ITIL V4 Foundations

August 2024

Google Project Management

August 2023

Google IT Support

June 2023