Kayla Sermini

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SUMMARY

Results driven Data Engineer with a track record of delivering fast, scalable solutions in high impact FinTech environments. I designed and built a high performance, low code ETL framework powered by metadata driven architecture, dynamic factory generation, and event based execution. The system enables rapid source onboarding without modifying core logic and is built for portability, extensibility, and configuration based orchestration.

This architecture supports more than just technical needs. The centralized logging module creates a bridge between audit insights, production support, and business visibility. It provides structured system level logs, validation tracking, dynamic error routing, and full audit trails. This allows audit teams to investigate independently, support teams to triage faster, and stakeholders to gain real time transparency into data health and pipeline status. It is a unified system that serves compliance, operations, and strategic decision making from the same source of truth.

I led a CI/CD transformation across five tech stacks by implementing automated semantic versioning, artifact promotion, and branching strategies using Azure DevOps. I thrive in fast paced environments and work effectively across Python, SQL, Java, and vendor toolchains to support production pipelines.

I am known for building systems that are modular, reproducible, and auditable. I move quickly while maintaining high quality standards. I bring a strong sense of ownership, a drive to learn fast, and a focus on delivering real business value through thoughtful engineering.

EXPERIENCE

Data Engineer

Western Alliance Bank   **March 2024 – April 2025, Phoenix, Az**

· Architected and led the development of a modular Python-based ETL framework for FCC screening systems, using YAML-driven configuration to onboard new data sources rapidly, significantly reducing development time and manual effort.
· Built a centralized logging system that captures detailed operational, compliance, and business-layer insights, enabling auditors, production support, and stakeholders to monitor pipeline behavior through a single source of truth.
· Designed a low-code/no-code architecture that enabled business analysts and junior engineers to configure data pipelines without code changes, improving maintainability and expanding platform usability across teams.
· Introduced a decoupled, event-driven batch processing model to handle daily ingestion from 30+ data sources, improving delivery reliability and simplifying operational scaling.
· Integrated the framework with Control-M to support full orchestration and automated scheduling, while building centralized logging, dynamic error handling, and audit trails to enhance compliance and reduce incident resolution time.
· Developed a Python-based handshaking mechanism to onboard a new business line through BMO under strict regulatory deadlines, ensuring seamless integration with operational and compliance requirements.
· Led the adoption of CI/CD practices across the team using Azure DevOps, implementing branching strategies and automated pipelines that improved release consistency and reduced deployment errors by streamlining delivery.
· Launched a documentation-first initiative and mentored team members on CI/CD, Python design patterns, and SDLC best practices, accelerating onboarding and improving engineering maturity across the team.
· Led the data retention initiative in partnership with Fiserv during a strategic lift-and-shift to the Prologue platform, converting legacy compliance rules into modular retention logic and aligning cross-functional teams to ensure seamless platform integration.
· Taught Git, virtual environments, and Python fundamentals through hands-on reviews and training sessions, enabling team members to independently contribute small enhancements and reducing daily developer support requests.

EDUCATION

Bachelor of Science Computer Information Science

Arizona State University · Tempe, AZ · 2024
· Capstone: Created a Flask-based budget management app with SQLAlchemy, Socket.IO, and Bootstrap. Led database integration, front-end modeling, and dashboard design.
· Global Tech Experience: Developed web applications using HTML, CSS, JavaScript; enhanced intercultural communication skills.

SKILLS

Languages & Frameworks: Python, Pyspark, Ansible, SQL, Java, C#, HTML, CSS, JavaScript
Tools & Platforms: Azure DevOps, Control-M, SonarQube, Databricks, Microsoft Power Apps
Concepts: CI/CD, Modular ETL Architecture, SDLC Best Practices, OOP, SOLID Principles, Dynamic Configurations, Financial Data Modeling
Certifications: Python and Statistics for Financial Analysis – Applied Python to financial time series data, investment performance metrics, and risk modeling. Practical Ethical Hacking. NSE 1 Network Security Associate