Kevin Mok

647-685-2500
me@kevin-mok.com
linkedin.com/in/Kev-Mok
github.com/Kevin-Mok

Projects

AML Risk Analytics <Python, SQL, Tableau> July 2025

- Built an end-to-end AML simulation using **Python**, generating **9M+ records** across customers, transactions, and alerts to mimic real-world financial behavior and suspicious activity patterns.
- Wrote advanced **SQL (CTEs + joins)** to classify **high-risk customers**, calculate alert counts, and filter transactions over the past 90 days with aggregated metrics.
- Engineered a **risk scoring model** in Python using transaction thresholds and alert volume to classify customers as Elevated or Critical risk.
- Designed **interactive Tableau dashboards** (Risk Heatmap, Alert Efficiency, Risk vs. Avg Amount) to visualize cross-country AML exposure and alert effectiveness.
- **Developed KPI-ready metrics** (alert rate, avg USD exposure, transaction volume) to drive AML performance reporting and enable cross-country risk comparisons.
- **Normalized multi-currency transaction data** to ensure consistent exposure calculations across USD, CAD, and EUR, supporting reliable AML metric aggregation.

Spotify Visualized <Python, Django> June 2023

- **Built a high-performance Python backend** using Django and PostgreSQL to process 10K+ data records per user, optimizing ingestion pipelines via API integration and ORM modeling.
- **Engineered normalized database schemas** to streamline query workflows, achieving a **50% reduction in PostgreSQL latency** for high-volume reporting tasks.
- **Visualized user music libraries in Tableau**, creating dashboards that grouped tracks by **artist and genre**, enabling users to explore listening patterns and discover trends in their Spotify data.

Rarity Surf <Python, Django, JavaScript, React> Oct 2022

- **Built a full-stack reporting tool** using React, Django, and **PostgreSQL** to analyze structured/unstructured metadata from APIs, enabling real-time rarity scoring and improving insight delivery by **80%**.
- **Optimized SQL query performance** within a Django-based pipeline, processing NFT ranking data at scale and exposing results via GraphQL with **low-latency response times under high concurrency (2,000+ queries)**.

Work Experience

Red Hat

May 2022 - Aug 2023

Cloud/Software Engineer Intern <Kubernetes, GoLang, Jenkins>

- **Decreased manual configuration errors by 80%** by automating service discovery and dynamic config updates, aligning with AML goals of minimizing operational risk and improving data integrity.
- **Enhanced CI pipeline reproducibility and performance** by rewriting the Jenkins nightly pipeline to support automated PR-level testing with reusable parameters, improving report consistency across environments.
- **Collaborated cross-functionally** with developers and testers to maintain reliable infrastructure, echoing the AML role's emphasis on stakeholder partnership for building robust reporting systems.
- **Improved system reliability** during production launches by implementing startup probes for legacy services, reducing downtime and enhancing stability for automated monitoring/reporting pipelines.
- **Reduced reporting deployment time by 66%** by building a CLI-based solution to push compiled binaries directly into Kubernetes/Openshift clusters, accelerating turnaround for testing and data validation workflows.

Skills

Python, **SQL**, **PostgreSQL**, **Tableau**, **MongoDB**, **JavaScript**, Django, **React**, Bash, **Git**, **Linux**, **Command Line**, Go(Lang), AWS, Kubernetes, Terraform, Docker (Compose), Jenkins, Groovy, Solidity, C

Education

University of Toronto (St. George)

2019 - 2024

Computer Science Specialist - 3.84 GPA (CS). Graduated with High Distinction.