

MASON NAUNG

808-205-8195 | saizaawwintnaung@gmail.com | [linkedin.com/in/mnaung](https://www.linkedin.com/in/mnaung) | github.com/masonn99

TECHNICAL SKILLS

Languages & Frameworks: Java, Python, TypeScript, SQL, Spring Boot, FastAPI, React, Next.js

Infrastructure & Cloud: Docker, Kubernetes (HPA, Spot Instances), AWS, Jenkins (CI/CD), Airflow, Kafka

Data & Observability: PostgreSQL, Redis, Datadog, Prometheus, XGBoost, Feast (feature store)

EXPERIENCE

Software Development Engineer — Visa Inc, Bellevue WA

June 2025 – Present

- Scaled the Apple Pay integration gateway on Visa's internal Kubernetes platform using horizontal pod autoscaling (HPA), enabling auto-scaling from 12 to 150+ pods during peak-traffic events and sustaining transaction throughput through holiday surges.
- Designed and implemented a Redis-backed caching layer for merchant routing rules with configurable TTL policies, reducing downstream database lookups by 90% under peak load.
- Proposed and led a dependency-aware incremental build system for a 200+ library monorepo using Python-based dependency-graph analysis to trigger CI builds only for affected downstream modules; reduced CI build times by 20% and adopted across 40% of services.

Software Development Engineer — Expedia Group, Seattle WA

August 2023 – June 2025

- Designed a split-tender payment orchestration microservice for OneKey flight bookings implementing a distributed reserve-then-capture flow across loyalty, payment, and order-management systems with compensating rollbacks; drove \$2.5M in quarterly split-tender volume.
- Built a high-throughput Spring Boot microservice to transform pre-bill records into invoices with cross-schema mapping, FX rate caching, and idempotent per-record state tracking via a tuned ExecutorService thread pool — processing 2M+ records per run; extended the pipeline to auto-generate and email PDF invoices to merchants, eliminating a manual workflow.
- Re-architected batch payment jobs from nightly to monthly accounting-deadline cadence; migrated workloads to AWS Spot Instances with Datadog-driven scheduling, reducing batch compute costs by 70% while meeting all SLAs.

Software Engineer Intern — nCino, Wilmington NC

May 2022 – August 2022

- Implemented transaction data filtering capabilities (date/month sorting) on nCino's SaaS banking platform using Angular and ng-lightning, improving usability for enterprise banking clients.
- Reduced page load times by 1.2 seconds through CSS sprites, lazy loading, code splitting, and tree shaking — cutting initial bundle size by 30%.
- Expanded unit and integration test coverage using Jest and Cypress, strengthening CI pipeline reliability.

PROJECTS

[realtime-fraud-engine](#) | Python, Kafka, XGBoost, Feast, Redis, FastAPI, Airflow, AWS

March 2026 – Present

- Architected an end-to-end streaming fraud detection pipeline processing 5,000+ TPS at sub-50ms P99 scoring latency, with XGBoost served from a Feast-backed online feature store using Redis sliding-window velocity counters — directly mirroring the scale and latency requirements of production payment fraud systems.
- Designed a graph-feature pipeline over a card-device-IP transaction graph using Louvain community detection, improving fraud recall at 1% FPR by 11 percentage points over a tabular-only baseline on the IEEE-CIS benchmark.
- Shipped a champion-challenger shadow-deployment framework with Prometheus observability, Evidently-based drift detection, and cost-weighted threshold optimization, enabling safe, iterative model rollout.

[rtd-travel-check](#) | Next.js 15, TypeScript, Neon Postgres, Llama 3.3, Telegram Bot API

2024 – Present

- Built a platform for US Refugee Travel Document (I-571) holders to check country-specific visa entry policies, serving 1,000+ monthly users via a 3D geospatial "Travel Freedom" map (D3.js, react-simple-maps) backed by a Neon serverless PostgreSQL database.
- Applied GenAI/LLM techniques: traveler reports submitted via Telegram Bot are processed by Llama 3.3 (Groq) for structured policy extraction, then held in a human-in-the-loop admin approval flow before committing to Postgres — an end-to-end LLM-powered data pipeline.

EDUCATION

Northwestern University

B.A. in Computer Science & Economics

Graduated: June 2023

GPA: 3.82