

Khoi Lam

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[Portfolio](#)

[LinkedIn](#)

[GitHub](#)

Skills

Languages: Python, Java, JavaScript, TypeScript, Go, SQL, Bash

Backend & Infrastructure: Node.js, Express, Spring Boot, Flask, Redis, Docker, NGINX, Terraform, JWT, OAuth2

Database & Cloud: AWS (EC2, S3, DynamoDB, ElasticCache, Lambda, CloudWatch), PostgreSQL, MySQL

Observability: Prometheus, Grafana, Loki, Promtail

Experience

Apply Flow

March 2025 – Present

Founder & Software Engineer

Remote

- **Building ApplyFlow**, a platform designed to help job seekers manage applications, automate follow-ups, and stay accountable in their job search through a personalized action plan.
- Designed and provisioned AWS infrastructure (**EC2, S3, DynamoDB, Redis**) to support production-ready deployments with high availability and minimal operational overhead.
- Containerized backend services with **Docker**, orchestrated via **NGINX** reverse proxy to manage routing, static asset delivery, and service isolation.
- Integrated **Redis** cache and observability stack (Prometheus, Grafana, Loki) to enhance API performance and uptime visibility, supporting thousands of concurrent requests.
- Built responsive, component-driven UIs to support cross-device UX and intuitive **CRUD** workflows.
- Built and maintained **CI/CD** pipelines using GitHub Actions, automating test, build, and deployment workflows for backend services.

Goldman Sachs

July 2022 – Feb 2025

Software Engineer

Boston, MA

- **Reduced schema ingestion errors** by 30% by building scalable **Spring Boot** ETL microservices to validate and transform Sybase records, enabling real-time data ingestion across downstream systems.
- **Increased workflow efficiency** by 95% by replacing legacy Excel VBA macros with a **React TypeScript** portfolio management app used daily by over 100 business clients.
- **Shipped production dashboards** used by 500+ internal users by integrating business-aligned UI components, working closely with UX and Trading team to meet usability and accessibility standards.
- **Reduced manual reporting time** by 90% by developing a secure Python CLI application that automated generation and delivery of 1,000+ daily institutional reports across multiple channels.
- **Achieved 100% security compliance** by leading a zero-downtime RHEL migration effort across a fleet of virtualized Linux servers, eliminating legacy dependencies and preserving data integrity across critical backend systems.

Projects

Jiggle Bliss E-commerce | PostgreSQL, Supabase, Typescript, React, Zustand, Vercel

- Built a full stack e-commerce (**Next.js, PostgreSQL and Stripe**), implementing **user-secure authentication, real-time cart management, and secure payment processing**, optimized for performance with server-side rendering.
- Implemented **OAuth2 and JWT** authentication flows using GoTrue Auth and Zustand state management for responsive UI state, reducing unauthorized access incidents by **85%** and improving session management efficiency by **50%**.
- Engineered **Stripe Checkout** integration with webhook handling and payment processing, achieving **99.9%** transaction success rate and reducing latency by **40%** through caching and database optimization in PostgreSQL.

Education

Bucknell University

2018-2022

B.S, Computer Science

Lewisburg, PA

- **Relevant Coursework:** Computer Architecture, Advanced Data Structures and Algorithms, Operating Systems, Programming Language Design, Distributed Computing.