

Charlie Kim

charliekim2.github.io | charliekim451@gmail.com | 587-921-4574

Education

University of Alberta

Bachelor of Science in Computer Science Specialization

Sep 2019 - April 2024

GPA: 3.75 / 4.00

Professional Experience

Software Team Lead - Vosyn

Mar 2025 - Present

- Leading SDLC of machine learning pipelines on GCP and a multimedia platform using React and Django, with over **200 engineers** in **12+ cross-functional Agile teams**.
- Collaborating with technical experts from **Google** and **Snowflake** to optimize cloud architecture with **GKE, Terraform, and Cortex**, decreasing latency and cost of systems by as much as **80%**.
- Engineering **ETL pipelines** and automations for web scraping and custom dataset generation from **several TBs** of audio and text using **BigQuery** and **Python**.
- Built internal tool for automating a company knowledge base using **n8n, Vertex RAG**, and several third-party integrations, greatly improving project planning, gap analysis, etc.

Backend Engineer Intern - Vosyn

Dec 2024 - Mar 2025

- Architected microservice-based B2B platform on **GCP** and **PostgreSQL**, enabling businesses to leverage AI translation pipelines via **RESTful APIs** and SDKs.
- Implemented CI/CD framework for containerized FastAPI and NextJS codebases using **Github Actions, Cloud Build/Deploy**, and **Docker**, resulting in rapid deployment and iteration.

Full Stack Developer - ABC Head Start Society

Jan 2024 - Sep 2024

- Developed & documented a robust file sharing API and custom hardware drivers in **Django, MySQL, and Typescript**, enabling **10,000+ users** to securely share and download ebooks.
- Created an automated QA framework using **SonarQube, Selenium, PyTest & JMeter** guaranteeing **80%+ code coverage & 0% downtime** during peak load.

Software Engineer Teaching Assistant - University of Alberta

Sept 2023 - April 2024

- Led four Agile student teams to successfully build & present live event ticketing Android applications in **Java & Firebase**.
- Taught labs with **400 students** Java programming, mobile development, & engineering best practices resulting in **90%+ positive** course feedback.

Projects

Music Streaming Discord Bot - NodeJS, NoSQL, RESTful APIs

- Chatbot with music streaming & 10+ other integrations on over **400 Discord servers**.

IoT Smart Home Platform - Java, Hibernate, Dropwizard, Python

- Used TDD to add 5+ new features, addressed **90% of technical debt**, integrated automated testing framework, & created a visual interface to view usage statistics for an existing IoT application.

Real time Chat Application - Golang, Echo, HTMX, AlpineJS - [Project Link](#)

- Chat app where users can create group discussions, leveraging Golangs powerful concurrency.

Machine Learning Applications - TensorFlow, R, Julia, Unity

- Various machine learning apps - time series forecasting, computer vision, A*, gradient descent, etc.