

# Charlie Kim

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## 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 2024 - Present

- Leading software development lifecycle of ML pipelines, full stack multimedia platform, and agentic search engine 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 **thousands of GB** of raw audio and text using **BigQuery** and **Python**.

Backend Engineer Intern - Vosyn

Dec 2024 - Mar 2024

- 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**, and **Artifact Registry**, resulting in rapid deployment and iteration.

Full Stack Developer - ABC Head Start Society

Jan 2024 - Sep 2024

- Built a web platform & custom hardware drivers in **React Typescript & MySQL** & secured it with Nginx & SSL, allowing **10,000+ users** to browse & share audiobooks.
- Developed & documented a robust file sharing API in **Django & OpenAPI**, enabling admin & users to securely & quickly access ebook files.
- Created an automated testing 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.