

Tri Cao (SWE III - L4)

minhtricao1996@gmail.com | (613) 851-6363 | C302-275 Columbia St W, Waterloo, ON | linkedin.com/in/tri-cao-64723313a

Skills

Languages: Java, Python, Kotlin, TypeScript, JavaScript, Golang, HTML, CSS, SQL, bash

Technologies: Google Cloud Platform, Spanner, gRPC, Protocol Buffer, Terraform, Guice, Spring, Bazel, React, Node.js

Technical fields: Back-End Development, Distributed System, Data Engineering, Front-End Development

Experience

Software Developer | Gemini in Firebase **Google** | **08-2024 – Current (L4 since 11-2022)**

- Collaborating with a team of 10 engineers, managers, and PMs to develop a personalized chatbot for Firebase Console users, enhancing the Firebase customer experience.
- Contributing significantly to designing and implementing the Firebase context fetching server for the chatbot, focusing on caching, integration testing, and productionization.
- Engaging with 3 partner teams, including the privacy team, to ensure secure data fetching from Firebase products for the chatbot while upholding user data privacy.
- Pioneering the use of Kotlin in the team's server, providing support and guidance to Java developers transitioning to Kotlin.

Software Developer | Firebase Backend **Google** | **04-2023 – Current (L4 since 11-2022)**

- Led the development of a new server stack to support Firebase app configurations fetching requests, launching a basic server in PROD for an Early Access Program supporting <10 customers by December 2023, involving extensive research, infrastructure design documentation, and implementation of key components such as load balancing, caching, and database replications.
- Enhanced accessibility for Firebase email alerts (30 variations) by achieving full dark mode support, optimizing screen reader compatibility, and streamlining developer workflow, resulting in reduced KSLO and improved user experience
- Participated in the migration of third-party channel alert delivery systems, including Jira and Slack, to a centralized backend server. Contributed to the development of a CRON job for data migration, designed new RPC APIs, and implemented logic for interaction with external APIs.
- Participating in an on-call rotation

Software/Data engineer | Firebase Metrics **Google** | **04-2021 – 04-2023**

- Engineered and maintained data pipeline systems to fuel Firebase usage and revenue data analysis, enabling all of Firebase and cross-PA partners to make data-driven decisions.
- Redesigned Firebase revenue data pipelines with **BigQuery SQL** and internal data warehouse system which allows parallel ad-hoc revenue studies with flexible timelines and data sources, while automating monthly revenue reporting process to save 90% the legacy manual processing time.
- Designed and released a **Python** automated code review bot for data pipeline configurations and SQL queries, permanently enforced good practices and rules for the cross-team shared code base.

Software Engineering Intern | Recommendations AI **Google** | **05-2020 – 08-2020**

- Built and established complex configurations for a new **Java** multi-component service.
- Designed and exposed new RPC APIs to monitor long-running operations and register for front-end notifications.

Software Engineering Intern | Firebase CLI **Google** | **05-2019 – 08-2019**

- Designed, implemented and fully tested Firebase CLI's new project management capabilities. Utilize asynchronous Typescript programming in NodeJS environment.

Education

Carleton University

Bachelor of Computer Science, Co-op Program

CGPA: 11.86/12 (A+). On **Dean's Honour List** since 2016.

Ottawa, Ontario, Canada

Jan 2016 – Feb 2021