
EDUCATION

• The University of Hong Kong*Bachelor of Engineering in Computer Science (Minor in Cognitive Science)**Sept. 2016 – May 2020**Full Scholarship**GPA: 3.51/4.30*

EXPERIENCE

• Credit Suisse**Hong Kong***Software Engineer**August 2020 - Current*

- **Private Banking** Matched investment ideas with preferences and regulatory requirements of thousands of clients on one screen. Allowed planning, review, preview, and send-off of emails, SMSs, and push notifications. Created on-brand interfaces with advanced filtering and data sourcing using React, Styled Components, and Typescript. Used Node.js & MongoDB for the GraphQL API.
- **Campaign Analytics** Developed a system to track conversions of the above-mentioned campaigns. Developed performant visualizations using vanilla CSS, virtualized tables, unit-tested filters, and processed data using Clojure in an ETL pipeline.
- **Gitlab1s** Ported the open-source github1s.com project internally to allow a quick preview of internal repositories across the APAC region.
- **Data Pipeline** Implemented horizontal auto-scaling by migrating from virtual machines to Kubernetes using GitOps for transparent and self-documenting cluster management. Dockerized Kotlin apps, deployed Kafka/ZooKeeper/Kafka Connect, and implemented push-based health monitoring using Kotlin.

*Software Engineer, Intern**June - August 2019*

- **Client Recommendation** Developed an idea recommendation platform powered by a content-based machine learning model with TypeScript, GraphQL, React, and OAuth. Used CSS and Recharts for several visualizations. Implemented continuous integration and deployment using GitLab CI, Docker, and Kubernetes.
- **CodeIT Suisse** Developed a programming competition platform for a recruitment event using Java, Spring Boot, and Vue. Added badges for gamification, performance graphs, admin dashboard, real-time grading, and BDD testing using Cucumber.

• GRAIL Inc.**Hong Kong; Menlo Park, CA, USA***Full Stack Software Engineer, Intern**June - August 2018*

- **Removed the need for manual invoicing every month** by implementing an auto-invoicing system. Auto-generated PDFs for each invoice and integrated with NetSuite and Salesforce to sync customer information in real-time. Developed a dashboard for company finances. Used React, Material UI, Redux, Go, and SQL. Added several unit and integration tests.
- **Allowed billing flexibility** by adding features for invoice correction, discount offerings, and special pricing per customer. Worked on both front-end and back-end.

• Microsoft**Hong Kong***Technology Solutions Professional, Intern**June - August 2017*

- **Reduced time for sales to find Azure offerings for clients** through a web app that allowed convenient searching and filtering of offered products with comparisons to competitors such as AWS.

PROJECTS

- **Acumen** Final Year Project: A distributed system to improve latency, efficiency, and throughput of machine learning inference pipelines. Used TensorFlow, gRPC, Docker, and Node.js. Paper at github.com/WaqasAliAbbasi/HKU-FYP
- **DragonSearch** Academic search engine powered by Elasticsearch that helps filter through millions of papers, authors, and topics by asking for real-time user feedback. - Winner of Chengdu80 2019 inter-university FinTech competition
- **StudentBase** High school community with 10,000 monthly active users (<https://studentbase.app>). Infrastructure as Code (Terraform), CI/CD, GraphQL Server with 90% testing coverage, S3 for content storage, Dockerized, React/Node.js/TypeScript, SSR using Next.js, Seed-funded HK\$100,000 by Hong Kong Science Park.

SKILLS & ADDITIONAL EXPERIENCE

- **Languages** Typescript, CSS, SQL, Clojure, Java, Haskell, Go, Python, Kotlin
- **Tools/Frameworks** React, Figma, Material UI, Tailwind CSS, GraphQL, Kubernetes, Django, gRPC
- **Teaching Assistant** ENGG1111 - Computer Programming and Applications