Ma Wing Kin, Paul

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EDUCATION

City University of Hong Kong

Hong Kong

Bachelor of Science in Computer Science, Expected Graduation Date: 06/2023

Sep 2019 - Present

EXPERIENCE

GoGoX (GoGoVan)

Hong Kong

Software Engineer, Part-time

Sep 2022 - Mar 2023

- Set up the design system in Flutter, provided features like Dark Mode and application for widget Showcase. Also added a CI/CD workflow with Codemagic, included deployment in App Distribution and CI build for pull requests
- Created a Flutter plugin that support per-app language preference with platform-specific code in Swift and Kotlin
- Increased >15% test coverage in Flutter app. Optimized logging with Crashlytics and Performance Monitoring
- Used React Flow to modify workflow transitions in the admin portal, and Dagre to display graphs with auto layout

GoGoX (GoGoVan)

Hong Kong

Software Engineer, Intern

Jun 2022 - Aug 2022

- Added >10 database models in the admin portal. Created APIs and unit tests in the backend with NestJS and Typescript. Integrated them in the frontend using React, Next.js, RTK Query, React Hook Form and JOI
- Developed a MVP in Flutter for tracking online orders which integrated Firebase and Google Sign In
- Exported designs automatically with Style Dictionary to solve the incompatibility between Figma and Flutter

Hospital Authority

Hong Kong

Programmer, Intern

Jul 2021 - May 2022

- o Developed an internal tool that supported several file formats to find matching IP addresses using Python
- Exported data to the desired format and performed data visualization with Pandas and Openpyxl
- Set up daily Cron jobs for Email automation and website monitoring with Github Actions and Python

PROJECTS

• Final Year Project | Python, Tensorflow

- \circ Applied Naive Bayes, SVM and BERT to predict the sentiment, the best model achieves an accuracy of ~ 0.6
- Used ARIMA and LSTM for time series forecasting, and employed predicted sentiment as the exogenous variable

• Distributed Accounting System | Spring Security, Spring Cloud Gateway, RabbitMQ

- Set up the architecture containing a gateway to load balance and route requests, and a message queue to distribute requests to multiple servers. Integrated Spring Security with JWT for authentication across the entire system
- o Configured producers and consumers in RabbitMQ, applied Request-Reply pattern to consume response in client

• CityU Downloader | Docker, Redis, PostgreSQL, Spring Boot

- Supported searching examination papers by every combination of course name/year/subject, which saved more than half the steps required to download each CityU examination paper. All responses are cached with Redis
- Created integration tests in Spring boot backend with PostgreSQL and Redis containers, has >90% test coverage

• Personal Website | AWS, Github Actions, Terraform

- Utilized Terraform to define infrastructure, apply changes in resources automatically with a CI/CD pipeline
- Serve the website with S3 and CloudFront, uses API Gateway, Lambda and DynamoDB for a visitor count API

Programming Skills

- Languages: C++, Dart, Java, Javascript, Python, SQL, Typescript
- **Technologies**: AWS, Docker, Firebase, Flutter, Github Actions, MongoDB, NestJS, Next.js, Nginx, PostgreSQL, RabbitMQ, React, Redis, Spring Boot, Terraform

ACHIEVEMENTS

- $\bullet\,$ 1 Kyu on Codewars, ranked top 100 for kata completed, solved 1900+ problems
- Completed Advent of Code 2021 and 2022, placed top 100 in several days
- Represented Hong Kong in 2017 CCGS SEA, a Clash Royale tournament, won 1500 USD