Ma Wing Kin, Paul

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EDUCATION

City University of Hong Kong

Hong Kong

Bachelor of Science in Computer Science

Sep 2019 - Jun 2023

EXPERIENCE

GoGoX (GoGoVan)

Hong Kong

Software Engineer

Jun 2023 - Present

- Added table virtualization to frontend with extra features such as local search. Resulted in a four times increase for the number of rendered rows. Improved table loading time and responsiveness time from >5s to <500ms.
- Migrated mobile APIs from V1 to V2. Reduced payload size by ~70% and wrote detailed to ensure compatibility.
- Enhanced PDF text search, and increased PDF generation performance by >50% with large number of images.
- Integrated Keycloak and created a complex user table that led to better user management and access control.
- Migrated projects to Typescript. Resolved most of the compile-time errors and refactored the package bundling.
- Utilized GovHK APIs to show real-time parking information in mobile. Boosted users' productivity by ~10%.
- Investigated fatal exceptions in Crashlytics. Reduced the number of corresponding exceptions by >80%.

Software Engineer, Part-time

Sep 2022 - Mar 2023

- Set up the design system in Flutter, implemented features like Dark Mode and application for widget Showcase.
- Added a CI/CD workflow with Codemagic, with deployment in App Distribution and CI build for pull requests.
- Created a Flutter cross-platform plugin to support per-app language, integrates it with an in-app language picker.
- Improved logging with extra metrics to smoothen the debugging process and help measure business values.

Software Engineer, Intern

Jun 2022 - Aug 2022

- Aided development in an early-stage full-stack project. Added >10 database models in application. Created APIs and tests using NestJS and Typescript. Integrates form state management and schema validation in frontend.
- Developed a Minimum Viable Product with Firebase and Google Sign-In to track online orders automatically.
- Exported designs automatically with Style Dictionary to solve the incompatibility between Figma and Flutter.

Hospital Authority

Hong Kong

Programmer, Intern

Jul 2021 - May 2022

- 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

CityU Exam Paper 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 were cached with Redis.
- Created integration tests in Spring boot backend with PostgreSQL and Redis containers, had >90% test coverage.

Personal Website | AWS, Github Actions, Terraform

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

TECHNICAL SKILLS

Languages: 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

 $1~\mathrm{Kyu}$ on Codewars, ranked top $100~\mathrm{for}$ kata completed, solved 1900+ problems

Completed Advent of Code 2021 and 2022, placed top 100 in several days