Ma Wing Kin, Paul

https://wingkin.eu.org

Email : mwk0048@gmail.com
Mobile : (+852) 55400938
GitHub : github.com/mwk48
LinkedIn : linkedin.com/in/mwk48

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 nest.js and Typescript. Integrated them in React using 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*
- Developed an internal tool that supported several file formats to find matching IP using Python
- Exported data to the desired format and performed data visualization with Pandas and Openpyxl
- Set up Cron Jobs for Email automation with Github Actions and Python

PROJECTS

- **Final Year Project | Python, Tensorflow**
  - Created a human-labeled (positive/negative/neutral) dataset with 3000 comments for sentiment analysis. Applied Naive Bayes, SVM and BERT to predict the sentiment, the best model achieves an accuracy of ~0.6
  - Implemented an asynchronous web crawler which can fetch more than 150000 comments in less than one minute
  - Used ARIMA and LSTM for time series forecasting, and employed predicted sentiment as the exogenous variable

- **CityU Downloader | Docker, React, Redis, PostgreSQL, Spring Boot, Typescript**
  - 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
  - Deployed a dockerized application to Oracle Cloud, set up Nginx for reverse proxy and HTTPS

- **Personal Website | AWS, Github Actions, Terraform**
  - Utilized Terraform to define infrastructure, apply changes in resources automatically with a CI/CD pipeline
  - Used API Gateway, AWS Lambda and DynamoDB to build a Serverless API for counting visitors
  - Configured Cloudfront and Cloudflare to serve the website on S3 bucket with a custom domain

PROGRAMMING SKILLS

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

ACHIEVEMENTS

- 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