Omer Wai Yan Oo

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EDUCATION

Singapore Management University — Singapore
Bachelor of Science in Computer Science — *August 2020 – December 2023*
- **Teaching Assistant** for Collaborative Software Development (CS203)
- **Relevant Coursework:** Data Structures, Design and Analysis of Algorithms, Networks, Operating Systems, System Design, DevOps, Machine Learning, & Big Data Architecture
- Technology Executive at SMU Ellipsis, the student body for the School of Computing and Information Systems
- Honorary Finance Secretary of SMU Stereometa, the premier student DJ-ing collective in Singapore

EXPERIENCE

Software Engineering Intern — January 2023 - May 2023
Grab — *Singapore*
- Building an internal data platform and tooling in the Automated Scalable Insights team
- Handling the automation of various ETL workflows and visualisation across business verticals at Grab, allowing product analytics teams to derive actionable insights from them
- Designing scalable systems using AWS and Azure services
- Technologies used: **ExpressJS, Flutter, Python, Typescript, AWS, Azure, Relational Databases**

Software Engineering Intern — May 2022 – August 2022
Ox Street by Carousell Group — *Singapore*
- Ox Street is a streetwear marketplace part of the **Carousell Group**, for new and used sneakers
- Developed a full overhaul of the main web application in NextJS with TypeScript React, working full-stack
- Built a **recommender system** using gathered user events to train a **machine learning model** which recommends similar products that other users view & like
- Implemented a pipeline for **internationalisation (i18n)**, translation management and automatic routing
- Followed best practices in phased development, writing unit tests and interaction tests with **Storybook**

Data Science Intern — June 2021 – October 2021
Ox Street by Carousell Group — *Singapore*
- Implemented data visualisation, processing and conversion tracking with tools such as **Pandas** & Google Analytics
- Programmed a **price-monitoring service with Flask on Heroku** to gather up-to-date and accurate pricing data, allowing the number of accurate listings on the app to increase by over 100%
- Wrote various Python scripts to automate workflows for catalogue managers

PROJECTS

Rupiks | *Flutter, Dart, C++* — In Progress
- Developed a **cross-platform mobile application in Flutter** to solve a Rubik's Cube based off of camera input from the device with the use of computer vision techniques
- Integrated a **C++ Foreign Function Interface (FFI)** to solve any given Rubik's cube efficiently using Korf's Algorithm and pattern databases

Locus | *Spring, React, Flask, GCP* — August 2021 – November 2021
- Locus is an event-management platform for the new normal - where communities can organise physical events without hassle; which was presented an award by the sponsor, **Credit Suisse**
- Utilised the **Spring MVC Framework** to build various APIs for the management of users & events, with automated vaccination certificate verification using GovTech's OpenAttestation client
- Programmed a **web scraper microservice in Flask** that collects prevailing COVID-19 regulations and event capacity limits from verified sources and feeds the data to the main application

TECHNICAL SKILLS

Languages: Python, C++, Java, C, TypeScript, SQL, Dart
Frameworks: React, gRPC, Node.js, FastAPI, Flutter, ExpressJS, Spring
Tools: Git, Docker, AWS, Google Cloud Platform, Azure, Heroku, MongoDB, LaTeX
Libraries: TensorFlow, Keras, pandas, NumPy, matplotlib
Certifications: Oracle Certified Foundations Associate (Java)