

EDUCATION

Northeastern University, Khoury College of Computer Sciences San Jose, CA
Master of Science, Computer Science | GPA 4.0 Sep 2022—Dec 2024 Expected
Relevant Coursework: Discrete Structures; Object-Oriented Design in Java; Data Structures, Algorithms, and Their Applications within Computer Systems; Mobile App Development; Operating Systems*

The Chinese University of Hong Kong Hong Kong, China
Bachelor of Business Administration, Business Analytics & Quantitative Marketing Sep 2017—Dec 2021
Relevant Coursework: Intro to Computing Using Java; Intro to Python; Network and Security

WORK EXPERIENCE

Data Engineer, [Dashmote](#) Jan 2022—June 2022

- Developed web scrapers based on **Scrapy** to gather raw data from 5+ delivery platforms. Processed large-scale datasets of 1M+ records using **Python**, **Pandas**, **SpiderKeeper**, **Jupyter Notebook** and **AWS S3**
- Utilized **AWS S3**, **ECS**, **Lambda** and **EventBridge** to automate data collection, resulting in a 90% increase in time efficiency. Migrated deprecated projects to the new schema and monitored the results weekly
- Investigated low-quality data and identified issues using queries against **MySQL** and **Amazon Athena**. Researched on **Google Places API**, conducted experiments and increased the accuracy by 9%
- Collaborated with an engineering team of 7 and cross-functional teams on **GitHub** across 6 repositories

Operations Intern, [ShopBack](#) Sep 2020—Jul 2021

- Integrated **TUNE Network API** to assist merchant onboarding, setup **Salesforce** accounts for clients, queried order records using **SQL** and performed data manipulations using **Pandas** and **Numpy**
- Initiated automation projects using **Python**, **Google Sheets API**, and hosted on **Google Cloud Platform**. Supported 1% weekly growth in partner numbers and achieved 98% decrease in support requests
- Constructed **JavaScript** in **Google Tag Manager** to support merchant integration via tracking pixels. Provided technical consultation to merchants on **Shopify**, **SHOPLINE**, **91App** and performed tracking tests
- Assisted data collection using **BeautifulSoup** and **Selenium**, supported operations of 20+ merchants with programs deployed to **AWS Lambda**, resolved ad-hoc issues and designed systematic solutions
- Worked collaboratively with Engineering, Customer Service, Marketing and Business Development teams to optimize and scale merchant operations. Monitored tracking reliability for 700+ merchants

PROJECTS

[VocaBoost](#) (vocabulary learning application)

Co-founder, full-stack developer

- Created an **iOS & Android app** with **React Native**, **Expo**, **Babel**, and **NativeBase**. Integrated **OAuth 2.0** and **OpenID Connect**, utilized **WebSocket** for realtime updates. Hosted backend on **AWS EC2** with **Docker**
- Implemented responsive user interfaces for 5+ devices, and achieved **1000+ downloads** on App Store
- Developed an analytics server with **Spring Boot**, **MongoDB** and **Prometheus** to store app's event history and monitor user behavior. Integrated **Grafana** for realtime data visualization.

[PawPal](#) (pet-focused social media application)

Team lead, full-stack developer

- Built an **Android app** using **Java**, designed database schema, and integrated **Firebase** for data storage, user authentication and realtime messaging
- Implemented search feature on an interactive map by integrating **Google Maps SDK for Android** and **Google Places API** to access realtime user location, and allow users to discover nearby pet-related services

SKILLS

Programming Languages: Python, JavaScript, Java, C, HTML, CSS

Frameworks: React, React Native, Node.js, Express, Spring Boot, Django, Flask, Scrapy, Selenium

Infrastructure: AWS, GCP, Docker

Database: MySQL, PostgreSQL, MongoDB, Firebase

Tools: Bash, Zsh, Vim, Git, Postman