ROBBY (XI) QIU

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EDUCATION

University of Pennsylvania

Master of Computer and Information Technology

exp. May 2023

• Cumulative GPA: 4.0/4.0

• *Ongoing Coursework*: Data Structures, Algorithms, Web Development, Database Management, Machine Learning, Theory of Computation, Computer Architecture, Operating Systems, Internet and Web Systems

University of Oxford

BA Hons Philosophy, Politics and Economics

Jul. 2019

• Overall Honours Classification: First Class – GPA equivalent: 4.0

WORK EXPERIENCE

Second State

Software Engineer Intern

Jun. 2021 - Aug. 2021

- Used Docker to containerize TensorFlow models powered by WasmEdge, Second State's WebAssembly virtual machine, and deployed service on AWS Lambda and Tencent SCF; wrote detailed tutorial on CNCF's blog
- Developed chatbot prototypes with Rust and deployed on WasmEdge-powered FaaS platform to showcase its speed and convenience; created user documentation on usage of the plaform with code examples
- Researched on integration of WasmEdge in smart cars (with tools from the Erdos Project) and development of WebAssembly containers (with CRI-O)

ByteDance

Product Manager Intern

Dec. 2020 - Apr. 2021

- Collaborated with engineering team on designing credit system for TikTok advertisers; used Pandas and Matplotlib to validate the system and visualize credit score distribution
- Processed and analyzed behavioral data of advertisers with SQL and Python to detect traits that mark off risky advertisers; implemented corresponding risk-control features and reduced key risk metrics by 60%
- Built shared monitoring dashboards for key risk metrics to accelerate information transmission between engineering, operations, and sales teams

MiraclePlus (Y-Combinator China)

Investment Analyst Intern

Apr. 2020 - Jul. 2020

- Developed web-scraping tool for deal-sourcing platforms with Python (Selenium, Requests, Beautiful Soup), used regularly by analysts and sourced 1 out of 15 start-ups invested by MiraclePlus in Fall 2020 round
- Scraped and analyzed data on founders and funding information of Chinese unicorn start-ups and researched on HR SaaS and car battery recycling; produced 3 in-depth reports
- Developed Python scripts to scrape and send cold emails to target start-ups automatically; sourced 400+ start-ups and convinced 90+ to apply to MiraclePlus in Fall 2020 round

PROJECTS

Face Analysis iOS Application | SwiftUI, CoreML, Vision

Jan. 2022

- Developed an iOS APP that extracts faces in a photo and shows predicted age, gender, and emotion for each face
- Implemented CoreML machine learning models on iOS with SwiftUI; detected and cropped faces with Vision, Apple's built-in framework for computer vision

Full-Stack Web Application (Social Network) | React, Express, MongoDB, Heroku

Sep. 2021 - Dec. 2021

- Created Reddit-like social network website in team of 3 under the Scrum framework and deployed through Heroku
- Built front-end with React & MUI and back-end with Express & MongoDB; tested with Jest and Cypress
- Independently implemented in-APP synchronous chatting that supports image, audio, and video; built the feature through polling, file streaming with Multer, and file storage with MongoDB GridFS

Educational Wechat Mini-APP | JavaScript, HTML, CSS, Tencent Cloud Functions

Apr. 2020 - Jul. 2020

- Designed and developed Wechat Mini-APP for Project Nous, an education NGO; frequently used by 40+ volunteers and 200+ students for program application, admission, and course registration
- Built front-end with JavaScript, HTML, and CSS, and used Tencent Cloud Function for back-end and database management; collaborated in team of 4 through GitHub and Slack

PROGRAMMING SKILLS

Languages: Python, Java, C, C++, JavaScript, HTML/CSS, Rust, Swift **Tools**: Git, Linux, Docker, Node.js, React, Cypress, SwiftUI

Big Data: MySQL, MongoDB, Pandas, Matplotlib, Seaborn, TensorFlow

LANGUAGES & INTEREST

Chinese: Native English: Proficient Hiking: Experience in high-altitude hikes Rock-Climbing: Intermediate - V5&5.10b