Yuchen Wang

Email: barrywang@cmu.edu   Phone: (412) 652-3396
https://www.linkedin.com/in/yuchen-barry-wang/
https://github.com/Barrywww
https://me.nmgit.net/

Education Background

Carnegie Mellon University   Pittsburgh, PA
Master of Software Engineering in Scalable Systems, GPA 3.92/4.33   09/2022-12/2023
Core Courses: Formal Methods, API Design, Agile Methods, Quality Assurance

New York University Shanghai   Shanghai, China
Bachelor of Science in Computer Science, GPA 3.65/4.00   09/2018-05/2022
Core Courses: Software Engineering, Distributed Systems, Computer Architecture, Databases, Operating Systems, Algorithms, Machine Learning, Computer Networking

Work Experiences

PayPal   Shanghai, China
Software Engineer Intern   06/2021-07/2022
- Constructed two data visualization platforms with TypeScript, React, Redux, and ECharts, supported role-based access control, data filtering, and custom dashboard, deployed with Jenkins CI/CD pipeline, and serviced 2000+ users.
- Implemented an internal front-end library that exports ECharts graphs into editable PowerPoint graphs, such as bar, line, pie, scatter charts, and the composite of them, and applied in two data visualization projects with 50+ charts.
- Held a knowledge-sharing session on the application of frontend reactive programming (RxJS), and introduced its benefits and shortcomings in handling asynchronous data flow in React projects.

New York University Shanghai   Shanghai, China
Learning Assistant   09/2020-12/2020
- Provided in-class coding support to Introduction to Computer Programming course students and presented timely feedback to the professor to facilitate teaching.
- Held office hours weekly, provided instruction on class and recitation materials to students, and organized midterm and final review sessions. Provided more than 50 hours of tutoring over the semester.

Yibei Investments   Shanghai, China
Software Engineer Intern   06/2020-09/2020
- Implemented a web crawler with proxies for EastMoney stock community (a professional Chinese financial information platform) with Scrapy, BeautifulSoup, and Selenium for crawling, pandas for data cleaning, and MySQL for storage.
- Developed an automatic hedging cost calculation and storage tool using Python, Pandas, and MySQL.

Research and Project

Capstone: NYU Shanghai Library Workflow Management System   02/2022-05/2022
- Constructed a back-end RESTful API and data processing service utilizing Python, FastAPI, and Pandas. Supported library staff's daily usage to manage ordering workflow of 10,000 + books, across sites in Shanghai and New York.
- Implemented JWT-based user authentication, access control, caching, and back-end pagination to improve loading performance, and automated database backup to ensure data security.
- Utilized Scrum for project management and worked closely with a team of three to provide end-to-end solutions.

Research: An Industrial Application of Mutation Testing in Fintech Systems   06/2021-05/2022
- Created a customized mutation operator under the PiTest framework with Java ASM, which identifies historical flaw patterns in China Foreign Exchange Trade System (CFETS) and applies mutation to them.
- Collaborated with teammates to conduct test case validity experiments provided by an automated test generation suite.
- Investigated the application of mutation testing technology in the field of financial technology.

Project: NYU Rates   02/2021 - 05/2021
- Delivered a responsive SPA website with React, Ant Design, and Redux for NYU students to rate their courses; professors to access statistics; and system managers to config and monitor the website.
- Analyzed business requirements and incorporated the Mocha test framework to formulate test plans and scripts.
- Participated in the development and testing of back-end RESTful API service using SpringBoot and JUnit.

Skills

Programming Languages: HTML/CSS/JavaScript (TypeScript), Python, C, Java
Development Toolkits: AWS, React, Redux, Webpack, Ant.d, Jira, Docker, Node.js, cURL, REST, GraphQL, PyTorch
Languages: Chinese (Native), English (Proficient)