Sitian Shen (Lucy)

Seeking full-time Software Engineer position starting after Dec 2020

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SUMMARY

As a graduate student majoring in Electrical and Computer Engineering at Carnegie Mellon University with solid programming & analytical background, I'm currently looking for full-time Software Engineer opportunity. Skilled and passionate about: Web Development technology, Data Structure & Algorithms, and Java (especially OOP) etc. Available start date: Dec, 2020.

WORK EXPERIENCE

Software Engineer Intern, Walmart ECommerce (Sunnyvale, CA)　　　**June, 2020 - Aug. 2020**

worked in Sam's Club Site Experience and Tools Team as a **back-end** software engineer;
created a monitoring & testing tool in **Node.js** with web tech **React** and **Express**.

- Continuous Synthetic Monitoring of Samsclub.com website with Node libraries Google Lighthouse and Puppeteer;
- Dashboard to monitor the metrics over time with Prometheus and visualized in Grafana;
- Use Docker to dockerize the code for deployment on Azure;
- User Interface by React to manage and trigger tests.

EDUCATION

Carnegie Mellon University　　　**Pittsburgh, PA**

Master of Science in Electrical and Computer Engineering, GPA: 3.9/4.0　　　May. 2020

- Courses: Foundations of Computer System (15513), Web Application Development, Java for Application Programmers, Data Structure for Application Programmers, Introduction to Machine Learning for Engineers, Computer Vision, Big Data Analytics

University of Electronic Science and Technology of China　　　**Sichuan, China**

Bachelor of Engineering in Electronic Science and Technology, GPA: 3.92/4.00　　　June. 2019

University of Glasgow (Joint Degree)　　　**Glasgow, UK**

BEng Electronics and Electrical Engineering (First Honor Degree), GPA: 20.92/22　　　June. 2019

SKILLS

Languages: Advanced knowledges with **Java**; Proficient with **Python, JavaScript, C, Matlab**
Fundamental: Strong Skill with **OOP**; Advanced knowledge with **Data Structure & Algorithms**
Web Tech: Proficient with **Django, Express.js, React.js**; Familiar with HTML5, CSS3, Bootstrap, Ajax
Database: Good understanding with relational database like PostgreSQL, Sqlite3
Other Tools: Version Control with **Git**, CI/CD with **Azure**, **Docker**, monitoring tool with **Prometheus**

PROJECTS

Full Stack Website Development Based on Django　　　**Sept. 2019 - Nov. 2019**

A Chain Restaurant Web Service

- Developed some applications like ordering food for clients, editing employees' info for managers based on MVC architecture and interacted with UI through jQuery, Ajax, HTTPs based on Django framework;
- Deployed Sqlite3 database system to store and handle huge number of requests from users;
- Use selenium to automatically test the website;
- The code is deployed to Azure via a CI/CD tool.

Dynamic Storage Allocator (Malloc) Based on C　　　**Nov. 2019**

- Design a **Double Linkedlist** module in C programming language to manage the storage;
- Realize malloc, realloc, free, calloc functions.
- Use explicit and segregated list and best-fit to improve the utilization and throughput.
- Increase utilization to 74% and throughput to over 11K KOPS.

A Multithreaded Cache Web Proxy Based on C　　　**Dec. 2019**

- Create a proxy that accepts incoming connections, reads and parses **concurrent** requests, forwards requests to web servers, reads the servers responses, and forwards the responses to the corresponding clients.
- Deal with multiple concurrent connections, use a simple main memory cache (with LRU policy) of recently accessed web content.