Chujun Xu (Jerry)

Education

- Computer Science B.S, Mathematics B.S., UCLA

Oct 2020 - Jun 2024 (expected)

- o GPA: 3.94/4.00, Deans Honor List Recipient
- o Courses: Data Structures and Algorithms, Operating System Principles, Computer Architecture, Automata Theory, Computer Security (in progress), Artificial Intelligence (in progress)

Experience

- Google, Inc., Sunnyvale, CA

Jun 2022 - Sep 2022

STEP Intern

- Spanner (Google's globally consistent relational database) backup team manages O(100k) batch job pipelines daily; lack of resources often triggers tickets
- o Created internal tool in C++ that exposes the backup pipelines' scheduling delay, reducing on-call load
- o Defined a clean data model to represent a pipeline with controller and worker pool jobs using protocol buffers, stored in a Spanner table
- o Exported metric to a monitoring service; created 2 different dashboards using Python to visualize trends
- Stellar Cyber, Santa Clara, CA [link]

Jun 2021 - Sep 2021

Software Engineer Intern

- Connected Prometheus's Alertmanager and a heartbeat server through a Flask app that additionally verifies credentials; Runs in a Docker container in a Kubernetes pod
- o Added multiple custom CLI commands, such as resizing root filesystem and LVMs
- o Introduced a unit testing framework in Python and added numerous test cases for existing code

Projects

- Caligo [link]
 - o Developed Chrome extension that enables dark mode and changes fonts on webpages for accessibility
 - o Collaborated in team of 2 over 1 week, for LA Hacks 2021
 - o Utilized HTML/CSS, JavaScript, and Chrome APIs
- Traffic Light Recognition [link]
 - Programmed a machine learning model (convolutional neural network) in Python for recognizing state of a traffic light, resulting in 91% accuracy; utilized Pytorch, NumPy, and Matplotlib libraries
 - o Used open-source Bosch dataset with annotated images of traffic lights
 - o Wrote a research paper, created presentation and video detailing results

Leadership

- ACM Cyber President at UCLA [link]

Nov 2020 - present

- o Presented cybersecurity related workshops on topics such as PHP web shells, XSS/CSRF, etc.
- o Designed and implemented CTF style challenges for each workshop with varying difficulties [link]
- o Mentored teams in various CTFs such as DTCC CTF, MetaCTF, Reply Cyber Security Challenge, etc
- LA Blueprint Developer Project Lead at UCLA [link]

Nov 2021 - present

- o Helped the Shoes that Fit nonprofit organization create a React web app that handles inventory management of shoe donations and orders for underprivileged children
- o Implemented Figma designs of multiple pages; utilized Airtable as backend database
- UPE member at UCLA [link]

Apr 2021 - present

- o Inducted into computer science honor society for top 1/3 of undergraduate CS/CS-related majors
- o Tutored other undergraduates on lower division classes such as Data Structures and Algorithms

Skills

- C++/C, Python, HTML/CSS, JavaScript, Bash, Git
- React, Node.js, Flask, Docker, Kubernetes