

Permanent Address 12779 Lantana Ave Saratoga, CA 95070 https://poe0821.github.io/ paulluo@umich.edu 408-981-0821 Current Address 1300 S University Ave, Apt 308 Ann Arbor, MI 48104

Work Experience

Software Engineer | VMware

Aug 2021 – Present

- Worked on containerization of kernel-space components to the user-space
- Implemented compression algorithm of header files for local daemon in vSAN distributed file system
- Upgraded performance of multiplexer for application above TCP layer
- Performed architectural/code reviews for high priority projects and feature requests
- Debugged and triaged bugs pertaining to overall team, and communicated with other teams about fixes/workarounds for issues

Software Engineer Intern | General Motors

Jan 2020 - Dec 2020

- Designed a wireframe process and Implemented a generative algorithm using Python and ANSYS modules to optimize heatsink topology in electronic devices
- Utilized extensive research on Python's SciPy library and integrated scripts to locate within 1% the global optima for evolutionary algorithms
- Discussed and communicated with team members and mentors about project planning as well as validation strategies during bi-weekly presentations following the Agile development process

Education

University of Michigan | Ann Arbor, MI

April 2021

Bachelor of Science - Computer Science

GPA: 3.587/4.0

Relevant Coursework: Operating Systems (EECS 482), Advanced OS Projects (EECS 498), Human-Centered Software Design and Development (EECS 497), Software Engineering (EECS 481), Database Management Systems (EECS 484), Information Retrieval and Web Search (EECS 486), UI Development (EECS 493), Computer Security (EECS 388), Foundations of Computer Science (EECS 376), Computer Organization (EECS 370), Data Structures and Algorithms (EECS 281)

Skills

- Programming Languages: C++, C, Python, HTML, CSS, JavaScript, SQL, Golang, Java
- Platforms/Frameworks: Windows, Linux, OSX, Git, Bash, perforce, VIM, MongoDB, React, AWS, GDB
- **Spoken Languages:** English, Chinese (Mandarin), Spanish

Projects

Network File Server (C++, C)

Nov 2020

- Applied knowledge of multi-threading, sockets, hierarchical file systems, security protocols, and clientserver systems to develop a program in C++ that serves file system requests from a client interface
- Used C++ standard mutex and thread library to correctly apply mutual exclusion and concurrency

Business Review App (HTML, CSS, JavaScript)

Jul 2020

- Created a web application that functions closely to Yelp.com using React, HTML, and CSS for the user interface design and Node along with MongoDB to execute backend methods in JavaScript.
- Applied RESTful API routing, Express and Passport for secure HTTPS requests, and AWS S3 for deployment

Social Media Simulator (SQL, JavaScript)

Oct 2019

- Designed a relational database using SQL which emulates the popular social media platform Facebook
- Implemented SQL scripts with Oracle and JavaScript programs with JDBC that ranged from querying mutual friends to looking up commonly tagged photos from specific events and hashtags

Extracurriculars

• UM ACHA Division II Men's Ice Hockey Team Member/Officer

Sep 2017 - Present