Paul Luo

Address
12779 Lantana Ave
Saratoga, CA 95070

https://poe0821.github.io/
paulluo@umich.edu
408-981-0821

Work Experience

Software Engineer | VMware   *Aug 2021 – Present*
- Implemented guardrail for cluster partitioning in vSAN distributed file system
- Applied compression algorithm of header files for local daemon
- 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

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)

Education

University of Michigan | Ann Arbor, MI   **April 2021**
Bachelor of Science – Computer Science   **GPA: 3.6/4.0**
- **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**)

Projects

Network File Server (C++, C)   *Nov 2020*
- Applied knowledge of multi-threading, sockets, hierarchical file systems, security protocols, and client-server 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 - 2021*