

Paul Luo

Permanent Address

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Current Address

1300 S University Ave, Apt 308
Ann Arbor, MI 48104

Education

University of Michigan | Ann Arbor, MI

Bachelor of Science – Computer Science

April 2021

GPA: 3.532/4.0

- **Current Coursework:** Operating Systems (EECS 482), Advanced Operating Systems Projects (EECS 498), Human-Centered Software Design and Development (EECS 497/ENGR 455)
- **Relevant Coursework:** Software Engineering (EECS 481), Database Management Systems (EECS 484), Introduction to Computer Security (EECS 388), Foundations of Computer Science (EECS 376), Computer Organization (EECS 370), Data Structures and Algorithms (EECS 281), Programming and Data Structures (EECS 280)

Work Experience

Student Software Engineer | General Motors

Jan 2020 – Dec 2020

- Designing a wireframe process and implementing a generative algorithm using Python and ANSYS modules to optimize heatsink topology in electronic devices
- Applying extensive research on relative topics including evolutionary and genetic algorithms to deliver detailed bi-weekly presentations following the Agile development process
- Discussing and communicating with team members and mentors about project planning as well as validation strategies such as integration/regression testing and informal code review

Computer Science Intern | Coding4Youth

Jun 2019 – Aug 2019

- Educated and inspired students K-12 about the basics of computer science and topics relating to software development
- Assisted students with understanding computer science concepts by designing and constructing games, discussing proper coding practices, and reviewing code

Skills

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

Projects

Multithreaded Disk Scheduler

Sep 2020

- Applied knowledge of threading, concurrency, and atomicity to develop a program using C++ to correctly service disk requests from a queue in shortest seek-time first (SSTF)
- Used C++ standard mutex library to apply mutual exclusion as well as thread protection to the program
- Debugged using GDB to localize faults and refactored conditional variables to allow for synchronization

Business Review App

Jul 2020

- Created a web application that functions closely to Yelp using React.js for the front-end and Node.js for the backend, integrating MongoDB and AWS for the database and deployment
- Followed RESTful API routing, and used Express and Passport for secure HTML requests

Social Media Simulator

Oct 2019

- Designed a relational database using SQL which emulates the popular social media platform Facebook
- Implemented SQL scripts in 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
- Society of Asian Scientists and Engineers

Sep 2017 - Present

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