

# Paul Luo

## Permanent Address

12779 Lantana Ave  
Saratoga, CA 95070

<https://poe0821.github.io/>

[paulluo@umich.edu](mailto:paulluo@umich.edu)

408-981-0821

## Current Address

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

## Education

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### University of Michigan | Ann Arbor, MI

Bachelor of Science – Computer Science

April 2021

GPA: 3.568/4.0

- **Current Coursework:** Information Retrieval and Web Search (**EECS 486**), UI Development (**EECS 493**)
- **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**), Computer Security (**EECS 388**), Foundations of Computer Science (**EECS 376**), Computer Organization (**EECS 370**), Data Structures and Algorithms (**EECS 281**)

## Work Experience

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### 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

### 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 fundamental computer science concepts by designing and constructing applications, discussing proper coding practices, and reviewing code

## Skills

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

## Projects

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### 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
- Handled client-side and server-side requests with Linux TCP/IP socket programming

### 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 methods in JavaScript to format and retrieve information from a backend database.
- 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

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- UM ACHA Division II Men's Ice Hockey Team Member/Officer
- Society of Asian Scientists and Engineers Member

Sep 2017 - Present

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