

Paul Luo

Permanent Address

5203 Bucknall Rd
San Jose, CA 95130

paullo@umich.edu

408-981-0821

Current Address

1300 S University Ave
Ann Arbor, MI 48104

Education

University of Michigan | Ann Arbor, MI

Bachelor of Science – Computer Science

April 2021

GPA: 3.5/4.0

- **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

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, Java
- **Frameworks/Platforms:** Windows, OSX, Linux, Git, Bash, Node, MongoDB, Express, AWS
- **Spoken Languages:** English, Chinese (Mandarin), Spanish

Projects

Social Media Database

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

Cryptographic Key Finder

Jan 2020

- Used knowledge of ciphertext exploitations to conduct a padding Oracle attack with Python and JavaScript GET and POST requests
- Applied knowledge on recursive data structures and algorithms to implement a ciphertext decryption algorithm using Python

3D Maze Solver

Feb 2019

- Applied knowledge of DFS and BFS to develop a program using C++, and input redirection to find a path through a 3D maze with specific constraints
- Analyzed efficiency of DFS vs. BFS algorithms in finding a path with the least steps taken

Extracurriculars

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

Sep 2017 - Present

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