Shannon Lau

Software Engineer

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SKILLS

Languages

C / C++
Python
Java
JavaScript (ES6)
HTML5
CSS / Sass
SQL
Scheme

Frameworks

React
AngularJS
D3
Flask
MongoDB

Tools

Git
Bash
Jira

RELEVANT COURSEWORK

Engineering Interactive Systems
EECS 598

Human Centered Software
EECS 497

Data Structures & Algorithms
EECS 281

Computer Organization
EECS 370

HONORS

EECS Scholar Award
UNIVERSITY OF MICHIGAN

Dean's Honor List & University Honors
UNIVERSITY OF MICHIGAN

Software Engineering Summiteer
CAPITAL ONE

OxyGEN Scholar Award
AT&T

EDUCATION

University of Michigan — B.S.E. Computer Science, with Honors
EXPECTED MAY 2022 // ANN ARBOR, MI

- Minor in Multidisciplinary Design | GPA — 3.9 / 4.0 | Major GPA — **4.0 / 4.0**

Stuyvesant High School — Honors in Math and Science
2018 // NEW YORK, NY

EXPERIENCE

Comau — Software Engineering Intern
JANUARY 2020 – PRESENT // ANN ARBOR, MI

- Collaborate with a small team of student and industry engineers to spearhead a robotic software system that optically recognizes objects and fills a bin to a high capacity.
- Architect and implement a live bin-packing heuristic in C++ that identifies optimal placement locations for a series of items.
- Create a command-line interface to iteratively visualize item placements and potential future placements, powered by Processing.

Capital One — Software Engineering Intern
JUNE – AUGUST 2020 // CHICAGO, IL

- Developed an AWS Lambda with Python that processes 3,000+ customer calls each day into visualizable data for Sage, Capital One's call assessment platform.
- Built and integrated a dual-speaker waveform visualizer, call transcription, issue-tagging, and other experience-elevating features into the audio player platform in AngularJS.
- Interfaced with designers, product managers, and other developers in Agile sprints to ensure functional and thoughtful user experiences across our voice-based applications.

FEATURED PROJECTS

Touch Connect Four
JANUARY – FEBRUARY 2020

- Multi-touch pad device that optically recognizes finger contours and tracks movements as different gesture patterns for specific Connect Four moves on the built-in app.
- Software built in Python with openCV in a team of four.

UFO
JANUARY – APRIL 2019

- High-altitude device built with a custom circuit board and Arduino, encased in a robustly built and tested payload, and launched into the stratosphere.
- Measured temperature, pressure, humidity, UV index, and GPS data for weather analysis.

INVOLVEMENT

University of Michigan, EECS — Teaching Assistant for EECS 281
AUGUST 2020 – PRESENT // ANN ARBOR, MI

- Teach weekly discussion to help students get a deeper understanding of core concepts, including stacks, queues, trees, dynamic programming, and hash tables.
- Hold office hours to guide students to improve their code by sharing best practices and teaching common debugging tools.

University of Michigan Ultimate Frisbee
SEPTEMBER 2018 – PRESENT // ANN ARBOR, MI

- Nationally-competitive D-I team and empowering community of driven, uplifting women.
- As **Gear Coordinator**: Design and order jersey kits, apparel, and gear for 50 players and coaching staff to cohesively define and shape the program brand.