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

Web Systems
EECS 485

Operating Systems
EECS 482

HONORS

Grace Hopper Scholar
CAPITAL ONE

EECS Scholar Award
UNIVERSITY OF MICHIGAN

Dean's Honor List & University Honors
UNIVERSITY OF MICHIGAN

SWE 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 — 3.95 / 4.00 | Major GPA — **4.00 / 4.00**

EXPERIENCE

Facebook — Incoming Software Engineering Intern
FALL 2021 // MENLO PARK, CA

Microsoft — Incoming Software Engineering Intern
SUMMER 2021 // SEATTLE, WA

Comau — Software Engineering Researcher
JANUARY – DECEMBER 2020 // ANN ARBOR, MI

- Architected and implemented a bin-packing heuristic in C++ that identifies items' optimal placement locations, maximizing capacity to 75% and speeding up company automation.
- Created a command-line interface for the robotic system that enables users to visualize item placements and possible future placements step-by-step, powered by Processing.

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

- Developed an AWS Lambda with Python that transforms 3,000+ customer calls each day into visualizable data for Sage, Capital One's call assessment platform.
- Built and integrated experience-elevating features into Sage's audio player platform with AngularJS and D3.js, including: dual-speaker waveform visualization to distinguish the active speaker, dynamic transcript interface, and smart audio-scrubbing functionality.
- 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

- Created a multi-touch pad device that optically recognizes finger contours and tracks movements as different gestures for specific Connect Four moves on the built-in app.
- Developed as a proof-of-concept for budget touch technology using OpenCV in Python.

UFO
JANUARY – APRIL 2019

- Launched a high-altitude device 26,822 meters into the stratosphere to measure and store pressure, temperature, humidity, UV index, and GPS data for weather analysis.
- Built with a custom PCB, Arduino, I2C & UART sensors, and robustly tested encasing.

INVOLVEMENT

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

- Help professors teach 900+ students by instructing labs, answering online questions, writing and evaluating exams, and holding office hours to guide students one-on-one.
- Deepen students' understanding of best coding practices, debugging tools, and core concepts, including stacks, queues, trees, dynamic programming, and hash tables.

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

- Compete on nationally-ranked D-I team with an empowering community of driven women.
- **Gear Coordinator**: Design jersey kits, apparel, and gear for 50 players and coaching staff.