SAM LEE

https://github.com/lchsam

Education

UNIVERSITY OF MASSACHUSETTS AMHERST
B.S. COMPUTER SCIENCE
Graduation: May 2020
Overall GPA: 3.8/4.0 **Major GPA:** 3.8/4.0
Courses:
Programming Languages, Operating Systems, Vision, AI, NLP, Networks, Data Visualization, Databases

Work Experience

UNDERGRADUATE RESEARCH ASSISTANT *May 2018 - Sept. 2018*
UMass Amherst *Amherst, MA*

- Collaborated with two UMass Amherst professors to revise a Programming Methodology course, CS220
- Developed an online IDE and EJS (explained in Projects), in use by every UMass Computer Science student
- Utilized Travis Continuous Integration Testing for development on Github
- Developed the grading infrastructure to be used during the semester, uses Gradescope + Node.js

TEACHING ASSISTANT IN CS220 *Sept. 2018 - May 2019*
UMass Amherst *Amherst, MA*

- Collaborated with six other teaching assistants to grade homework, quizzes, and exams
- Assisted instructor by answering questions from many students in an online forum
- Maintained the online editor and the Autograder infrastructure used in this course by fixing many bugs both in frontend (React TypeScript), backend (Node.js Google Cloud Functions) and the autograder backend (Node.js).

SOFTWARE ENGINEERING INTERN *June 2019 - August 2019*
Covered Security, Inc. *Boston, MA*

- Worked on the development of primary consumer-facing web app using AWS and Test-Driven, Agile Development.
- Streamlined client onboarding by creating config scripts using TypeScript, reducing client onboarding time
- Developed account reset feature in web application using Angular and Firebase.

Projects

OCELOT IDE AND ELEMENTARYJS *August 2018 - Sept. 2018*
UMass Amherst *https://umass-compsci220.github.io/Ocelot/*

- Developed the frontend (TypeScript React + RxJS) and backend (Google Cloud Functions) of a web IDE.
- Utilized Google Cloud Functions, Storage, and Datastore for backend, and React with Material UI for frontend.
- Built ElementaryJS with the Babel.js transpiler, enforces good coding practice with static and dynamic checks

CLASS I/O
Personal Project

- A Facebook bot that helps students find open courses at UMass Amherst.
- Uses Python Flask + Selenium

PANORAMIC STITCHING
CS370: Computer Vision, Spring 2018

- Used Matlab to stitch multiple parts of an image to create a panorama
- Uses feature extraction + RANSAC

LANGUAGE VERIFIER
CS497P: Programming languages, F19

- Developed verifier with OCaml using Microsoft's SMT Solver, Z3 to verify assertions and loop invariants

Honors and Awards

DEAN'S LIST
2016 - Present
Completed each semester with 3.5 GPA or above.

CS230 COURSE CITATION
2017
Received course citation for outstanding performance in CS230: Computer Systems

OUTSTANDING UCA AWARD
2018
Exemplary efforts as Undergraduate Course Assistant during Fall 2018

SENIOR LEADERSHIP AWARD
2020
Demonstrated outstanding leadership and service to the UMass Amherst community

Languages

Languages I love
TypeScript/JavaScript, Python, Java, HTML5, CSS
Languages I know
C/C++, OCaml, PostgreSQL
Languages I speak
English (Fluent), Cantonese (Intermediate), Japanese (Novice), Mandarin (Novice)

Tools + Environment + Libraries

Tools/Envs I love
Git, GCP, Node.js, React, Linux Ubuntu, Adobe Suite, VSCode
Tools/Envs I know
Make, Vim, Vagrant, Docker, PyCharm, IDEA