SAM LEE

https://github.com/lchsam ✉ lch.samlee@gmail.com 📱 (617)-319-9721

Education

UNIVERSITY OF MASSACHUSETTS AMHERST
B.S. IN COMPUTER SCIENCE
Graduation: May 2020
Overall GPA: 3.8
Courses:
 Algorithms, Computer Vision, Computer Networks, Distributed Systems, Operating Systems, Database

Work Experience

RESEARCH ASSISTANT TO PROFESSOR ARJUN GUHA　　　　　　　　*May 2018 - Sept. 2018*

PLASMA Lab, UMass Amherst
- Collaborated with Professor Arjun Guha and Joydeep Biswas to revise a functional programming course, CS220
- Developed an online code editor (Ocelot, elaborated in Projects) and a custom language for the course.
- 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 - Now*

UMass Amherst
- Collaborated with 6 other teaching assistants to grade homework, quizzes, and exams.
- Assisted the instructor by answering student questions on 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).

Projects

FAST: FEISTY ALERT AND STATUSES TRACKER　　　　　　　　　*Jan 2018 - May 2018*

CS 320: Software Engineering course
- Collaborated with 6 teammates to develop a mock application that provides customers of HP Enterprise the ability to view statuses and alerts of their storage devices.
- Developed frontend and backend using Bootstrap, Python Flask and MongoDB.
- Learned how to write high and low level design documents, and how to design UML sequence diagrams

OCELOT AND ELEMENTARYJS　　　　　　　　　　　　　*August 2018 - Sept. 2018*

PLASMA Lab, UMass Amherst　　　　　　*https://umass-compsci220.github.io/Ocelot/*
- Developed the frontend (TypeScript React + RxJS) and backend (Node.js Cloud Functions) of a online code editor
- Utilized Google Cloud Functions, Storage and Datastore for backend, and React with Material UI for frontend.
- Built ElementaryJS with Babel.js by writing a transpiler for JavaScript that throws static and dynamic errors

FAT16 AND NTFS PARSER

CS365: Digital Forensics, Spring 2018
- Developed a parser using python that parses FAT16 and NTFS images.
- Mimics The Sleuth Kit, *fsstat and istat*

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.

COURSE CITATION IN CS230

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

OUTSTANDING UCA AWARD

2018
- Exemplary efforts as Undergraduate Course Assistant during Fall 2018

Programming Languages

• Java　• C　• C++　• JavaScript　• Matlab　• TypeScript　• Python　• OCaml　• PostgreSQL

Tools

• Git　• Vagrant　• Adobe Suite　• Make