
Education

University of Southern California

August 2019 – May 2024

B.S and M.S in Computer Science

Work Experience

University of Southern California - Los Angeles, CA

Jan 2021 – present

Teaching Assistant - CSCI 103 (Introduction to Programming)

Jan 2021 – May 2021

- Teaching memory management, object-oriented programming, recursion, and more
- Holding office hours to reinforce course content and assist students with programming assignments

Teaching Assistant - CSCI 104 (Data Structures and Object-Oriented Design)

May 2021 – July 2021

- Teaching common data structures (AVL trees, stack, queue, and hash maps), object-oriented programming, back-tracking, common graph algorithms (BFS, DFS), and more
- Holding office hours to help students
- Managing course GitHub repos, including maintaining student submissions, writing scripts to run automated GTest for grading, posting student grades as issues through GitHub API and python scripts

Teaching Assistant - CSCI 356 (Introduction to Computer Systems)

August 2021 – present

- Teaching low-level topics such as binary representation, assembly language, dynamic memory allocation.

Project/Work Sample

COVIDER (<https://github.com/210057zzh/Covider>) (Group Project) (**Best App Award out of 100 submissions**)

- Android based covid risk monitor tool, allows teachers to monitor student health in **real time**
- **Tech stack used:** Android (espresso, Junit, Java), Firebase,
- **Contribution:** All code including Firebase and Android and Black Box test with espresso.
- **Demo:** https://www.youtube.com/watch?v=ynCIILtGV08&ab_channel=Faust.ZZH

Sprout (https://github.com/210057zzh/CSCI_201_Final_Project) (Group Project of 5)

- A **Yelp** clone that has support for business searching, posting, reviewing, and saving as favorites.
- **Tech stack used:** ReactJS, SpringBoot, SQL (Google Cloud Service)
- **Contribution:** All front-end form validation logic and business review page, added support for Google Login/SignUp, Deploying the application onto AWS Beanstalk.
- **Demo:** https://www.youtube.com/watch?v=Jypp8e10xx8&ab_channel=Faust.ZZH

SALSTOCK (https://github.com/210057zzh/SALSTOCK_DAVIDZ) (**Personal Project**)

- A browser based real time stock trading and portfolio management simulator that supports SignUp/Login, stock searching, exchanging, and saving as favorites.
- **Tech stack used:** ReactJS, SpringBoot, MySQL
- **Demo:** https://www.youtube.com/watch?v=vnVn3bW_9U8&ab_channel=Faust.ZZH

Live Post Project (<https://cloudpost.pages.dev/>) (**Personal Project**)

- A post website that allows posting and voting.
- **Tech stack used:** ReactJS, Cloudflare Wrangler Workers, Cloudflare Pages
- **Live link:** <https://cloudpost.pages.dev/>

C++ Work Samples (<https://github.com/210057zzh/Cpp-Samples>)

- Includes a **Super Mario's first level's** clone, a **Travelling Salesman's** genetic algorithm implementation with functional programming, and a **html server** that's capable of fulfilling GET request (**No library used**).

Skills

MySQL, C++, Java, Servlet, JavaScript, ReactJS, Android, Firebase, Python, Git, Linux