Victor Siu · Software Engineer

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Education

University of California, San Diego / Computer Science

September 2021 - May 2025

- GPA : 3.8
- Classes: CSE 12 (Data Structures), CSE 15L (Software Techniques)
- Organizations: Association for Computing Machinery (ACM), Students Who Engage, Learn & Lead (SWELL)

Experience

Gordian Software / Software Intern

June 2021 - August 2021, Remote

- Designed and implemented 4 command-line interfaces using Python to get data from different airline APIs, and transformed that data from XML to JSON using lxml.etree and jsonify.
- Analyzed airline-specific price irregularities and developed a library using Python to correct them, resulting in prices accurate down to the nearest half-dollar.
- Developed an automated testing suite with Pytest to aid in TDD for the rewriting of an internal library, reducing the rewriting time by nearly a week.

Google Mentorship Program / Full Stack Developer

December 2019 - June 2020, New York, NY

- Managed the codebase using Github to facilitate collaboration and follow the software development life-cycle
- Created Flask backend that scrapes car-dealing websites for car data then places it into a SQLite database
- Utilized a React frontend to dynamically rank and display cars on the market using user-selected parameters.

The Stuyvesant Spectator / Lead Full Stack Developer

Jan 2019 - Jan 2021, New York, NY

- Redesigned parts of the main website using React to make a more fluid user experience, such as a faster-loading search bar and a less cluttered footer.
- Created a new Ruby on Rails API endpoint in the backend, then used React in the content management system to facilitate the addition of new author/illustrator profiles.
- Monitored the server hosted on AWS and limited server downtime to less than an hour a month.

Projects

Student Toolkit / React + Express all-in-one app for UCSD students

Implemented features such as calendars and to-do lists. Data is hashed and stored in a MongoDB database.

Graphics Engine / Python Library for the animation of basic 2D and 3D shapes

Researched and implemented line and shape drawing algorithms to efficiently create short gifs and images.

Bashenger / C app for client-server communication

Utilized pipes in C to create a local communication network. Messages are end-to-end encrypted for security.

Attendance-scanner / Flask app for attendance taking

Moved a paper-based system onto the web. Utilized Google OAuth and Google Cloud for storage and server management.

Skills

Languages:
Proficient: Python, Javascript
Familiar: C, Java

Software Development:
Proficient: Git, Flask, Pytest, React.js, REST APIs, Linux/Unix, AWS
Familiar: Tensorflow, Django, Node.js