# Victor Siu · Software Engineer

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## Education

**University of California, San Diego /** Computer Science

September 2021 - May 2025

- GPA : 4.0
- 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 for the rewriting of an internal library, reducing the rewriting time by nearly a week.

**Google Mentorship Program /** Mentee

December 2019 - June 2020,  New York, NY

- Worked in a team to create a React and Flask web app that scrapes popular websites such as KBB and Edmunds for car data.
- Presented the data dynamically by comparing user-selected cars with other similar cars on the market with gold, silver, and bronze medals.

**The Stuyvesant Spectator /** Web Editor

Jan 2019 - Jan 2021,  New York, NY

- Redesigned parts of the main website to make a more fluid user experience, such as a faster-loading search bar and a less cluttered footer.
- Created a new API endpoint in the content management system to facilitate the addition of new author/illustrator profiles.

## Projects

**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.

**Sort-Visualizer /** A python-based simulation of different sorting algorithms

Researched and implemented popular sorting algorithms, then animated them using Python's Turtle library.

**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, Unix, Linux
Familiar: Tensorflow, AWS, Django