# James Li

3096 McClintock Ave, Los Angeles, CA 90089
(347)-696-5886 jli51468@usc.edu linkedin.com/in/jamm-es github.com/jamm-es

## Education

**University of Southern California** **Expected May 2026**
*Bachelor of Science in Computer Engineering and Computer Science* *Sophmore standing*
Presidential Scholarship recipient
National Merit Finalist

## Experience

**Consumer Affairs** **February 2021 – Present**
*Data Analysis and Visualization Engineer*

- Conducted specialized analysis of internal consumer reviews data, determining the topics most relevant to consumer reviews across different companies, as well as the most praised or criticized aspects of different services.
- Analyzed, cleaned, and processed government data sources with Pandas and Numpy into comprehensive and digestible datasets that were used to write articles and content, driving a notably high amount of engagement.
- Built a specialized system of Python programs to simplify the process of calculating state or city level rankings with the US Census API, based on various qualitative attributes, like housing quality and safety.
- Generated maps and bubble charts programmatically with Plotly in Python to visualize data for use in articles.

**SoFlo SAT Tutoring** **August 2021 – March 2022**
*Software Engineer*

- Developed a chat autoresponder on a Node Express server with configurable templates interfacing with the Thumbtack API to automate customer acquisition, which directly increased lead retention rates and search ranking while eliminating all manual labor from initial lead messaging.
- Automated the generation of SAT answer explanation courses on Teachable from videos uploaded to Loom using Puppeteer and Node.js, reducing excessively tedious work and creating another avenue of customer acquisition.

## Projects

**WordleStat** | *JavaScript, MongoDB, Node.js, Express, React, Bootstrap* **January 2022**

- Displays aggregated Wordle statistics for each day in simple, readable charts. Reaches thousands of users per month while ranking highly on search engines.
- Queried the Twitter API to gather Wordle scores shared online with an Express server and Node.js.
- Analyzed and stored scores in a MongoDB NoSQL database, with which the server implemented a RESTful API to serve collated data to the front-end site.
- Created a static front-end website with React and Bootstrap and hosted on Cloudflare, including graphs and charts animated with D3.js and differing layouts to optimize for both desktop and mobile.

**SAT Practice Tools** | *Front-end HTML/CSS, JavaScript, React, Bootstrap* **August 2021**

- Helps high school students practice taking SAT standardized tests online with a featureful web app written in React, with thousands of new active users reached organically every month.
- Managed a team to compile data from a comprehensive range of past tests to create a full-featured database of answers, question types, and answer explanations.
- Designed a novel interface for answer input, including a bespoke short-answer mathematical input parser.
- Automatically grades questions while calculating a curved score based on crowdsourced information, providing a clean interface to show answer explanations.

**look@num Data Visualizations** | *Python, Pandas, Numpy, JavaScript, TypeScript, d3.js* **August 2020**

- Wrote and designed a large variety of data visualizations, in the form of charts, animations, and web interactives exploring novel and interesting data, reaching millions of people online with hundreds of thousands of upvotes.
- Scraped the RottenTomatoes website to compile a dataset of audience and critic scores for different movies, then plotted the relationship between the two on an interactive bubble chart, featuring dynamic fuzzy search with Fuse.js.
- Collated Reddit comment data with Numpy and Pandas, examining the relationship between frequency of comments posted and user account age over time, which was animated into a dynamic stacked area chart with d3.js.

## Technical Skills

**Languages**: JavaScript, TypeScript, Python, C++, Java, HTML/CSS, SQL
**Frameworks**: React, Node.js, Express.js, d3.js, Bootstrap, Mongoose, Puppeteer, Plotly, Swing
**Technologies**: MongoDB, Anaconda, Linux, Git, Cloudflare, Linode, Google Analytics, Google Search Console