

# Arav Watwani

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## EDUCATION

### University of California, Berkeley

B.A. Computer Science

**Graduation** May 2023

GPA: 3.65

## EXPERIENCE

### LPL Financial

Software Engineering Intern

San Diego, CA

Jun. 2021 - Aug. 2021

- Independently built an internal command line tool to generate error logs from over 2500 rows of LPL's cloud contact center data
- Streamlined unstructured cloud data from API calls into a configurable CSV output, saving 120+ hours of manual work yearly
- Deployed tool to 600+ unique admins to improve error detection, slashing throughput of flawed advisor data by 84%

### UC Berkeley, Department of EECS

Teaching Assistant

Berkeley, CA

Jan. 2021 - May 2021

- Working to best assist roughly 2000 students by teaching weekly discussion sections in CS 61A, UC Berkeley's Intro. to CS course
- Answered conceptual questions on Python, Scheme, and SQL to help make students' introduction to CS more comfortable
- Improved students' understanding of programming fundamentals by delivering mini-lectures and problem-solving techniques

### UC Berkeley, Haas School of Business

Software Engineer, Research Assistant

Berkeley, CA

Sept. 2020 - May 2021

- Built an error logging tool in Python to compare web-scraped data to manually found data by lab members, yielding 100% accuracy
- Refactored old Stata scripts written by researchers into Python, enhancing data processing speeds by over 20%

### SKUVision

Software Engineering Intern

San Diego, CA

Jul. 2020 - Aug. 2020

- Added a second layer of security in SKUVision's inventory analytics platform, integrating Google's OAuth 2.0 API
- Improved users' understanding of the product by building a front-end product demo with interactive dashboards in Flask

## PROJECTS

### SWE Daily Digest | *Twilio API, Python, Pandas, BeautifulSoup*

[GitHub Repository](#)

- Created a bot that sends users notifications of new software engineering job postings, eliminating the need for repeated searches
- Leveraged Twilio's REST API for Python to SMS users, and BeautifulSoup to scrape 100+ rows web data on job postings online
- Parsed data into usable format with Pandas, and wrote a separate script to automate the main tool to send notifications daily

### COVID-19 Case Visualizer | *D3.js, HTML, jQuery*

[GitHub Repository](#)

- Built an interactive visualization of the COVID-19 pandemic with D3.js, and fetched data on case totals from New York Times
- Designed and implemented drag-force physics to create interactive bubbles for each state, enhancing user appeal and interaction

### Gitlet | *Java*

Private Repository (Class Project)

- Designed a versioning system to replicate Git's core functionality, implementing branching, staging, merging, commits, etc.
- Wrote a breadth-first search algorithm to detect split points in commit history, allowing for correct branch merging

## ACTIVITIES

**Democratic Education at Cal**, Teaching Assistant (Introduction to Algorithmic Thinking)

Aug. 2021 - Present

**Berkeley Quizbowl**, Member

Aug. 2020 - Present

**Helping Everyone via Arts**, Co-Founder

Oct. 2018 - Present

## SKILLS

**Languages:** Java, Python, HTML/CSS, SQL, JavaScript, Scheme, TypeScript, GraphQL

**Tools:** React, NumPy, Pandas, JUnit, Git, Unix, Docker, Flask, Node.js