

Advay Ratan

(628) 255-0206 advayratan@berkeley.edu advayratan.com linkedin.com/in/advay-ratan/ github.com/ARtheboss/

EDUCATION

University of California, Berkeley **Aug 2022 - May 2026**
B.S. in Electrical Engineering and Computer Science Berkeley, CA
Relevant Coursework: Algorithms & Datastructures (Java), Computer Architecture (C), Databases, GPA: 4.0
Graphics (C++), Machine Learning

SKILLS

Languages: Python, Java, C, C++, Javascript, PHP, MATLAB; **Web Development:** HTML/CSS, JQuery, React, Webpack, : HTML/CSS, JQuery, React, Webpack, Django, Ruby on Rails; **App Development:** Flutter/Dart; **Game Development:** HTML5 Canvas; **Programming:** USACO Gold; **Software Engineering:** Git, Jira, GitHub, GitLab;

HIGHLIGHTED PROJECTS & EXPERIENCE

Project Intern | Fractal Analytics **June 2023 - Present**
• Working with cloud and data technology team to develop a Python machine learning data classifier. Bengaluru, India
• Creating an API to expose machine learning endpoints to client-facing webapp.

Software Engineering Intern | GlobeSisters **Sep 2022 - Jan 2023**
• Developed from early stages and helped launched app in a small team. Berkeley, CA
• Translated UI/UX requirements from Figma to frontend Flutter/Dart user interface.
• Handled Firebase backend, including Cloud Firestore, Firestore Rules, Firebase Functions etc.
• Led creation of CI pipelines on GitLab to set up unit, widget and integration testing.

Data Engineering Intern | Nugit **May 2021 - Jul 2021**
• Led creation of a new data pipeline (extract, transform, load) optimizing core tech for all clients Singapore
using Apache Airflow/Python. Wrote integrations for various APIs such as Google Adwords, Facebooks Ads etc. and handled MongoDB server for transformed data storage.
• Followed AGILE framework/Jira roadmaps to work effectively with team of twelve engineers

CS 61A Academic Intern | UC Berkeley EECS **Jan 2023 - May 2023**
• Weekly Office Hour assistant for introductory Python programming course at UC Berkeley.

EECS 16A Junior Mentor | Computer Science Mentors **Jan 2023 - May 2023**
• Ran weekly 1.5 hour mini-lecture/tutoring sessions on circuits and linear algebra.

Creator | Time Trial Racing **Oct 2017 - Present**
• Independently published game to Chrome Webstore (6000+ users) and developed car physics with Javascript, rendered with HTML5. Currently in 7th major version with 3000+ lines of code.
• Managing Ruby on Rails web server hosted with Heroku which handles thousands of requests a day.
• Worked with Node and Webpack to optimize code performance, reliability and ease-of-development.

Delivery Route Optimization **Apr 2023**
• Created tool to solve for the quickest delivery route plan for multiple vehicles given a city plan and a list of orders.
• Employed Java to create a modified version of Dijkstra's and employed a greedy approach to increase efficiency.

LEADERSHIP & EXTRACURRICULAR ACTIVITIES

Vehicle Dynamics Member | Berkeley Formula Racing **Oct 2022 - Present**
• Selected to be on Vehicle Dynamics team to plan and optimize attributes of the car.
• Wrote physics simulations with MATLAB, used live sensor data to make changes to car and validate design choices.

Unit 1 Representative | Berkeley Residence Hall Assembly **Aug 2022 - May 2023**
• Awarded Finance Committee Member of the year and won school of the year against 60+ RHAs.
• Organized general activities for 1600 residents in residence hall, managed a \$100k+ budget.
• Liaised for Residence Hall Assembly, collated and represented resident's voice to initiate positive change in my residence hall.