Ian Cheung

(650) 398-8393 • ian@iancheung.dev • **in** iancheung0202 • **Q** iancheung0202

EDUCATION

University of California, Berkeley

Applied Mathematics and Data Science, B.A.

Expected Graduation: May 2029

GPA: N/A

Relevant Coursework: Structure and Interpretation of Computer Programs, Foundations of Data Science, Multivariable Calculus, Discrete Mathematics, Linear Algebra*, Data Structures*, Probability of Data Science* (* intending next semester)

Henry M. Gunn High School Weighted GPA: 4.78 · Unweighted: 4.0

Graduation Date: June 2025

Coursework: AP Chemistry, AP Computer Science A, AP Physics C, AP Statistics, AP Economics, AP English Literature, AP U.S. History, AP Psychology

EXPERIENCE

Bridging Berkeley Mathematics Mentor

September 2025 - Present

• Provide individualized math support to 20 middle school students per session during after-school teacher's office hours.

OpenBrackets Vice President of Education · Python Instructor

April 2023 – April 2025

- Delivered four 8-week remote Python programming course to 50+ middle school students with no prior coding exposure.
- Designed interactive Google Colab notebooks covering programming fundamentals, data structures, and basic algorithms.

PROJECTS

Fischl (Creator & Lead Developer) Discord.py · Flask · Firebase · Prometheus · Grafana

February 2022 - Present

- Developed and maintain a feature-rich Discord bot serving 200,000+ users with 99.9% uptime.
- Implemented modular command systems such as ticket management, event coordination, automated queues, and role management.
- Built full-stack web dashboard with Flask backend, enabling server admins to view analytics and configure server settings.
- Deployed monitoring infrastructure with Prometheus and Grafana to track performance metrics and ensure reliability.

GunnHacks 11.0 (Web Developer & Workshop Host) React · Vercel

November 2024 - January 2025

- Deployed and maintained official website annual high school hackathon, streamlining logistics and registration for 40+ participants.
- Hosted introductory workshop on web development fundamentals, teaching HTML, CSS, and JavaScript to beginner hackers.

Analysis of California Traffic Collisions Python · Pandas · NumPy · Scikit-learn

August 2024

- Analyzed 5 million California collision records using exploratory data analysis and feature engineering techniques.
- Applied machine learning models such as logistic regression and random forests to identify key factors of collision severity.
- Synthesized findings into data-driven policy recommendations for roadway safety improvements to reduce accident rates.

RecycleSorter HTML · CSS · JavaScript · TensorFlow

January 2023

- Built image processing pipeline using TensorFlow.js to distinguish recyclables, compost, and landfill items with 85% accuracy.
- Awarded Most Creative Award at GunnHacks 9.0 for the AI-powered web app to classify waste from live camera footage.

Librarian Attendance System (Chief IT Developer) HTML · CSS · JavaScript

September 2021 – May 2022

- Created automated clock-in system for La Salle College Library Board, reducing manual spreadsheet data entry time by 90%.
- Designed web interface enabling quick check-in/out using student ID card with timestamp logging and weekly attendance report.

TECHNICAL SKILLS

Languages: Python \cdot JavaScript \cdot TypeScript \cdot HTML \cdot CSS \cdot Java \cdot SQL \cdot Scheme

Frameworks & Libraries: React · Flask · Node.js · Discord.py · Bootstrap · jQuery · TensorFlow · Pandas · NumPy

Tools & Infrastructure: Git · Docker · GitHub · Firebase · Vercel · Cloudflare · Linux · Nginx · Prometheus · Grafana

Data Science: Scikit-learn · Matplotlib · Seaborn · OpenCV · Jupyter Notebooks · Google Colab