





Albert Ye

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Education

University of California, Berkeley

Berkeley, CA

Mathematics and Computer Science B.A. 4.0 GPA

2022–2025

– Relevant Coursework:

– **CS 70 (A+)** - Discrete Math and Probability Theory, **CS 61A (A)** - Structure and Interpretation of Computer Programs, **CS 61B (A+)** Data Structures, **CS 61C (A)** - Great Ideas of Computer Architecture (Machine Structures), **CS 170 (A)** - Efficient Algorithms and Intractable Problems, **Math 110 (A)** - Linear Algebra (Upper Division)

– Activities: Upsilon Pi Epsilon CS Honor Society - Software Development Committee, Berkeley Math Tournament Test Organizer, CALICO Informatics Competition Officer, Open Computing Facility Staff, ACM-ICPC Berkeley Gold (2022 PacNW)

West Valley College

Saratoga, CA

Concurrent Enrollment 4.0 GPA

2021–2022

– Relevant Coursework: Intermediate Calculus (A), Linear Algebra (A)

Experience

UC Berkeley Computer Science Department

Berkeley, CA

Academic Intern

Jan 2023–

– CS 70: Discrete Mathematics and Probability Theory

– Provided more individual support for students in large discussion sections, supporting around six students on average

X-Camp Academy

San José, CA

Instructor

Jul 2022–Present

– Taught data structures/algorithms topics such as binary search, graph traversals, and divide-and-conquer in preparation for the USACO Silver competition over summer and winter training camps.

– Prepared and delivered lessons on coding problems testing these algorithms during year-round enhancement classes.

– Facilitated student discussions and fostered a collaborative and productive environment.

Teaching Assistant

Dec 2021–Present

– Ran office hours, answering student questions about algorithm design and debugging during year-round classes.

Projects

PNG Encoder

Mar 2023–May 2023

– Wrote a Rust program to encode and decode messages from chunks of a PNG file.

– Collaborated with multiple teammates in Berkeley's Upsilon Pi Epsilon honors society to deliver results.


YEI Learn


Oct 2021–Jan 2022


– Created example slides and practice problems for an educational website on AP Microeconomics and Macroeconomics.

– Using Next.js and TypeScript, worked with a team to implement the frontend for this website.

Skills

 **Expert:** Data Structures / Algorithms

 **Proficient:** C/C++, Java, Python, Android Studio, Next.js

 **Novice:** MATLAB, Lisp (Scheme), SQL, React, Rust, TypeScript

Awards

USA Computing Olympiad; Platinum Division

Apr 2021

Top 3% of the roughly 10,000 USACO contestants.

AIME Qualifier, 5x

2018–2022

The second level of US competitive math, with around 3,000 of the top high school students.