# Catherine Huang

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Bay Area, California, USA (510) 396-4952

#### EDUCATION

# University of California, Berkeley

Berkeley, CA

BS in Computer Science and Applied Mathematics; GPA: 3.86/4.00

Aug. 2018 - Dec. 2021

- Computer Science Classes: Structure and Interpretation of Computer Programs (CS 61A),
   Data Structures (CS 61B), Machine Structures (CS 61C), Discrete Mathematics and Probability
   Theory (CS 70), Efficient Algorithms and Intractable Problems (CS 170), Machine Learning\* (CS 189), Computer Security\* (CS 161), Database Systems\* (CS 186)
- Electrical Engineering Classes: Probability and Random Processes (EE 126), Convex Optimization (EE 127)
- Mathematics Classes: Multivariable Calculus (Math 53), Linear Algebra and Differential Equations (Math 54), Analysis (Math 104), Abstract Algebra (Math 113), Topology and Analysis\* (Math 202A)

\*in progress

#### EXPERIENCE

### Summer@ICERM

Dr. Akil Narayan

Researcher

June 2020 - Aug. 2020

Graph Spectral Clustering (GSC): Compiled a comprehensive guide on GSC and its
connection to PDEs. Read numerous papers on the topic and gave biweekly progress presentations.
Created a website detailing our work.

# UC Berkeley EECS Department

Student Instructor (SI), Reader, Academic Intern (AI)

Jan. 2019 - Present

- Student Instructor (CS 70 Fa20): Led discussion sections and office hours.
- Reader (EECS 126 Fa20, CS 70 Sp20): Graded homework and helped in office hours.
- Academic Intern (CS 70 Su19, CS 61A Sp19): Helped students in office hours and created worksheets.

### Theoretical Computer Science Club

Theorist Toolkit Reading Group Organizer

Jan. 2020 - May 2020

 $\circ$  Ran reading group based off of CMU's Theorist Toolkit. Led group discussions on topics including probabilistic method and spectral graph theory.

### Computer Science Mentors

Mentor for Discrete Mathematics and Probability Theory course

Aug. 2019 - May 2020

- **Junior Mentor**: Led weekly group discussions. Students scored one standard deviation above the mean.
- Content Mentor: Worked with course staff and created weekly worksheets used by over 100 students.

#### Projects

### Personal Website

HTML, CSS, Jekyll

### TECHNOLOGIES

• Languages: Python, Java, C++, C, HTML, CSS

• Other: Git, LATEX