

Sequoia Eyzaguirre

sequoia-tree.github.io

EDUCATION

- **University of California, Berkeley** Berkeley, CA
B.A. of Computer Science with Highest Honors *August 2016 – May 2019*
 - ΦBK Laureate, Regents' & Chancellor's Scholar, EECS Honors Student, Outstanding Graduate Student Instructor.
 - 4.0 GPA, with an A+ in most of my upper-division courses including CS 188: A.I. and CS 189: Machine Learning.

RESEARCH

- **Malasakit 2.0 (IEEE GHTC 2018)** Berkeley, CA
CITRIS & the Banatao Institute *November 2017 – October 2018*
 - Introduces multidialectal voice recognition to improve accessibility for low-literacy regions. Deployed in 4 field tests.
- **Malasakit 1.0 (IEEE GHTC 2017)** Berkeley, CA
CITRIS & the Banatao Institute *April 2017 – October 2017*
 - Robust to regional language differences unlike most supervised classification techniques, Malasakit identifies locally valuable disaster risk reduction (DRR) strategies and assesses correlations in related textual / demographic data.
 - Deployed in 12 field tests across the Philippines to crowdsource and collaboratively filter 100's of DRR strategies.
 - Won the Chancellor's Award for Research in the Public Interest.
 - Runner-up for the Pacific Telecommunications Council's Best Quality of Life Improvement Award.
- **FORDS: A First-Order Driving Simulator** Berkeley, CA
UC Berkeley AUTOLab, Samsung *April 2017 – December 2017*
 - Released as an Open A.I. module developed for Samsung, to generate synthetic data for training self-driving agents.
 - Laid groundwork for FLUIDS: A First-Order Local Urban Intersection Driving Simulator, published at CASE 2018.
- **Development on AvatarMind's iPal Robot** Berkeley, CA
UC Berkeley AUTOLab, AvatarMind *August 2016 – May 2017*
 - Implemented and benchmarked reliable actuation of poses from the Human3.6M dataset under stochastic controls.
 - Accomplished real-time cleaning of noisy video data from a \$10 webcam to make it usable for human pose mimicry.

TEACHING & COURSE DEVELOPMENT

- **CS 61A: The Structure and Interpretation of Computer Programs** Berkeley, CA
Head T.A. of Teaching, Head T.A. of Software, Guest Lecturer, T.A., Tutor *June 2017 – December 2018*
 - Wrote a popular beginner-level textbook covering novel approaches to thinking about recursion and DP.
 - Invented a method of diagramming code execution, soon to be a standard component of the curriculum.
 - Integrated MOSS with existing course infrastructure to detect plagiarism in programming assignments.
 - Taught the highest-rated discussion and lab sections in the Spring 2018 and Fall 2018 semesters.
 - Spearheaded a concept-oriented office hours program, averaging twice the turnout of normal office hours.
- **CS 370: Introduction to Teaching Computer Science** Berkeley, CA
Instructor of Record, Head T.A., Guest Lecturer, Content Developer *August 2017 – December 2018*
 - Single-handedly ran CS 370 for a year, scheduling nearly 10,000 hours of tutoring and training ~250 new course staff.
 - Taught in Summer '18 as the youngest ever instructor of record in the department. It was the top-rated class offered.
 - Engaged faculty, who voted unanimously to accredit CS 370 for the pedagogy training required of all EECS T.A.'s.
 - Scaled CS 370 to 4 times its size, enabling 5,750+ hours of tutoring per semester. Simultaneously oversaw a rise in enrollment to 17% underrepresented minorities (compared to 2% in the department), and from 17% to 50% female.
 - Redesigned the entire curriculum – including lesson plans, assignments, course infrastructure, and exams – to communicate hands-on teaching advice, and also modern research on pedagogy and psychosocial factors in learning.
- **CS 186: Introduction to Database Systems** Berkeley, CA
T.A., Content Developer *January 2019 – May 2019*
 - Writing a new official textbook covering database architecture and novel approaches to writing / visualizing SQL.
- **Berkeley Institute of Data Science & the Data Science Education Program** Berkeley, CA
Guest Lecturer, Content Developer *May 2017 – May 2018*
 - Redesigned the curriculum for Engineering 7, UC Berkeley's introductory programming course for mechanical engineers. The new curriculum, integrated with Jupyter and its own autograder, was well-received by faculty.
 - Designed curricula for LS 88: Visualizing Data and Art 23: Data Arts, to engage psychology students in data science.

COMMUNITY SERVICE & DIVERSITY INITIATIVES

- **Hunting Hunger Charity for the Homeless:** Founder & Chair Barstow, CA and Berkeley, CA
Raised \$10,000+ and delivered 2,500+ meals to homeless CA residents and impoverished veterans of the U.S. Marines.
- **Semper Fi Fund for Wounded Warriors:** Activist & Donor San Clemente, CA
Wrote a book to raise awareness for military families, and donated all \$10,000+ profits to the Semper Fi Fund.
- **CS Scholars & CS Kickstart:** Head Student Instructor Berkeley, CA
Taught female and underrepresented EECS freshmen how to combat impostor syndrome, stereotype threat, etc.
- **Hispanic Heritage Club:** Founder & President Barstow, CA
Oversaw a 25% decline in reports of racial prejudice against Hispanic students at Barstow Community College.