Sequoia Eyzaguirre

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EDUCATION

University of California, Berkeley — Berkeley, CA
B.A. of Computer Science — *August 2016 – May 2019*

- Awards: Regents' & Chancellor's Scholar, Outstanding Graduate Student Instructor, and EECS Honors Student.
- GPA: 4.0, with an A+ in most of the upper-division / graduate computer science courses I took.

RESEARCH

CITRIS & the Banatao Institute — Berkeley, CA
Malasakit 1.0 — *April 2017 – December 2017*

- Malasakit 1.0: A Participatory Online Platform for Crowdsourcing Disaster Risk Reduction Strategies in the Philippines. Brandie M. Nonnecke, Shrestha Mohanty, Andrew Lee, Jonathan Lee, Sequoia Eyzaguirre, Justin Mi, Sanjay Krishnan, Rachel Edita Roxas, Nathaniel Oco, Camille Crittenden, and Ken Goldberg. IEEE Global Humanitarian Technology Conference (GHTC). San Jose, CA. October 2017.
- Used to assess government performance in California and Mexico, crowdsource insights on family planning in Uganda, improve typhoon preparedness in the Philippines, and collect feedback from students on MOOCs.
- Won the 2017 – 2018 Chancellor's Award for Research in the Public Interest, and it was the runner-up for the Pacific Telecommunications Council's Best Quality of Life Improvement Award.

UC Berkeley AUTOLab — Berkeley, CA
FORDS: A First-Order Driving Simulator — *April 2017 – December 2017*

- An Open A.I. module developed for Samsung, to generate synthetic data for training self-driving agents.
- Laid the groundwork for FLUIDS, a publication at the IEEE Conference on Automation Science and Engineering.

UC Berkeley AUTOLab — Berkeley, CA
Avatar Mind's iPal Robot — *August 2016 – May 2017*

- Implemented and benchmarked fine motor control of Avatar Mind's humanoid iPal robot.
- Implemented robust computer vision on 2-dimensional input from a $10 webcam, combined with a reverse-Semaphore mapping to enable reading and mimicry of human Semaphore dialogue.

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 student-accessible textbook with practice, covering course concepts and supplementary material.
- 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 & lab sections in the Spring 2018 and Fall 2018 semesters.
- Spearheaded a concept-oriented office hours program.

CS 370: Introduction to Teaching Computer Science — Berkeley, CA
Instructor, Head T.A., Guest Lecturer, Content Developer — *August 2017 – December 2018*

- Engaged with faculty to propose CS 370 should satisfy the pedagogy training requirement compulsory among all T.A.'s in the UC Berkeley EE & CS Department. Faculty voted unanimously in favor.
- Scaled CS 370 to 4 times its size within a year, enabling students in the class to offer 5,750+ hours of tutoring to their peers in the UC Berkeley EE & CS Department every semester.
- Increased enrollment to 17% underrepresented minorities (compared to 2% in the department), and from 17% to 50% female. The hope is that a more representative teaching community will foster diversity in the department.
- Redesigned the entire curriculum – including lesson plans, assignments, course infrastructure, and exams – to focus on not only practical teaching advice, but also modern research on pedagogy and psychosocial effects on learning.
- At 18 years old, taught CS 370 as the youngest ever summer instructor at the UC Berkeley EE & CS Department.
- Single-handedly ran CS 370 for a year, scheduling thousands of tutoring hours and training ∼250 course staff.

- **CS 186: Introduction to Database Systems** — Berkeley, CA
  T.A., Content Developer — *January 2019 – May 2019*
  - Currently writing a new official textbook, which will cover course concepts and supplementary material.

- **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 engineers. The new curriculum, integrated with Jupyter and its own autograder, was well-received by faculty.
  - Guest lectured, developed documentation, and designed assignments for LS 88: Web Data Visualization.
  - Designed notes and assignments for ART W23AC: Data Arts, to engage psychology students in data science.

- **Diversity Initiatives:** CS Scholars and CS Kickstart which support underrepresented and female EE & CS freshmen.

COMMUNITY SERVICE

- **Hunting Hunger** — Barstow, CA and Berkeley, CA
  Founder & Chair. Raised $1,000's of dollars to feed the homeless. — *June 2015 – December 2016*

- **Hispanic Heritage Club** — Barstow, CA
  Founder & President. Increased Hispanic membership in student organizations by 10%. — *March 2015 – December 2015*