

# Sequoia Eyzaguirre

sequoia-tree.github.io // sequoia@berkeley.edu // (415) 464-7278

I aspire to leverage my background as a machine learning researcher, technical communicator, fast-paced learner, and collaborative engineer, in order to develop scalable software that makes a positive impact on people globally.

## EDUCATION

---

### University of California, Berkeley

*B.A. in 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.

## EXPERIENCE

---

### University of California, Berkeley

*Research Scientist*

*June 2019 – present*

## TEACHING & CURRICULUM DEVELOPMENT

---

### CS 186: Introduction to Database Systems

*TA · Content Developer*

*January 2019 – May 2019*

### CS 370: Introduction to Teaching Computer Science

*Instructor · Head TA · Content Developer*

*August 2017 – December 2018*

- Designed the curriculum, delivered lectures, scheduled nearly 10,000 hours of tutoring, and trained ~250 course staff.
- Scaled CS 370 from 30 to 120 students, raising enrollment from 6% to 17% minorities and from 17% to 50% female.

### CS 61A: The Structure and Interpretation of Computer Programs

*Head TA · TA · Tutor · Lab Assistant*

*January 2017 – December 2018*

- Wrote a popular beginner-level textbook covering novel ways of approaching HOFs, DP, recursion, and asymptotics.
- Invented a new method of visually diagramming the lexical and dynamic state of a program as it evolves over time.

### The UC Berkeley Institute of Data Science

*TA · Content Developer*

*April 2017 – October 2017*

- Designed curricula for LS 88: Web Data Visualization and ART 23: Data Arts, to engage non-majors in data science.

## RESEARCH & SELECTED PUBLICATIONS

---

### COMPASS: Modeling and Analyzing the Metabolic State of Single Cells (Under peer review)

*The YosefLab at UC Berkeley*

*November 2019 – May 2020*

- Wrote a general-purpose library for analyzing cell-to-cell metabolic heterogeneity based on single-cell metabolic data.

### Malasakit 2.0: Multidialectal Voice Recognition for Low-Literacy Surveys (IEEE GHTC 2018)

*CITRIS & the Banatao Institute*

*November 2017 – May 2018*

- Implemented multidialectal voice recognition via feature phone to improve survey accessibility in low-literacy regions.

### Malasakit 1.0: Collaboratively Filtering Disaster Risk Reduction Policies (IEEE GHTC 2017)

*CITRIS & the Banatao Institute*

*April 2017 – October 2017*

- Developed a data collection pipeline used to crowdsource and collaboratively filter hundreds of risk reduction policies.
- Made a dialect-agnostic analysis tool to assess and prioritize correlations in related textual and demographic data.

### FORDS: A First-Order Driving Simulator

*The AUTOLab at UC Berkeley · Samsung*

*April 2017 – October 2017*

- Built an Open A.I. module for Samsung, to generate customizable synthetic data sets for training self-driving agents.

### Development on AvatarMind's iPal Robot

*The AUTOLab at UC Berkeley · AvatarMind*

*November 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.

## VOLUNTEERISM & DIVERSITY INITIATIVES

---

### Semper Fi Fund for Wounded Warriors

- Wrote a book to raise awareness for disabled military veterans and donated \$10,000+ in profits to the Semper Fi Fund.

### Hunting Hunger Charity for the Homeless

- Raised \$10,000+ and delivered 2,500+ meals to homeless CA residents and impoverished veterans of the U.S. military.