Sequoia Eyzaguirre

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

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.

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 EXPERIENCE & 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.