# Sequoia Eyzaguirre

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#### EDUCATION

## University of California, Berkeley

B.A. in Computer Science with Highest Honors

August 2016 - May 2019

- $\circ$   $\Phi$ BK 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 370: Introduction to Teaching Computer Science

 $Instructor \cdot Head \ TA \cdot Content \ Developer$ 

August 2017 - December 2018

- $\circ$  Designed the curriculum, delivered lectures, scheduled nearly 10,000 hours of tutoring, and trained  $\sim$ 250 course staff.
- $\circ$  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

 $Head\ TA\cdot TA\cdot Tutor\cdot Lab\ Assistant$ 

January 2017 - December 2018

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

#### CS 186: Introduction to Database Systems

 $TA \cdot Content\ Developer$ 

January 2019 - May 2019

# The UC Berkeley Institute of Data Science

 $TA \cdot Content \ Developer$ 

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

 $\circ \ \ \text{Wrote a general-purpose library for analyzing cell-to-cell metabolic heterogeneity based on single-cell metabolic data}.$ 

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

CITRIS & the Banatao Institute

November 2017 – May 2018

- o 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)

  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

o 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

- $\circ$  Implemented and benchmarked reliable actuation of poses from the Human3.6M dataset under stochastic controls.
- o 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.