# ADAM SEQUOIA BECKMAN

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To whom it may concern:

My enthusiasm for learning led me to be accepted by the nation's best: Harvard, MIT, Berkeley. I followed my curiosity for neuroscience and robotics to the latter, where I am inspired by luminaries like Jose Carmena, Ken Goldberg, and Pieter Abbeel. I want to follow their footsteps in exploring the boundary of machine intelligence and consciousness.

I am also passionate about teaching, and I am on track to become the youngest undergraduate instructor in UC Berkeley's department of Computer Science. I aim to teach machine learning before I graduate, and in the future obtain a professorship here.

This semester I am conducting research in UC Berkeley's AUTOLab and I've become the most in-demand tutor for the introductory programming course CS 61A. In the summer I plan to continue my research, formally TA, and complete work on a revised textbook for CS 61A.

Sincerely,

Adam Sequoia Beckman

## ADAM SEQUOIA BECKMAN

### STUDENT RESEARCHER & INSTRUCTOR

#### RECENT EDUCATION

(UC Berkeley) B.A. of Computer Science
(Barstow College) 58 Units. Natural Science & Mathematics
2016 - present
2013 - 2016

#### **HONORS**

(UC Berkeley) Regents & Chancellor's Scholar
(Barstow College) Dean's List
UC Regents
2013 - 2016

#### **TEACHING**

#### **UC BERKELEY**

- CS 61A: Prospective TA (Summer 2017).
- CS 61A: Tutor (Spring 2017). Highest rated tutor in CS 370: Intro to Teaching CS. Referenced from Christopher Hunn, Director of Undergraduate Instruction in Computer Science.
- CS 61A: Author (Spring / Summer 2017). Writing a new, student-accessible textbook for UC Berkeley's intro to computer science. The first full edition to be complete in the summer.

#### **BARSTOW COLLEGE**

- Calculus II: Adjunct Instructor (Fall 2015). Taught a crossover class between Barstow College and Excelsior High, for advanced seniors looking to pursue careers in mathematics. This involved everything from developing the curriculum to grading exams.
- Calculus II & Chemistry: Tutor (Spring / Fall 2015).

#### LEADERSHIP

VP & SUPERVISOR: CTE Club (Spring / Fall 2015)

Pioneered a crossover program between Barstow College and Excelsior High, to teach robotics and provide hands-on experience in design and 3-D printing. This involved securing funding and popularizing enrollment in the program.

VP & SUPERVISOR: STEM Club (Spring / Fall 2015)

Secured support from the Board of Directors for an outreach program to Excelsior High to promote STEM-aligned education and career paths. Directed a program to teach Calculus I - III to advanced high-schoolers looking to enter STEM careers.

VP & FOUNDER: Hispanic Heritage Club (Spring / Fall 2015)

Directed efforts to increase Latino/a representation on campus and in student organizations.

FOUNDER: Hunting Hunger (Fall 2015)

Secured funding and volunteers to distribute food to the homeless and impoverished.

## **PROJECTS**

UC BERKELEY AUTOLAB: iPal Robot (Fall 2016 / Spring 2017)

- Implemented fine control of the iPal robot from Avatar Mind.
- Benchmarked iPal's capabilities by testing motion accuracy and repeatability with respect to angular velocity on all user input.
- Implemented actuation of the Semaphore flag language on iPal.
- Implemented reverse-Semaphore mapping so the robot can read and replicate human Semaphore dialogue.

## UC BERKELEY AUTOLAB: CAFE (Spring 2017)

- Tested the CAFE platform in various connections to diagnose possible failure cases.
- On a team of 3 and with a deadline of 10 days, planned a finite state machine over the CAFE platform to map out possible errors; analyzed hundreds of lines of code in time to receive new data delivered from researchers in the Philippines.

UC BERKELEY UNDERGRADUATE INSTRUCTION: 61A Textbook (Summer / Spring 2017) Single-handedly writing a new online concept-oriented and student-accessible textbook for UC Berkeley's intro to programming, of 1500+ students per semester. The new model focuses on establishing abstract concepts, and developing strategies to analyze and write code. The first full edition to be complete in the summer, while students acclaim drafts so far.

PERSONAL PROJECT: Foo(Bar) Text Adventure (Fall 2016 / Spring 2017)

Making a CS-themed text adventure to foster enthusiasm in students new to the field. Although a personal project, it will also be used to demonstrate object oriented programming in CS 61A.