# Shayna Kothari

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## Education

# University of California, Berkeley

#### Aug 17 - May 21; GPA: 3.75/4

Regents' and Chancellor's Scholar B.S. Electrical Engineering and Computer Science, Human Rights minor

#### Relevant coursework:

- Data Structures
- The Structure & Interpretation of Computer Programs
- Analysis of Technological and Social Networks
- Linear Algebra and
  Differential Equations
- Discrete Math and Probability Theory
- The Foundations of Data Science
- o Immigration and Data Science

# **Skills**

Java	SQL
Python	Spark
Javascript	Scheme
HTML/CSS	Flask
jQuery	Jupyter
Django	NumPy
spaCy	R

Advanced, Intermediate, Beginner

# **Awards/Honors**

# Regents' and Chancellor's Scholarship

Awarded highest academic honor granted to incoming students at UC Berkeley, granted to <2% of students at the University.

## Jacobs Innovation Catalyst Grant Recipient

Won a Jacobs Innovation Catalyst grant of \$2000 for JARL (Just Another Robotic Limb) to continue developing project.

#### **Big Ideas Winner**

Won \$6000 in Big Ideas competition, a competition to provide funding to social ventures, for Opportunity Through Data.

## Experience

# Software Engineering Intern | Moody's Analytics

Jun 18 - Aug 18

Languages/Frameworks: Java, Spark, Hadoop, SQL, ANTLR

- Created a new 'lite' version of a stress-testing product, Scenario Analyzer.
- o Restructured its backend to be reliant on Spark and Hadoop.
- Optimized product to use cluster computing, improving read/write speeds for large amounts of data.

#### **Course Tutor | CS61A**

#### Jan 18 – Present; Academic Intern Jan 18 – May 18

Languages/Frameworks: Python, SQL, Scheme

- Teaches small-group sections for CS61A, a course with over 1800 students per semester taught in Python, SQL, and Scheme.
- Supports students with projects, homework, etc. during office hours and assists students with course content during lab sections.

### Research Assistant | Hybrid Ecologies Lab

#### Feb 18 - May 18

Languages/Frameworks: Javascript, jQuery, Python, SQL, Flask, d3.js

- Designed & built full-stack Chrome Extension for experiment to see the effects of visualizations on reading and writing patterns of individuals on one of the largest online writing communities, Archive of Our Own.
- o Researched user base of site for extension development.

#### **Director of Technology | Opportunity Through Data**

opportunity-through-data.github.io

#### Oct 17 - Present

Languages/Frameworks: Python, Jupyter

- Technical lead of a team that plans to expand data science education to women's prisons to reduce recidivism rates.
- Won 2<sup>nd</sup> place in the Workforce Education and Development category in the 2018 Big Ideas competition, receiving \$6000 in funding to implement project.
- o In charge of curriculum design, including the creation of a textbook and interactive activities, and other technical considerations.

### Vice Chair and Tech Staff | Berkeley Model United Nations Sep 17 – Present

Languages/Frameworks: Python, ReactJS, Django

- Vice Chair, Research Staff, and Technology Staff for the oldest high school Model United Nations conference in the world.
- Works on the registration, grading, and feedback system, Huxley, using Django.
- $\circ \quad \text{Developing an integrated speech-tracking platform for use during conference}.$
- Helps plan for and head committees with over 100 students at a conference with over 2000 attendees annually, condensing material to a high-school level.

### **Projects**

#### JARL | EnableTech

#### Sep 17 - Present

Languages/Frameworks: Arduino

- Team lead for JARL (Just Another Robotic Limb): a robotic wheelchair attachment for people with limited hand mobility.
- Oversees team of 10+ working on tasks spanning software to mechanical systems.
- Worked with need-knower to implement design of a linear actuating base for z-axis movement as well as a universal wheelchair mounting system.
- Won a Jacobs Institute Innovation Catalyst grant of \$2000 for potential.