# Sambhav Sunkerneni

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#### **EDUCATION**

## **University of California, Berkeley**

Expected 2020

B.A. Computer Science

Technical GPA: 3.93, Overall GPA: 3.88

Relevant Courses (<u>Current</u>): <u>Algorithms</u>, <u>Machine Learning</u>, <u>Computer Architecture</u>, Data Structures, Linear Algebra and Differential Equations, Discrete Math and Probability, Intro to CS, Data Science Decal

#### **EXPERIENCE**

## **Intel | Software Engineering Intern**

May 2018 - Aug 2018

- Built system to automatically generate properly-wired VLSI modules from raw instance data
- Designed probabilistic string similarity algorithm to classify wire rules, with 98% accuracy
- Used summary statistics and an unsupervised SVM model to detect anomalies in circuit data
- Wrote parser to search for missing standard cells in specific areas of large code files

## **UC Berkeley | Academic Intern**

Jan 2018 - May 2018

Tutored students for CS 61A (Intro to CS) and taught lessons on basic asymptotic analysis

## **Evergreen ECS Society | President, Cofounder**

Aug 2015 - May 2017

 Spearheaded content creation, management, and teaching of 30+ Python workshops & classes at multiple local libraries, as leader of registered nonprofit

### **SKILLS & SIDE PROJECTS**

Languages: Python, JavaScript, Scheme, Java

Technologies: Unix, Git, Flask, Express, jQuery/AJAX, Scikit Learn, Pandas

## Tileman – Tile Based Adventure Game (Python, Pygame)

• Built tile-world representation system implementing data compression, dynamic tile-object rendering, smooth map rastering, and OOP hero-environment interactions

## Pictacular – Photo Mosaic Creator (Python, Flask, Pillow, JavaScript)

 Designed photo approximation algorithm using dynamic programming and color sampling techniques to efficiently construct mosaic from database of thousands of images

# CS 61A (Intro to CS) Grade Calculator (Python, BeautifulSoup)

- Scrapes Okpy grade portal's HTML, extracts grade data and computes grade statistics
- Used by over 200 classmates

## Cardy - Virtual Postcard Creator (Python, Pillow, Tkinter)

Desktop email client that detects user location, filters Flickr photographs taken nearby,
offers selection of scenic photographs, and allows users to email virtual postcards to friends

## **AWARDS**

Jane Street Electronic Trading Competition, 8th Place	2018
AIME Qualifier (Top 1.5% out of 170,000 Students in national math contest)	2016, 2017
Cal Alumni Association Leadership Award Scholar	2017
Stanford ProCo, 4th Place Speed Round (50+ Teams)	2016
Harker Programming Invitational, 4th Place (30+ Teams)	2016
USA Computing Olympiad, Silver Contestant	2015