MAITREYEE JOSHI

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EDUCATION

CARNEGIE MELLON UNIVERSITY

May 2018

- Bachelor of Science in School of Computer Science, Minors in Drama and International Relations and Politics
- **GPA:** 3.25/4.00, **Honors:** Dean's List 2016
- Relevant Coursework: Topics in Law: 1st Amendment, Judicial Politics and Behavior, US Foreign Policy and Interventions in World Affairs, Comparative Politics, Theories of International Relations, Political Behavior, Machine Learning (PhD)

SKILLS

Technical Skills: Python, C++, Java, Objective-C, Javascript, Typescript, Matlab, HTML5, SQL

Language Skills: Spanish, Marathi, Hindi

EXPERIENCE

MICROSOFT, Software Engineering/Product Management Intern

May 2016 - August 2016

- Designed and developed custom visual on Power BI to help the visually impaired and blind understand their financial data
- Wrote design guidelines to ensure that all data visualizations were in compliance with accessibility standards

MEDIUM ONE, Software Development Intern

June 2015 – August 2015

Optimized protocol buffer implementation to increase speed of data exchange

WALT DISNEY IMAGINEERING, Research and Development Lab Assoc.

November 2014 - March 2015

Developed iOS application, using Objective-C and XCode, to read in and parse data stored on RFID chips

BLINDWALK, CEO and Founder

June 2013 – Present

- Designed and developed indoor navigation system app for the blind, using Objective-C and XCode, that uses sound cues to allow the blind to navigate through virtual maps of indoor buildings
- Decreased number of attempts it takes for a blind individual to independently navigate through a building from 30-35 to 5-6

INVENIO STEM JOURNAL, Coeditor-in-Chief and Cofounder

August 2013 - June 2014

Cofounded STEM Research Journal to offer high school students the opportunity to publish and share their original research work

STANFORD HUMAN-COMPUTER INTERACTION LAB, Research Intern

July 2013 - January 2014

Worked with team of graduate students to develop HTML/Javascript/SQL app to census the demographic and cognitive skills of workers on Amazon's Mechanical Turks

STANFORD NEUROMUSCULAR BIOMECHANICS LAB, Research Intern

June 2013 – August 2013

- Designed and built hardware braces to aid in proper muscle placement for human experimentation
- Programmed Matlab scripts to analyze muscle sarcomere data

LEADERSHIP

UNDERGRADUATE STUDENT SENATE, Campus Life Committee Chair

August 2015 - Present

- Elected to represent over 6,000 undergraduates in student government in issues pertaining to student life
- Led team of 8 to improve civic, community, & campus engagement, mental health awareness, sexual assault prevention on campus
- Developed, implemented policy to require mental health and sexual assault prevention training for 400 student leaders

UNICEF, Treasurer and Co-Fundraising Chair

August 2015 - Present

Hosted fundraisers that raised collectively over \$1,200 for UNICEF

INTRODUCTION TO COMPUTER SYSTEMS, Teaching Assistant

August 2016 - Present

• Led weekly recitations for a group of ~30 students and held office hours for a class of 400+ students

${\bf THE\ BORGEN\ PROJECT}, Regional\ Director$

July 2013 - December 2013

• Met with local congressional leaders and mobilized locals to lobby for key poverty reduction legislation

INDEPENDENT PROJECTS

TOUCHPROSTHETICS: Bringing Tactile Sensations to Upper Extremity Prosthetics Using Haptic Devices

- Built tactile feedback system that enables amputees to feel tactile sensations, such as pressure, through their prosthetic arms
- Awards: 1st place at Synopsys Science Fair

CANCER MUTATIONS DETECTOR: Identifying DNA Mutations That Cause Brain Tumor Glioblastoma Multiforme Using a Biclustering Algorithm

Developed and implemented C++ biclustering algorithm to identify probable causes of brain tumors in cancer patients