HAOLIN ZHU

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EDUCATION

University of California, Berkeley

Cumulative GPA: 3.877

EECS GPA: 3.950

B.S. in Electrical Engineering and Computer Sciences, expected graduation May 2021

<u>Relevant coursework</u>: Computer Architecture (Machine Structures), Computer Security, Data Structures, Designing Information Devices and Systems, Discrete Mathematics and Probability Theory, Efficient Algorithms and Intractable Problems, Foundations of Data Science, Introduction to Artificial Intelligence, Structure and Interpretation of Computer Programs

Organizations: Eta Kappa Nu, Tau Beta Pi

PROJECTS

Sustainable Materials Based Electronics Project

March 2019 - May 2019

- Designed an earthquake sensor using sustainable and low-cost materials under EECS Prof. Muhammad Hussain
- Optimized earthquake sensor prototype by improving the design and testing
- Used TI MSP430 microcontroller, LEDs, and 3D printed designs to create model
- Presented prototype and project poster at the Jacobs Institute for Design Innovation

Concrete Bridges Vibration Monitoring Project

July 2017 - August 2017

- Designed a sensor system to monitor concrete bridges under CEE Prof. Scott Moura
- Proposed an algorithm to identify structurally deficient concrete bridges based on vibration and displacement
- Used Arduino UNO, accelerometer, GPS, and 3D printed designs to create demonstrations
- Pitched prototype to industry leaders and faculty at the Jacobs Institute for Design Innovation

EXPERIENCE

Research Assistant at Human Rights Center, UC Berkeley School of Law

September 2019 - Present

- Compiled and cleaned datasets documenting current events in the Middle East
- Used machine learning algorithms to find correlations and investigate potential human rights abuses

DocuSign Momentum Hackathon Participant

June 2019

- Worked collaboratively to create a web application for The Wilderness Society
- Brainstormed ideas to create an interactive game to promote forest and land conservation efforts
- Utilized Google Maps API, DocuSign API, Google Cloud Geolocation to build web application

Computer Science 61A Course Academic Intern

August 2018 - December 2018

- Assisted students in weekly Office Hours by debugging code, answering conceptual questions, and providing logistical and other technical support
- Reviewed course materials and collaborated with other academic interns in preparation for Office Hours

LEADERSHIP

American Society of Civil Engineers, UC Berkeley Chapter (Career Fair Director)

September 2017 - September 2019

- Organized Spring 2019 Civil and Environmental Engineering Career Fair attended by 42 companies, 93 undergraduates, and 116 graduates
- Generated \$25,400 in net income for civil engineering student organizations
- Maintained on-going relations with corporate sponsors and recruiters

SKILLS & INTERESTS

- Programming: C, CSS, HTML, Java, Javascript, MATLAB, Python, RISC-V, SQL
- Languages: Chinese (Mandarin, Cantonese), English