HAOLIN ZHU

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EDUCATION

University of California, Berkeley — Expected graduation: May 2021
B.S. in Electrical Engineering and Computer Sciences — GPA: 3.847
Relevant coursework: Artificial Intelligence, Computer Architecture (Machine Structures), Computer Security, Data Structures, Discrete Mathematics and Probability Theory, Efficient Algorithms and Intractable Problems, Foundations of Data Science; *(future):* Machine Learning, Operating Systems and System Programming

EXPERIENCE

Software Engineering Intern at Viasat, Inc. — May 2020 - Aug. 2020

- Designed updates in Software Configuration Index to document improvements in software deployment process.
- Implemented features to support independent container images as part of platform refactoring initiative.
- Added component acceptance tests to verify software updates.

Research Assistant at Undergraduate Research Apprentice Program, UC Berkeley — Feb. 2020 - Present

- Scraped cannabis dispensary and product data from publicly available websites.
- Cleaned data collected by webcrapers and built datasets for text analysis.
- Analyzed approx. 3 million cannabis dispensary and product descriptions using cosine similarity.

Research Assistant at Human Rights Center, UC Berkeley School of Law — Sept. 2019 - Dec. 2019

- Built a dataset of approx. 2,000 airstrikes during the Syrian Civil War from open sources.
- Designed website explaining relationship between belligerents of the Syrian Civil War.
- Geolocated videos and images documenting human rights abuses around the world.

PROJECTS

Sustainable Materials Based Electronics Project — Mar. 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.

Concrete Bridges Vibration Monitoring Project — Jul. 2017 - Aug. 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.

LEADERSHIP

Career Fair Director at American Society of Civil Engineers, UC Berkeley Chapter — Sept. 2017 - Sept. 2019

- Organized Spring 2019 Civil & Environmental Engineering Career Fair attended by 42 companies and 209 students.
- Generated $25,400 in net income for civil engineering student organizations.
- Maintained on-going relations with corporate sponsors and recruiters.

TECHNICAL SKILLS

- Programming: *(proficient)*: Python, Java, HTML/CSS; *(familiar)*: C, Go, JavaScript, MATLAB, RISC-V, SQL
- Tools: Docker, Git, Jenkins, Swagger

AWARDS AND HONORS

- 2017 Congressional Art Competition (Jackie Speier, CA-14 District) Recognition
- IEEE Eta Kappa Nu Honor Society (Computing Services Asst. Officer), Tau Beta Pi Engineering Honor Society (IT Officer)