HAOLIN ZHU

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EDUCATION

University of California, Berkeley — Expected graduation date: May 2021
B.S. in Electrical Engineering and Computer Sciences — GPA: 3.847 / 4.0
Relevant coursework: Artificial Intelligence, Computer Architecture (Machine Structures), Computer Security, Data Structures, Discrete Mathematics and Probability Theory, Efficient Algorithms and Intractable Problems, Operating Systems and System Programming, Foundations of Data Science; *(Spring 2021):* Database Systems, Machine Learning
Activities: IEEE Eta Kappa Nu Honor Society, Tau Beta Pi Engineering Honor Society

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 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 1,000+ battles and events during the Syrian Civil War from open sources.
- Designed a website detailing the relationship between belligerents of the Syrian Civil War.
- Geolocated videos and images documenting human rights abuses around the world.

SELECTED PROJECTS

Review Sessions App (Python, HTML/CSS) — Apr. 2020 - May 2020

- Implemented a web app for IEEE HKN Honor Society where admins can post upcoming course review sessions.
- Utilized Django web framework and SQLite for database management.

Secure File Sharing System (Go) — Feb. 2020 - Mar. 2020

- Designed a file sharing system where authenticated users can store and share files securely.
- Utilized public-key & symmetric cryptography, digital signatures, and HMAC to ensure confidentiality and integrity of files.

Enigma (Java) — Sept. 2018 - Oct. 2018

- Implemented WWII-era Enigma machine to encrypt and decrypt messages.
- Utilized HashMap, LinkedList data structures to store rotor permutations and machine state.

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 with 42 companies and 209 student participants.
- 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, Django, Git, Jenkins, Swagger