Jun Hee Han

408-893-2034 | junheehan@berkeley.edu | Berkeley, CA 94704

Education

UC Berkeley - B.A. Computer Science *Expected Class of 2022*

Coursework: Operating Systems (current), Database Systems (current), Algorithms, Computer Security, Data Structures, Machine Structures, Discrete Math/Probability

• GPA: 3.78

Experience

UC Berkeley EECS Department | Academic Intern/Tutor *January 2019 - Present*

Programming Fundamentals (CS 61A) • Data Structures (CS 61B) • Machine Structures (CS 61C)

- Helped students in lab, answered questions in office hours, and assisted head TA in the two introductory computer science classes at UC Berkeley (61A and 61B)
- Tutored students individually (61B and 61C), going over lecture material and practice problems

Renewable and Appropriate Energy Lab | Research Assistant *January 2019 - May 2019*

- Worked in team of 3 to construct strategies for California to reach its decarbonization goals
- Used Pandas and NumPy on public energy datasets to identify and analyze the economic factors driving electricity and natural gas usage in California's largest districts

Projects

Encrypted File Sharing System *Fall 2019*

Backend • Go, VSCode

- Designed and implemented in Go an end-to-end secure file sharing system that allows users to create/load/append to files and share/revoke file permission to other users
- Utilized public/symmetric key encryption to ensure confidentiality of data on the server
- Applied hash-based message authentication code and digital signature scheme to guarantee integrity and authenticity of sharing/revocation of files, and to detect malicious modifications to data by server itself

CPU *Summer 2019*

RISC-V, C, Logism

- Constructed a pipelined CPU in Logisim with 5 stages to simulate code run through the CALL process
- Implemented part of a compiler to convert C code into RISC-V

Bearmaps *Spring 2019*

Backend • Java, IntelliJ

- Programmed backend of a web mapping application of Berkeley in Java, with features such as image rastering at various zoom levels, autocomplete location search, and route mapping

Frozone *Summer 2018*

Full Stack • Swift3, XCode

- Developed and pushed to App Store an iOS app that shows users the expiration dates of foods in their pantry and how many days before food items go bad
- Provides average shelf life for 300 common foods and allows users to input custom expiration dates

Skills

Python, Java, C, Go, Swift, Assembly (RISC-V), SQL, Scheme, Numpy, Pandas

Affiliations

Upsilon Pi Epsilon *Fall 2019 - Present*

- Member of UPE Nu Chapter, UC Berkeley's CS Honor Society
- Member of Industrial Relations committee: sourced guest speakers from companies, hosted company info sessions, promoted event on campus, and planned sponsorships with companies

Computer Science Mentors *Fall 2019 - Present*

- Teach group of CS61B (Data Structures) and CS 70 (Discrete Math/Probability) students through mini-lectures/problem based worksheets

Innovate Berkeley *Fall 2018*

- Worked in team of five to construct prototype of new feature for open source student services mobile app: feature displays how crowded UC Berkeley libraries and study rooms are at any given time
- Implemented UX for home menu and data transfer from backend to library display page