Emily Duan

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EDUCATION

University of California, Berkeley

Graduating May 2024

Bachelor of Arts in Computer Science

GPA: 3.880

Relevant Coursework: Data Structures (Java), Structure and Interpretation of Computer Programs (Python, BNF, Scheme), Discrete Mathematics and Probability Theory

SKILLS

Programming Languages: Python, Java, BNF, Scheme, HTML, CSS

Tools: Git/Github, Visual Studio Code, IntelliJ

EXPERIENCE

University of California, Berkeley EECS

Academic Intern for CS61A (Structure and Interpretation of Computer Programs)

Aug 2021 - Present

- assisting students' understanding of core concepts of programming at weekly lab sections
- answering questions on OOP, Python, and basic data structures

PROJECTS

Gitlet Dec 2021

- implemented a version control system that documents the history of different versions of files collected in a directory
- implemented commands, including add, commit, log, checkout, merge, to allow clients to view histories, merge file versions, restore file contents, etc.

Ants vs. Some Bees Apr 2021

- coded a tower defense game where ants defend a colony from intruding bees
- applied object-oriented programming paradigm through specializing varying classes of ants, including FireAnts and CarpenterAnts, to perform different actions and have different health values

ACTIVITIES/LEADERSHIP

Food Association at Berkeley

Director of Operations

Aug 2021 - Present

• logged test scores and homework, adjusted weekly work plans of students, collected fees, greeted and guided students and parents, introduced the process of Kumon to new students, awarded students with prizes

University of Kansas Medical Center Education Experience (KEE) Program

Student Researcher

Jun 2018 - Jul 2018 | Jun 2019 - Jul 2019

- participated in a lab dedicated to pharmacology and toxicology and observed expressions of certain proteins through visualization of western blots after the small heterodimer partner (SHP) gene is knocked out of mice and the same mice are subjected to acetaminophen (APAP) overdose.
- contributed to the abstract entitled "Nrf2 activation mediates the protection against acetaminophen-induced liver injury in hepatocyte-specific Shp deficient mouse" that was selected for oral talk by 2019 Annual Meeting of American Association for the Study of Liver Diseases (Boston, Massachusetts, United States, November 8-12, 2019).