SAMANTHA BUSTAMANTE

Fremont, CA • (510)674-6350 • samanthapbustamante@gmail.com • Github • LinkedIn

EDUCATION

California State University, East Bay (CSUEB) - Hayward, CA**,** Conferred Dec.2023
B.S., Computer Science
- Relevant Coursework: Analysis of Algorithms, Artificial Intelligence, Automata and Computation, Data Structures and Algorithms, Software Engineering, Topics in Computer Science - Linux

PROFESSIONAL EXPERIENCE

ASPIRES Intern at Lawrence Berkeley National Laboratory(LBNL), June – Aug. 2022
Software Intern for the Advanced Light Source (ALS) Division
- Partnered across divisions to develop Berkeley Lab Aggregate Data Explorer (BLADE), a prototype web platform displaying a dataset's metadata and visualizations.
- Wrote Python script to extract metadata from dataset file and ingest metadata onto a dataset catalog application.
- Created 4D dataset visualizations displaying the average spatial position of sample and average bandwidth structure of sample based on user input.

CSUEB STEM Lab Learning Assistant, Aug. 2020 – Dec. 2023
College Algebra Tutor
- Collaborated with College Algebra Professors and TAs to advocate for a greater learning experience for the students.
- Assisted 40+ students by attending both the lecture and lab component of the College Algebra course to answer in-class inquiries.
- Hosted drop-in hours and 2-hour exam study sessions to ensure understanding amongst the 40+ students.

CSUEB RUMBA, Sept. 2020 – Jan. 2021
Student Researcher
- Collaborated with a team to develop a solution towards decreasing the generational wealth gap among different racial groups. Used Python to display mathematical findings.
- Explored the severity of the generational wealth gap by creating horizontal bar graphs that compared the average cost of living in Alameda County to the total personal income across racial groups.

TECHNICAL PROJECTS

Stock Ticker Web Development Project (CSS, HTML, JavaScript, Python Flask)
- Developed a Stock Ticker Web Application that allows users to enter a stock ticker symbol and view comprehensive summary table of the stock ticker information
- Implemented Javascript functions to handle user input and server communication. The submit button triggers a XMLHttpRequest to send user input to the server. The clear button clears user input and the summary table.
- Utilized Python Flask to retrieve stock ticker values from the server, make API calls to the Tiingo API, and manipulate the resulting JSON file to display a summary table of the stock ticker.

Missionaries and Cannibals Project (Lisp)
- Collaborated with fellow peer to model possible future states of the Missionaries and Cannibals toy problem based on provided user input.

TECHNICAL SKILLS

Tools: Github, Linux / **Frameworks:** Dask, Flask / **Programming Languages**: C++, CSS, HTML, Java, Python /**AWS**: EC2, Elastic Beanstalk

AWARDS/ACKNOWLEDGEMENTS
- Dean's List (Fall 2019, Spring 2021, Fall 2021), Honors List (Spring 2020)
- 2021 Liberty Mutual Women in Technology Summit Attendee