Brandon Fuentes

Computer Scientist

(415)-532-6348, brandonfuentes754@gmail.com, 1530 Armstrong Ave, apt 57 Novato, California, 94945 LinkedIn: <u>www.linkedin.com/in/brandon-fuentes-829271236</u>, Github: <u>https://github.com/Branded2000</u>

EDUCATION

UNIVERSITY OF CALIFORNIA SANTA CRUZ

Santa Cruz, CA

June 2023

Bachelor of Science in Computer Science

• **GPA**: 3.54/4.0

Relevant Coursework: Statistics, Data Structure and Algorithms, Analysis of Algorithms, Computational Models, Computer Architecture, Principles of Computer System Design, Database Systems, Intro to Software Engineering, Foundations of Programming Language, Artificial Intelligence, Machine Learning (Deep Learning), Web Applications.

WORK EXPERIENCE/INTERNSHIPS

2021 NASA/CaSGC Micro Computer & Robotics Internship

Kentfield, CA

Title: Software Developer

February 2021 - June 2021

- Constructed a NASA rover equipped with a robotic arm design for ground exploration and item collection, intended for research purposes. The rover was remotely controlled via Bluetooth using an Android app that we developed.
- Designed and programmed the functionality responsible for controlling the Nasa rover's arm through an Arduino Uno which highlights technical expertise in software development.

ACADEMIC PROJECTS

Principles of Computer System Design: Multithreaded HTTP Server

UCSC

- Created a multi-threaded server, built in c, employing HTTP 1.1 protocol capable of handling 600+ concurrent requests per second. This was achieved by using a data load balancer, showcasing proficient server performance and scalability.
- Implemented robust functionality with server operations such as Read, Write, and Append data to files, demonstrating expertise in file management and data manipulation.
- Thoroughly unit-tested the server modules to eliminate execution errors and ensure deployability to the market.
- Designed and executed a reliable server architecture that incorporates advanced threading techniques which emphasizes competence in building scalable and efficient systems.

Intro to Software Engineering: Slug Stocks

UCSC

- Developed a stock trading application as a team of 5 developers and employed SCRUM and AGILE methodologies alongside various software engineering practices to organize the team and facilitate the app's development.
- The application connects to TD Ameritrade API for stock trading, while also utilizing the News API to retrieve the most recent stock news. Additionally, the application incorporates Chart.js API to generate graphs that give the user a visual representation of the stock data and user investments.

Web Applications: Professor Class Matching

UCSC

- Built an application as a 5-member team, where each member acted as a full stack developer, intended to assist
 departments in creating schedules of classes and professors for a given school year, enabling easy viewing and
 management.
- Software developed with a strong emphasis on user experience (UX), ensuring that the user interface (UI) is both
 user-friendly and intuitive. This results in a streamlined experience that can reduce schedule creation time by 30%
 compared to existing alternatives.

ADDITIONAL SKILLS

- Technical skills: c/c++, python, java, javascript, SQL Server/Database, Haskell, HTML, CSS, JSON
- Frameworks: Flask, Django, React, Vue.js, Bulma
- **Soft skills:** Creative, problem-solving, team player
- Knowledgeable and experienced with SCRUM, Agile, and DevOps methodologies, as well as Software Engineering Development practices such as readable, repeatable, and clean code.
- Experience using microprocessors to control DC motors, digital servos, and LCDs, all using Arduino IDE.
- Familiarity with REST APIs, DOM manipulation, and construction of scalable systems.