# **JOSHUA REVILLA**

 San Jose, California
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#### **EDUCATION**

## University of California, Santa Cruz

Expected June 2023

B.A. in Computer Science Overall GPA: 3.93

#### **Relevant Coursework:**

Computer Systems and C programming Data Structures and Algorithms Database Systems Advanced Networking Computer System Design Data Programming and Visualization Software Engineering Distributed Systems Parallel Programming

## **PROJECTS**

### Water Footprint:

- Implemented a data visualization project using D<sub>3</sub>.js to effectively display and analyze complex data sets
- Collaborated with cross-functional team members to gather data and improve the user experience of the visualization
- Utilized version control software, such as Git, to manage the development process and collaborate with team members
- Utilized skills in JavaScript, HTML, and CSS to create dynamic and responsive visualizations

#### **HTTP Server:**

- Implemented a multi-threaded HTTP server in C, capable of handling multiple simultaneous requests and improving overall performance and scalability
- Utilized POSIX threads and synchronization primitives for handling of concurrent requests
- Experience with network programming, Sockets, and HTTP protocol
- Implemented HTTP parsing and handling using Regex and the C programming language

#### **EZ Captions:**

- Developed and deployed a React-based caption application, allowing users to create and edit captions for videos
- Showed ability to work with modern web technology stack, React and its related libraries to provide a meaningful and intuitive user experience
- Incorporated real-time video playback and caption/subtitle synchronization to ensure accurate timing

# Adventure SQL Game

- Gained strong knowledge of SQL and database design principles for creating and managing application data
- Demonstrated familiarity with PostgreSQL stored procedures, triggers, and advanced queries for application logic
- Experience in optimizing database performance and scalability using indexing
- Familiarity with libpq functions for executing SQL commands, managing connections and transactions, and retrieving query results

#### **TECHNICAL STRENGTHS**

Programming Languages: C, C++, Python, JavaScript, React.js, SQL, Bash, HTML, CSS, Rust, Java Software and Tools: UNIX, git, D<sub>3</sub>.js, Vim, VS Code, Trello, Languages: TCP/IP Protocol Stack, Client-Server Architecture, Parallel Programming

#### **VOLUNTEER EXPERIENCE**

# Santa Theresa Little League

April 2016 - June 2017

Assistant Coach

San Jose, CA

- · Demonstrated leadership and responsibility by organizing and coordinating practices and games for a Little League team
- · Displayed skills in problem solving, conflict resolution, teamwork, and decision-making