# Bill J. Wu

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#### **Education**

University of California San Diego

Expected Graduation: June 2022

B.S. Computer Science | Major GPA: 3.67 | Overall GPA: 3.31

East Los Angeles College August 2017 – June 2019

Overall GPA: 3.82 | Dean's Honor List: All Semesters | President's Honor List: 3 Semesters

#### Coursework

Software Engineering || Advanced Data Structures || Design and Analysis of Algorithms || Computer Graphics Computer Architecture Software Perspective || Computer Vision || Theory of Computability || Machine Learning Principles of Computer Operating Systems || Programming Languages: Principles and Paradigms

### **Experience**

Amazon (AWS) - Software Development Engineer Intern

June 2021 – September 2021

- Worked on full-stack web development under an AWS data center automation team
- o Wrote a system design document as well as implemented a safe dynamic configuration to improve flexibility
- Improved user experience by developing additional features for the UI using React.js, Redux.js, and
  TypeScript for frontend, and Java for backend. Set up corresponding actions, APIs, reducers for Redux state
- Conducted A/B end-to-end testing and wrote integration tests in Jest before deploying to production
- o Reduced package vulnerabilities, blocker bugs, and minor bugs to zero in Java and tested using JUnit

**East Los Angeles College** - Computer Science Volunteer Tutor

August 2018 – December 2018

- o Tutored 100+ students in Object-Oriented Design in C++ and led bi-weekly review sessions
- o Guided students in debugging their code and designing algorithms

# **Projects**

#### **Pomodoro Timer Web App**

January 2021 - March 2021

- Created a website encompassing the Pomodoro Technique alongside a software engineering team
- Contributed through full-stack development and website UI design using Node.js, JavaScript, HTML, and CSS
- Tested through unit testing with Cypress and end-to-end testing

Web Store February 2021

- o Populated an online store with products in JavaScript
- o Created a custom web component to handle product items after fetching data from an API

#### **Graph Representation of Data**

December 2020

- o Implemented the graph ADT, its basic operations, and populated it using file data in C++
- o Found shortest unweighted and weighted paths as well as connected components using BFS and Dijkstra's

# Huffman Encoding November 2020

Created a program to compress and decompress files using Huffman Coding in C++

o Built a Huffman tree using file data and utilized it to encode and decode files

# IEEE-754 Single Precision Floating Point Converter

November 2020

- Extracted bytes from binary file in C and converted each byte to an IEEE FP value using ARM assembly
- Calculated IEEE, FP, and decimal values using bitmasks and bit shifts

# **Technical Skills**

- o Programming Languages: Java, C++, C, TypeScript, JavaScript, HTML, CSS, Python, Assembly, Bash
- Frameworks/Libraries/Tools/Skills: React.js, Redux.js, Node.js, Jest, Cypress, JUnit, Git, A/B Testing
- o Interests: Stock Trading, Valorant, League of Legends, NBA, Cooking, Reading, Music