# Briana Kirkman

860-752-8624 / bkirkman2004@gmail.com /

#### Education

#### California Polytechnic State University San Luis Obispo

Computer Science Major

San Luis Obispo, CA

Aug. 2022 – June 2026

#### Technical Skills

Languages: Java, Python, C/C++, JavaScript, CSS, HTML, RISC-V Assembly

Developer Tools: VS Code, Visual Studio, PyCharm, IntelliJ

## Experience

#### Girls Hackathon Participant and Winner

June 2021

California State University San Marcos

San Marcos, CA

- Developed a prototype on code studio utilizing JavaScript to provide teens with suitable summer occupations.
- Participated in a 24-hour hackathon focused on creating technology solutions catered towards teens.
- Collaborated with a team of mentors and peers to create a functional prototype.

## **Projects**

#### Minimally Useful shell (MUSH) / C

December 2023

- \* Developed a simple shell (mush2) with both interactive and batch processing capabilities, incorporating essential features such as command parsing, redirection, pipes, quoted strings, and backslash escapes.
- \* Successfully handled redirection of standard input and output, as well as pipes to connect the output of one command to the input of another.

#### **Concordance** / Python

November 2022

- \* Developed a python program that provides the concordance of a given text file of any length.
- \* Implemented customized hash table data structure to hold words and their list of line numbers.
- \* Implemented Horner hash function and quadratic probing for rehashing and collisions.

### **Huffman Encoding and decoding** | Python

October 2022

- \* Developed a python program that compresses or decompresses a given file utilizing Huffman encoding and decoding.
- \* Implemented customized doubly linked list data structure to hold frequencies and build frequency tree.