Samuel Woods

samuel@samuelwoods.me ❖ (503)-530-0106 ❖ San Diego, CA

EDUCATION

University of California San Diego   Sept 2017 – Dec 2021
Mathematics – Computer Science B.S.
- Emphasis on data structures and algorithms
- Well versed in analysis, abstract algebra, advanced calculus, and discrete math
- Programs of study in Business and Japanese
- University of California San Diego Ultimate Frisbee Team

PROJECT EXPERIENCE

Academic/Personal Projects   Sept 2019 – Current
- Compression program created using Huffman Coding in C++
- Generic graph constructor that takes in an edge list in CSV format. It can find the shortest path, connected components, and minimum connecting threshold between nodes. Used to graph HIV transmission cluster data gathered from a recent HIV-TRACE done at UCSD.
- Designed ArrayList, LinkedList, HashTable, Deque, Queue, Stack, PriorityQueue, BinaryTree, and BinarySearchTree from scratch using generics. Unit tested against their respective Java Collections subsets.
- Randomly generated maze game in Java with collision and WASD movement
- Python webapp using Jinja2 and MySQL
- Developed chess in Java

WORK EXPERIENCE

CedarBridge Group   Jun 2019 – Sept 2019
Intern
- Created reports and spreadsheets for Mathematica
- Designed a thoroughly researched internship program for CedarBridge Group
- Preformed on-call duties across departments such as digitizing paperwork, landscaping, mailing, and website editing
- Coordinated client meetings and team communications

SKILLS & TECHNOLOGIES

- **Programming Languages:** Python, Java, C, C++, Haskell, Assembly (ARM), MATLAB
- **Languages:** English (Native), Japanese (Advanced), Spanish (Basic)
- **Other:** Bash, Git, GDB, Valgrind, HTML5, CSS3, Jinja2, MySQL

LINKS

- Website: https://samuelwoods.me
- GitHub: https://github.com/samuellwoods
- LinkedIn: https://linkedin.com/in/samuellwoods
- LeetCode: https://leetcode.com/samuellwoods