Colton Maring

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Education

University of Central Florida Expected May 2025
B.S. Computer Science *GPA: 3.58*

Relevant Coursework
Data Structures & Algorithms, Computer Logic & Organization, Security in Computing

- Proficient in advanced data structures and algorithms, including self-balancing trees, Bloom filters, skip lists, backtracking, BFS, DFS, Bellman-Ford, and Dijkstra's algorithm
- Familiarity with algorithm design techniques such as dynamic programming and greedy algorithms
- Demonstrated an understanding of computer design principles, including machine instructions and CPU architecture
- Acquired knowledge of cryptography and encryption, including the foundations of symmetric and asymmetric encryption algorithms

Course Projects

Skip List | *Java*

- Implemented a probabilistic data structure that facilitates rapid insertion, deletion, and searching operations
- Created a generic container class that can accommodate multiple types
- Demonstrated the portability of the program by conducting testing in a standardized Linux environment

War Card Game | *C*

- Implemented the game's mechanics, enabling two players to engage in a turn-based battle
- Integrated error handling and input validation to ensure the game runs without crashes

Personal Projects

Stencil Creator | *Three.js, Javascript, HTML, CSS*

- Developed a 3D application to create stencils specified by user input
- Utilized the Three.js library to render the stencil
- Implemented an export button for effortless use in 3d printing applications

Password Generator | *Javascript, HTML, CSS*

- Developed a password generator where users can choose their level of security
- Designed a visually engaging GUI that delivers an optimal user experience across various mobile devices

Technical Skills

Languages: Java, C, Python, Javascript, HTML, CSS
Frameworks: Node.js, Flask, Swing
Developer Tools: Git, Apache, Nginx, Vite, Unix, Windows, Valgrind, Digital Ocean Droplets
Hardware: Arduino, Raspberry Pi, Home Lab, 3D Printing