McKay Mower

+1 (801) 867-9001 · mmower777@gmail.com

Education

University of Utah – M.S. Computer Engineering   Salt Lake City, UT; Aug. 2021 – Present
Thesis Focus: Scheduling Conflict Graph Parallelism in VLSI Physical Design
University of Utah – B.S. Computer Engineering   Salt Lake City, UT; Aug. 2018 – May 2022
Salt Lake Community College – A.S. Science   West Jordan, UT; Aug. 2016 – May 2018

Relevant Experience

RISC-V Fault Testing (C, VHDL, Verilog)   Sandia National Labs; Aug. 2021 – May 2022
- Managed a small student group to test the adaptability and reliability of the RISCV-ISA
- Coded a copy buffer in VHDL to duplicate instructions
- Created a new 'CHECK' instruction in the RISCV ISA
- Changed RISCV GNU GCC to accept and view the new instruction in program binaries

Taskflow Development Research (C/C++)   University of Utah; May 2021 – Aug. 2021
- Wrote a C++ algorithm and Data Structure to detect 'unreachable tasks' in a Taskflow program
- Published a research paper into the IEEE Journal: https://ieeexplore.ieee.org/document/9651218

Relevant Projects

Pathfinding Algorithm Visualizer (ReactJS)
- Developed a visualizer for various algorithms such as Dijkstra's, Depth-first search, Breadth-first search
- GitHub Repository: https://github.com/McKayMower/pav

Pumpt App (React Native)
- Made an iOS/android app like Grub Hub/Door dash for gasoline delivery
- Utilizes user authentication, permissions, Google Maps API and more

YouTube to MP3 Converter (Python)
- Created a custom UI and loading screen, as well as a backend to convert a YouTube video to an MP3 file
- GitHub Repository: https://github.com/McKayMower/Jazzie

Technical Skills

- C/C++, ReactJS, React Native, VHDL, Verilog, Python, HTML, CSS, JavaScript

Personal Characteristics

- Team Worker, Leadership, Critical Thinker, Integrity, Data Structures, Algorithms

Awards

University of Utah Dean's List
University of Utah Percy Stovall Scholarship
University of Utah Academic Scholarship
New Century Scholarship

Socials

GitHub Portfolio: https://github.com/mckaymower
LinkedIn: https://linkedin.com/in/mmower777
Personal Website: https://mckaymower.github.io