MASTAAN RANDHAWA

Software Developer

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PROJECTS:

RISC-V Processor

Operating Systems, 2023

- Developed a RISC-V processor in C/C++/Assembly.
- Implemented RISC-V instructions with custom slt-type instructions.
- Decoded and printed output for a concise representation of executed instructions.

Multi-level Cache System

Operating Systems, 2023

- Developed and managed multiple cache projects using C/C++ programming language.
- Implemented a cache system with features such as LRU and LFU eviction policies.
- Utilized structures and dynamic memory allocation to organize cache sets, lines, and blocks.

AVL Tree Data Structure

Data Structures and Programming, 2022

- Implemented Wordlist class using AVL tree data structure, eliminating reliance on vectors, arrays, or linked lists.
- Developed constructors to create empty Wordlist objects and parse words from files.
- Ensured memory leak prevention and rigorously tested code for correctness.

Website Projects

Web Development Projects, 2023

- Designed and developed multiple websites utilizing HTML, CSS, Bootstrap, and JavaScript.
- Applied Bootstrap for efficient styling and responsiveness.
- JavaScript was employed to add interactivity and improve user engagement.

WORK EXPERIENCE:

Executive

Google Developer Student Club, Burnaby 2023(November) - Present

- Lead tech initiatives, and created digital designs that matched the club's vision.
- Fostered a collaborative tech community.

Vision Centre Associate

Walmart, New Westminster 2021(June) - Present

- Collaborated effectively with my team to offer comprehensive eye care solutions.
- Lead effective sales and customer satisfaction.

SKILLS:

- Objected Oriented Languages
- Software Proficiency
- Excellent Interpersonal Skills
- Proficient Problem Solving Skills

EDUCATION:

Bachelor of Computer Science

2022 - 2026 | Simon Fraser University