Husam Kassab

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SKILLS

Languages: C, C++, Python, Java, HTML, CSS, JavaScript, Assembly, VHDL, SQL, PHP Laravel

Technologies: CodeWarrior, Oracle, Linux, Git, MATLAB, Quartus II, Multisim, Visual Studio, MySQL, NodeJS, React

PERSONAL PROJECTS

Weather System Application   *July 2023*
- Developed a dynamic website using **React** to fetch and present real-time weather data through **API integration**.
- Implemented a robust data ingestion mechanism for capturing and processing various weather information.
- Increased the website's average loading speed by **30%** through optimization techniques.
- Designed a visually appealing and user-friendly interface using **HTML**, **CSS**, and **JavaScript**.

Bookstore Application   *May 2022*
- Built a bookstore application that allows the function of purchasing and creating books using **Java**
- Programmed a secure login system separating admins and customers, allowing for different functions
- Achieved an easy-to-use GUI using **JavaFX**

General-Purpose Processor   *April 2022*
- Implemented an arithmetic and logic unit using **VHDL** in **Quartus II**, and integrated it on a FPGA Board
- Developed a finite state machine to determine the controller sequence and a 4 to 16 decoder for the control unit.
- Enabled diverse computational functionalities, including bit swapping, ORing and ANDing inputs, and left or right bit rotation.

Towers of Hanoi Problem Solver   *February 2022*
- Developed a **C-based** algorithm in a **Linux** environment to efficiently solve inputted Towers of Hanoi problems and generate the required moves.
- Optimized a recursive algorithm by reducing its runtime by **55%** through careful modifications and enhancements.
- Utilized various algorithms, including insertion sort and merge sort, to construct the project effectively.

EXPERIENCE

Adidas Canada | Retail Sales Associate   *September 2021 – September 2022*
- Provided exceptional customer service to create a positive shopping experience for customers.
- Collaborated with team members to meet store goals and resolve customer concerns promptly

LEADERSHIP EXPERIENCE

Toronto Metropolitan University (Previously Ryerson) Muslim Student Society   **Toronto, ON**
Student Engagement Sub-Committee   *Sept 2022 – Present*
- Organized multiple events such as basketball games, soccer games, as well as Islamic knowledge events by coordinating with sub-committee members.

Competitive Programming Club   **Toronto, ON**
Toronto Metropolitan University (Previously Ryerson University)   *April 2022 - Present*
- Competed in weekly competitions, attended technical interview preparations, and helped improve existing projects from other classmates.

EDUCATION

Toronto Metropolitan University (Previously Ryerson University)   **Toronto, ON**
B.Sc. – Computer Engineering | Software Specialization   *Sept 2020 - Present*
- Related Coursework: Software Systems, Digital Systems, Database Systems, Data structures and Algorithms, Object Oriented Programming, Software Design and Architecture, Software Requirement Analysis and SPEC