DeVontae Hudson

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Education

B.S., Mechatronic Systems Engineering Expected 2023

Western University, London, Ontario, Canada

- Relevant Coursework: Data Structures and Algorithms, Computer Science Fundamentals II

Noteworthy Projects

University Online Timetable Search API,

- Designed and implemented a ReST API using JavaScript's NodeJS and Express, allowing users to efficiently search and access university schedule information.
- Utilized HTML and CSS in the API design.
- Developed a user-friendly front-end client interface using React, enhancing the overall user experience.

Student Finance App,

- Developed a finance tracking app to help users monitor and manage their daily, monthly, weekly, and yearly expenses and income.
- Integrated interactive pie charts to provide a clear and visual representation of budget breakdown.
- Built using Angular, Node.js and various Node libraries, with back-end server functionality implemented through a ReST API using NodeJS.

Western Formula Racing,

Grounded Low Voltage Lead

- Implemented CAN protocol to streamline wire harness production, resulting in a 25% reduction of the wire harness database components.
- Utilized Arduino IDE software to send 10-bit analog to digital voltage outputs in 2 bytes to all CAN IO modules to the vehicle master, resulting in a 300% increase in voltage reading accuracy.
- Developed Python script to interface with programmable DC electronic load, using .CSV files as input.
- Demonstrated exceptional presentation and intrapersonal skills by presenting the final battery design to the GLV lead and passing technical inspection.

Autonomous Robot,

- Utilized Arduino to implement IR, ultra-sonic sensors, and motor control for the device.
- Facilitating weekly meetings with three team members to ensure the project's timely completion.
- Demonstrated exceptional presentation and communication skills by delivering a successful final project presentation to two professors and a panel of four graduate students, earning a grade of 91%.

Experience

West81 Engineering, May 2021 – Aug 2022

Mechatronic Designer Intern

- Programmed PLC's for industrial machinery using ladder logic and function block diagrams
- Improved engineering operations by creating a consolidated Excel database for part files, increasing productivity and streamlining operations
- Developed an equipment fail-safe testing manual to ensure the safe operation of heavy machinery on-site
- Designed detailed reeving diagrams using AutoCAD for crane and rigging layouts for on-site riggers, ensuring safe and efficient operations on heavy equipment

U-Haul, May 2019 – Sept 2019

Supervisor

- Supervised daily operations and trained team members to provide exceptional customer service and ensure efficient rental processes, resulting in improved customer satisfaction ratings and increased revenue
- Managed inventory and ensured proper maintenance of rental equipment, resulting in reduced equipment downtime and increased customer availability.

Skills

Java, Python (Django), JavaScript (Angular, NodeJS, Express), HTML, CSS, C++, C, Git, GitHub, Arduino, MS Office