Jonathan Bodner

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SKILLS

Languages: Java, C++, Python, HTML, CSS, Javascript, VHDL, Processing, MATLAB, SQL

Technologies: Git, GitHub, Bootstrap, Node.js, Windchill, Arduino, Creo

WORK EXPERIENCE

ExtentCom   May '21 - Aug '21
Software Developer   *Richmond Hill, ON*

- ⇢ Designed a fully functional, web based Command Line Interface front end page using HTML, CSS & JS that interfaces with a CLI API using AJAX allowing users to enter data in real time
- ⇢ Built an API using Node.js that replicates CLI behavior in order to test the above front end
- ⇢ Researched, developed and analyzed a gradient algorithm that will accurately determine location of nodes on a map based on limited node locations and interconnecting distances. Performed tests in MATLAB to improve accuracy while maintaining performance & speed

Terrestrial Energy   Jan '20 - Apr '20 & Sep '20 - Dec '20
Software Developer & IT Technician   *Oakville, ON*

- ⇢ Developed Windchill workflows using Java and the Windchill API in order to automate numerous product lifecycle management processes, improving data accuracy & security in SQL tables while also reducing the time spent by users on redundant tasks
- ⇢ Collaborated with the QA team to overhaul the existing Problem Identification process, planned, managed & designed all required software features and changes in Windchill
- ⇢ Arranged installation, verification and version control for multiple user software packages
- ⇢ Analyzed server usage and planned improvements to increase performance by up to 10x
- ⇢ Implemented solutions and deployed patches for software and hardware issues

SIDE PROJECTS

Algorithm Visualizer: Java based Processing application to display sorting algorithms in real time

Rock Paper Scissors: Responsive browser based game using HTML, CSS, JS, Bootstrap & JQuery

Obstacle avoidance: Used ultrasonic sensors and arduino to safely navigate a robotic vehicle

Path Visualizer: Applied Greedy algorithm on input elevation data in Java to determine path with lowest change in elevation and highlight it on a grayscale map

EDUCATION

University of Waterloo   Sep '19 - Apr '24 (Expected)
BASc. in Computer Engineering   *Waterloo, ON*