Josh Bakelaar

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Education

Bachelor of Science at Western University (London, ON, Canada) **2020 – 2024**

- Major in Computer Science with a Minor in Game Development

Skills & Certifications

Programming: Java, C, Python, C++, C#, JavaScript, Bash

Libraries / Frameworks: React.js, JUnit, jQuery

Development Tools & Databases: Git/GitHub, Atlassian, SQL, MySQL, Unix & Linux, CSS, HTML, Unity

Certifications: IBM Z Xplore

Experience

Program Coordinator at Camp OK (London, ON, Canada) **Dec 2023 – Present**

- Orchestrating and coordinating all aspects of camp programming, ensuring a seamless and engaging experience for participants.
- Spearheading the development and implementation of a dynamic leadership curriculum tailored to teenagers, fostering the growth of leadership qualities through constructive feedback and hands-on experiences.

Mentor at First Robotics Team - Raider Robotics 5024 (London, ON, Canada) **Sept 2020 – Present**

- Collaborating seamlessly within the team to ensure the successful execution of robotics projects, emphasizing agile methodologies and adaptability to meet evolving technical challenges.
- Leading the planning and execution of programming initiatives for the First Robotics Team, overseeing the development of high-performance robots programmed in Java, with a focus on precision and efficiency.
- Utilizing advanced data management tools such as Google Sheets and Excel to meticulously record and analyze performance metrics, enabling data-driven decision-making and continuous improvement.

Manager at Rocky Mountain Chocolate (London, ON, Canada) **Nov 2021 – June 2024**

- Foster effective communication and collaboration among team members to achieve organizational objectives and performance targets.
- Train and mentor staff members to maintain high standards of performance, professionalism, and customer service.

Projects

Structural Integrity - The VR Damage Assessment Simulator (C#, Unity)

- A Virtual Reality education tool for in-class learning with civil engineering students at Western University.
- Equips students with skills to identify and assess structural damage in real-world scenarios.

5K24 SPARK- *Enhancing Scouting for First Robotics Competition (FRC) (JavaScript, React.js, CSS)*

- Engineered the platform to operate offline, empowering teams to scout and save data without an internet connection, ensuring uninterrupted functionality in dynamic competition environments.
- Developed a comprehensive scouting website for FRC teams, facilitating the collection of data on other teams during competitions. The system seamlessly combines all relevant information into a QR Code, streamlining the integration of data into teams' scouting spreadsheets.

Analysis of Machine Learning Models for Brain Age Prediction using the OASIS Dataset - *(Python)*

- Aimed to develop and compare machine learning-based models in predicting brain age from MRI data. As the discrepancy between physical age and brain age can indicate neurological conditions or cognitive decline, accurate prediction models are of clinical relevance.
- Conducted a comprehensive comparison of four different ML models: SVR, ResNet, and Lasso.

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