William Marcus

Ottawa, Ontario, Canada

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GitHub Profile
LinkedIn Profile
Portfolio Website

Education

•Carleton University *4th Year Standing*

Bachelor of Computer Science Honours (Co-op) Overall CGPA: 10.75/12 | Major GPA: 11.25/12

Experience

•Dayforce HCM *January 2025-August 2025*

Software Developer In Test Remote

- Developed and executed automated test scripts using FitNesse that reduced manual testing efforts by 90%
- Designed comprehensive test cases and strategies to increase code coverage to 100%, leading to higher quality releases and a more robust application.
- Optimized existing test automation scripts to achieve over a 50% reduction in execution time.
- Engineered and implemented robust C# FitNesse fixtures to significantly enhance test coverage

•Bank of Canada *May 2024-August 2024*

Full-stack Developer Ottawa, Ontario

- Developed PHP, JavaScript, HTML & CSS in 5 of the Banks major websites including BankofCanada.ca
- Worked in an agile team with code review processes, daily scrum meetings, and weekly sprint plannings
- Thoroughly tested code using PHPunit and Behat tests to ensure effective and non-broken code

•Bank of Canada *May 2023-March 2024*

Application Developer Ottawa, Ontario

- Migrated Jira application data to upgraded version in JavaScript using Node, Axios & REST API
- Programmed in Javascript with various frameworks such as React js for more efficient and user friendly interfaces
- Created a ticket management tool using Node js to archive and keep track of requests

Personal Projects

•Maze Runner Simulation Using Artificial Intelligence *December 2024*

https://github.com/WillMarcuss/mazeRunner

- **Tools & technologies used:** Python, NumPy, Pygame, Q-Learning, Rule Based Systems, Artificial Life
- **Description:** The Maze Runner project is a Python-based application to solve dynamic mazes using artificial intelligence techniques. It employs Q-learning, artificial life for dynamic wall updates, and rule-based systems for moving obstacles (grievers) to challenge the maze-solving capabilities of an agent.

Technical Skills

Languages: Java, Python, C, C++, JavaScript, HTML, CSS, SQL, PHP, C#

Concepts: Object Oriented Programming, Data Structures, Polymorphism, Inheritance, Encapsulation

Frameworks/Libraries: Java Swing, JavaFx, Java AWT, Pygame, Node.js, React.js, Angular.js, REST API, Axios, .NET, WPF, FitNesse, Selenium

Related Skills

Languages: Fluent in French and English; oral, reading, and writing

Problem Solving: Debugging, Integration Tests

Communication: Peer Programming, Daily Scrum

Time Management: Sprint planning, Prioritization, Agile Task Management, Time blocking

Achievements

•C J Mackenzie Scholarship: Yearly Scholarship achieved by retaining a 10.82 overall GPA *September 2024*

•Deans Honours List: Award given by achieving a minimum of 10.0 GPA *May 2024*