

Matthew Bodenstein

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EDUCATION

York University

Honours Bachelor of Science in Computer Science (Software Development Specialization)

September 2020 - April 2025

Toronto, ON

- Recipient of the York University Entrance Scholarship for the year 2019-2020
- Recipient of the York University Continuing Student Scholarship for the year 2020-2021

TECHNICAL SKILLS

Languages and Frameworks

- C, C++, C#, Java, Python, JavaScript, CSS, HTML5, MATLAB, Arduino, PowerShell, React, Flutter, Kotlin, Dart, Spring, Springboot, Neo4j, Robot Framework, Pygame.

Environments and Tools

- Linux/UNIX, Node.js, Git, Maven, JUnit, Postman, Tkinter, Unreal Engine 4, Unity, AutoCAD, Figma, WordPress, Wix.

EXPERIENCE

Research Assistant: Mars Simulation Project

Lassonde School of Engineering, Dept of Earth & Space Science & Engineering

September 2023 – Present

Toronto, ON

- Conducted research and developed simulations for wind dynamics on Mars' polar ice caps using Matlab and Python.
- Uncovered valuable insights on Mars's polar ice activity through thorough literature reviews and investigations.
- Translated complex Matlab code into Python and integrated advanced features, significantly enhancing its functionality with new components.
- Delivered regular, informative updates to Professor Smith and his lab, ensuring effective communication and progress tracking.

Freelance Web Developer/Designer

Star House Publishing Inc.

August 2023 – September 2023

Vaughan, ON

- Improved website with responsive design, leading to 50% higher mobile conversions and 20% lower bounce rates.
- Collaborated with clients, implemented innovative website features, resulting in a 30% increase in user engagement.
- Collaborated with project managers to consistently meet project deadlines, delivering high-quality websites that exceeded client expectations.
- Provided technical support and troubleshooting, resolving website issues for clients and end-users.

IT Technician Co-op

Litens Automotive Partnership

January 2023 – April 2023

Vaughan, ON

- Resolved problems with the server and networking hardware with exceptional skills in hardware troubleshooting.
- Construct, install, and test customized configurations based on various platforms and operating systems.
- Developed and maintained PowerShell scripts to automate tasks and streamline processes, resulting in a 67% increase in efficiency.
- Maintained detailed documentation for system builds, configurations, and support procedures, resulting in a 50% decrease in resolution time for technical issues.

President of Engineering Club

Westmount Collegiate Institute Engineering Club

September 2019 – June 2020

Vaughan, ON

- Established and led an Engineering club to teach computer engineering through theory and practical methods.
- Fostered a collaborative and critical thinking environment, providing students with problem-solving opportunities.
- Instructed students on logical propositions, physics, and proper component usage, resulting in a 95% mastery rate.

Student Engineer/Computer Scientist

Westmount Collegiate Institute

September 2018 – June 2020

Vaughan, ON

- Successfully instructed Logic and Syntax in Python and Arduino to over 50 students, resulting in a 98% pass rate.
- Produced a cooperative team environment to develop skills/knowledge, resulting in a 20% growth in productivity.
- Thoroughly tested prototypes and standard products, documenting results in detailed reports.

PROJECTS

The Six Degrees of Kevin Bacon | Java, Maven, Neo4j, Robot Framework, Git, Postman

- Developed REST API endpoints using Neo4j graph database JSON formatting and used Robot Framework to create test scripts to perform endpoint testing.
- Developed a backend service that computes the shortest path between Kevin Bacon and actors through movies.
- Enhanced the project by implementing a movie recommendation feature based on actors and ratings.

The-Holy-Grail - 2D Side-Scrolling Video Game | C#, Unity

- Developed a 2D side-scrolling game using Unity and C# programming language.
- Designed and implemented various game mechanics and special features to enhance gameplay experience.
- Engaged playtesters for bug feedback, incorporating suggestions to enhance game balance and user experience.

Academic Scheduler - YU Hacks | Android Studio, Flutter, Dart, Kotlin

- Participated in a 24-hour event, developing a Mobile App for School Assignments and Exams.
- Led project planning and development, quality control, and final review to control milestones and deliverables.
- Designed UX/UI and implemented front-end and back-end systems to interact with each other and the user.