Matthew Bodenstein

(647)-633-1196 | bodey@my.yorku.ca | linkedin.com/in/matthew-bodenstein/ | matthewboden.github.io | github.com/MatthewBoden

EDUCATION

York University

September 2020 - April 2026 Toronto, ON

Honours Bachelor of Science in Computer Science (Software Development)

- 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
- Relevant Courses: Advanced Object Oriented Programming, Software Design, Design and Analysis of Algorithms, Data Structures, Database Systems, Theory of Computation

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, SQL

Environments and Tools

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

EXPERIENCE

Programmer

Ministry of Children, Youth and Social Services I&IT Cluster

January 2024 - Present Toronto, ON

- Developed and tested functionalities using emerging technologies like Al and ML, resulting in a 25% improvement in application responsiveness.
- Presented proof of concepts and solutions, leading to the adoption of two new technologies and methodologies.
- Prepared comprehensive business and technical documentation, reducing onboarding time for associates by 30%.

Research Assistant: Software Development

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

September 2023 – Present Toronto, ON

- Conducted research on Mars' polar ice caps wind dynamics, developing Python 2D/3D simulations that led to a 20% increase in accuracy compared to previous models.
- Oversaw data storage and implemented code optimization strategies, resulting in a 40% reduction in runtime.
- Translated Matlab into Python while integrating features, leading to a 15% enhancement in simulation visualization.
- Crafted simulation scenarios to explore and verify real-world situations, promoting research and experimentation.

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.
- Provided technical support and troubleshooting, resolving client and end-user issues with a 100% resolution rate.

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 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.

PROJECTS

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

- Developed REST API endpoints using Neo4j database JSON formatting, improving query response time by 30%.
- Created Robot Framework test scripts, resulting in a 20% reduction in bug detection time.
- 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.

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

- Participated in a 24-hour event, developing a Mobile App for School Assignments and Exams.
- Designed UX/UI and implemented front-end and back-end systems to interact with each other and the user.
- Led project development, meeting all milestones and receiving recognition for project management skills.

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 unique gameplay mechanics, receiving positive feedback from playtesters.
- Incorporated playtester feedback, resulting in a 15% improvement in user satisfaction ratings.