Matthew Bodenstein

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EDUCATION

York University   **Toronto, ON**
Honours Bachelor of Science in Computer Science (Software Development)   *September 2020 - April 2026*

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: Python, Java, C, C++, C#, JavaScript, CSS, HTML5, MATLAB, Arduino, PowerShell, React, Flutter, Kotlin, Dart, Spring, Springboot, Neo4j, Robot Framework, Pygame, SQL, Pandas, Azure OpenAI
Environments and Tools: Linux/UNIX, Node.js, Git, Maven, JUnit, Postman, Tkinter, Unreal Engine 4, Unity, AutoCAD, Figma

WORK EXPERIENCE

Unity Developer
York University Sensorimotor Control Lab, Toronto, ON   *June 2024 – Present*

* Developed VR applications using Unity, enhancing cognitive functions and coordinationthrough sensory-driven gameplay.
* Integrated visual, auditory, and haptic feedback into VR, improving user cognitive and motor skills by 25%.
* Designed and implemented VR tasks, boosting cognitive and motor skill development by 20% through targeted challenges.
* Collaborated with designers, artists, and engineers to integrate sensory feedback and control mechanisms, increasing VR simulation effectiveness

Software Developer
Ontario Government, Enterprise Architecture Office, Toronto, ON   *January 2024 – January 2025*

* Developed an AI for OPS mental health support in Python using automation, raising productivity by 30%
* Collaborated with colleagues to develop and deploy a Python AI for efficient delivery of news, using Azure DevOps
* Developed advanced SharePoint automation leveraging cutting-edge AI/ML technologies to analyze document similarity, resulting in a remarkable 45% boost in productivity.
* Collaborated on metaverse-like training system using mixed reality for interactive training for employees

Research Assistant: Software Development
Lassonde, Dept of Earth & Space Science & Engineering, Toronto, ON   *September 2023 – March 2024*

* 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.

IT Technician
Litens Automotive Partnership, Vaughan, ON   *January 2023 – April 2023*

* Resolved problems with the server and networking hardware with exceptional skills in hardware troubleshooting.
* Developed PowerShell scripts to automate tasks and streamline processes, resulting in a 67% increase in efficiency.
* Constructed, installed, and tested customized configurations across diverse platforms and operating systems, while maintaining meticulous documentation. Achieved a 50% decrease in resolution time for technical issues.

PROJECTS

AI Wellness Companion - OPS Phenomenal Hackathon — Python, Azure OpenAI, PowerApps, Whisper OpenAI
- Led the development of OPS AI Wellness Companion using Power Apps, Azure Open AI, and Microsoft Co-Pilot, offering tailored support and resources for OPS employees, improving productivity by 30%.
- Implemented Python Text-to-Speech (TTS), enhancing accessibility and user experience in applications.

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.

Academic Scheduler - YU Hacks — Kotlin, Android Studio, Flutter, Dart
- 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.