# Matthew Bodenstein

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## Education

**Honours Bachelor of Science in Computer Science** April 2026

*York University, Toronto, ON*

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

**Extracurricular Activities:** Team Canada Men's Softball, Competitive Natural Bodybuilding Competitions (CPA Certified), Online CPT, Rock-Climbing, Hackathons, Video Game Development

## Technical Skills

- **Languages**: Python, Java, C, C++, C#, JavaScript, HTML5, CSS, MATLAB, PowerShell, Kotlin, Dart, SQL
- **Frameworks**: React, Flutter, Spring, Spring Boot, Neo4j, Robot Framework, Pygame, Pandas, NumPy, Matplotlib
- **Tools & Technologies**: Azure OpenAI, Linux/UNIX, Node.js, Git, Maven, JUnit, Postman, Tkinter, Unreal Engine 4, Unity, AutoCAD, Figma, Arduino
- **Agile Methodology**: Scrum process, Iterative Software Design, SOLID Principles, Design Patterns, JIRA Tracking

## Work Experience

**Unity Software Developer** June 2024 – Present

*York University Sensorimotor Control Lab* *Toronto, ON*

- Built VR applications in Unity, enhancing cognitive functions and coordination through sensory-driven gameplay.
- Integrated visual, auditory, and haptic feedback into VR, improving user cognitive and motor skills by 25%.
- Designed and built VR tasks, boosting cognitive and motor skill development by 20% through targeted challenges.
- Collaborated with designers and engineers to incorporate sensory feedback and control mechanisms, enhancing the effectiveness of VR simulations.

**Software Developer** January 2024 – January 2025

*Ontario Government, Enterprise Architecture Office* *Toronto, ON*

- 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.
- Constructed advanced SharePoint automation leveraging cutting-edge AI/ML technologies to analyze document similarity, resulting in a remarkable 45% boost in productivity.
- Designed and Implemented metaverse-like training system using mixed reality for interactive training for employees.

**Research Assistant: Software Development** September 2023 – March 2024

*Lassonde, Dept of Earth & Space Science & Engineering* *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.

**IT Technician** January 2023 – April 2023

*Litens Automotive Partnership* *Vaughan, ON*

- 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, achieving 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.
- Constructed a back-end service that computes the shortest path between Kevin Bacon and actors through movies.