# Matthew Bodenstein

(647)-633-1196 matthewboden.github.io m.bodenstein@outlook.com linkedin.com/in/matthew-bodenstein github.com/MatthewBoden

#### Education

## Honours Bachelor of Science in Computer Science

Dec 2025

York University - 3.7/4.0

Toronto, ON

Awards: Dean's List, Entrance Scholarship, Continuing Student Scholarship

Relevant Courses: OOP, OS, Design and Analysis of Algorithms, Data Structures, Databases, Theory of Computation Extracurricular Activities: Team Canada Softball, Competitive Natural Bodybuilding (CPA), Hackathons, Game Dev

## Experience

## Unity Developer

Jul 2025 – Aug 2025

Squido Studio (Mount & Mail, VR Game on Meta Quest Store) - Contract

Montreal, QC

- Developed and shipped a free VR climbing and delivery game for youth aged 12–17, published on the Meta Quest Store within a one-month contract.
- Led milestone planning and implemented physics-based mechanics, environmental map design, and Fusion Networking for synchronized multiplayer.

## Full-Stack Software Engineer

May 2025 – Aug 2025

CarGenie.co (AI Vehicle Recommendation Platform) - Contract

Toronto, ON

- Architected and deployed a GPT-4o-powered platform using TypeScript, Node.js, and PostgreSQL to generate personalized vehicle recommendations.
- Built an admin dashboard with secure authentication, analytics, and automated email campaigns via Mandrill and Mailchimp, improving user acquisition efficiency.

# Research Assistant (Unity Software Developer)

Jun 2024 – Aug 2025

York University Sensorimotor Control Lab - Contract

 $Toronto, \ ON$ 

- Built Unity-based VR cognitive training systems used by 500+ participants, integrating multimodal feedback (visual, auditory, haptic) for 25% faster responses.
- Collaborated with interdisciplinary researchers to refine calibration tools and enhance experiment reproducibility.

## Software Developer (Internship)

Jan 2024 – Jan 2025

Ontario Government, Enterprise Architecture Office - Contract

Toronto, ON

- Developed AI automation in Python to streamline mental-health support workflows, reducing manual processing
- Implemented SharePoint AI pipelines for document similarity analysis, increasing resolution accuracy by 45%.

### Research Assistant (Software Developer)

Aug 2023 - Apr 2024

Lassonde School of Engineering, Dept. of Earth & Space Science - Contract

Toronto, ON

- Engineered 2D/3D Mars wind simulations in Python, improving atmospheric model accuracy by 20% and reducing computation time.
- Created data-visualization scripts to support publication-ready analysis across simulation datasets.

## IT Technician (Internship)

Jan 2023 - Apr 2023

Litens Automotive Partnership - Contract

Vaughan, ON

- Automated system administration tasks using PowerShell, cutting issue resolution time by 50%.
- Implemented cross-platform configuration workflows that increased IT operational efficiency by 67%.

## Projects

#### Interactive Black Hole Simulation | ML5.js, p5.js, JavaScript

• Built a real-time black hole simulation with ML5.js Handpose for gesture control, visualizing gravitational lensing and particle motion through dynamic shaders.

### AI Wellness Companion (OPS Hackathon) | Python, Azure OpenAI, PowerApps, Whisper

• Led an AI-powered wellness assistant project integrating Azure OpenAI and PowerApps with voice and TTS support, improving accessibility for OPS employees.

## Six Degrees of Kevin Bacon | Java, Neo4j, Robot Framework, Postman

• Developed REST API endpoints with Neo4j to compute actor connection paths, automated testing via Robot Framework and Postman for 20% faster QA.

#### Technical Skills

Languages: Python, Java, C, C++, C#, JavaScript, HTML5, CSS, MATLAB, PowerShell, Kotlin, Dart, SQL, PostgreSQL Frameworks & Libraries: React, Flutter, Spring Boot, Neo4j, Robot Framework, PyTorch, Pandas, NumPy, p5/ml5.js Tools: Azure OpenAI, PowerApps, Linux/UNIX, Node.js, Git, Maven, JUnit, Postman, Tkinter, Unity, Figma, Arduino Methodologies: Scrum process, Iterative Software Design, SOLID Principles, Design Patterns, JIRA Tracking, CI/CD