

# Aayan Rahman

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## EDUCATION

### University of Waterloo

BASc, Electrical Engineering (Co-op)

Waterloo, ON

Sept 2025 – Apr 2030

- **Focus:** Full-Stack Development (React, Next.js, Node.js), Game Development (Unity, C#), Machine Learning (Python, TensorFlow), Systems Programming (C/C++)

## TECHNICAL SKILLS

**Languages:** JavaScript, TypeScript, Python, C++, C#, SQL, Bash, Lua

**Frameworks:** React.js, Next.js, Node.js, Express.js, Unity (C#), TensorFlow

**Cloud & DevOps:** Google Cloud, Firebase, Supabase, Docker, Kubernetes (basics), Git & GitHub, CI/CD, Linux (Ubuntu, Raspberry Pi OS), Shell Scripting

**Tools:** VS Code, Visual Studio, Notion, Figma

**Other:** Agile Development, Technical Writing, Project Coordination

## PROJECTS

### HealthBot.ca – AI Health Assistant | Google Cloud, Node.js, React

May 2024 – May 2025

- Co-founded and launched an AI health-assistant chatbot, deployed on **Google Cloud**, reaching **100+ active users** within first year.
- Implemented backend services with **role-based access control** and **CI/CD pipelines**, cutting deployment time from **30 minutes to under 5 minutes**.
- Updated system prompts, databases, and access workflows to align with **PHIPA-compliant privacy standards**, ensuring secure handling of sensitive health data.
- Resolved a critical frontend integration issue with ImageKit by restructuring React components, enabling secure uploads and gaining **local media coverage**.

### ProteccAPI – Git-Integrated Secret Scanner (UofT Hacks) | Node.js, Git Hooks, Regex

Jan 2025

- Built **open-source CLI + VS Code extension** preventing API/secret leaks; reached **100+ npm downloads** within one month.
- Applied **regex + Levenshtein distance** to detect potential API key leaks and flag suspicious dependencies, blocking **20+ faulty package installs** during testing.
- Streamlined onboarding by auto-generating **.env** files and integrating with Husky pre-commit hooks, cutting setup time by **40%** and reducing leak risk to **0% in testing**.

### Raspberry Pi Home Server – Self-Hosted Cloud | Linux, Portainer, Docker

May 2024 – Present

- Engineered a home server on Raspberry Pi Zero 2 W with external SSD, orchestrating **6+ Dockerized services** to replace third-party SaaS.
- Configured **Nextcloud** and **Jellyfin**, enabling secure file sync across **3+ devices** and achieving **99% uptime**.
- Automated monitoring and updates with Linux shell scripts, cutting manual maintenance by **30%**.

## EXPERIENCE

### Brain Stimuli Project – University of Toronto

Oct 2024 – Feb 2025

Full Stack Developer

Toronto, ON

- Developed a **full-stack web tool** in **React + MongoDB** to interface with an existing AI emotion recognition model, supporting **10+ neuroscience trial sessions** with **95% uptime**.
- Integrated model outputs into **interactive dashboards**, streamlining researcher workflow and reducing trial setup time by **2 hours**.

### Code Ninjas

Sep 2024 – Aug 2025

Instructor (*Sensei*)

Oakville, ON

- Mentored **50+ students** in **JavaScript** and **C# (Unity)**, boosting average coding assessment scores by **20%**.
- Introduced **circuit logic and problem-solving** to children aged **4–15**, increasing STEM program retention by **15%**.
- Maintained **100% technical readiness** of classroom PCs and robotics kits, ensuring uninterrupted delivery across **100+ lessons**.