

Waaberi Ibrahim

613-400-3503 | wibra007@uottawa.ca | waaberi.dev | linkedin.com/in/waaberi | github.com/waaberi

EXPERIENCE

Software Developer & Technical Coordinator

Jan. 2026 – Present

IEEE uOttawa Student Branch

Ottawa, ON

- Reached **50 participants** by delivering a web security workshop on common vulnerabilities and secure coding
- Improving website maintainability by building the branch homepage with **Payload CMS** and **Next.js**
- Providing support during technical events to students in both official languages, **French** and **English**

Cybersecurity Analyst

Nov. 2024 – Jan. 2025

De La Salle Public High School

Ottawa, ON

- Identified **2 critical vulnerabilities** in authorized internal assessments and supported patch rollout
- Built proof-of-concepts for identified vulnerabilities to validate impact and support patch planning
- Co-authored a vulnerability report that ranked fixes by risk and implementation effort

Computer Science Tutor and Coding Club President

Sep. 2023 – Jun. 2025

De La Salle Public High School

Ottawa, ON

- Expanded CS support by founding and leading the club with **~40 sessions** and tutoring **~50 students**
- Raised contest readiness by running DSA workshops and mock CCC contests
- Wrote **20+ pages** of docs for **Python**, **Supabase**, **Express**, and **React**

PROJECTS

Plussel | *Python, React, Tailwind, PostgreSQL, Docker, Linux*

- Shipped backend faster by building a containerized REST API with **FastAPI**, **Tortoise ORM**, and **Docker**
- Strengthened security by implementing **OAuth**, **JWT**, and **RBAC** on **Supabase PostgreSQL**
- Improved bilingual accessibility by building a **React/Tailwind** frontend with **i18n**

MyosAI | *Node.js, TypeScript, Next.js, Tailwind, Gemini API, Vercel*

- Delivered a production web app by building with **Next.js/TypeScript** and deploying on **Vercel**
- Improved JSON reliability by integrating the **Gemini API** with schema-constrained prompting and server-side validation
- Improved session continuity by designing local/URL state persistence with caching for branch-based flows

Synacor VM Emulator | *Python, Virtual Machines, Low-Level Systems*

- Built a working Synacor VM emulator by implementing its 15-bit architecture in **Python**
- Implemented opcode parsing, 8 registers, stack operations, and 32768-address memory space
- Built debugging capabilities with stack inspection and runtime analysis tools, facilitating the rest of the challenge

SKILLS

Languages: Python, Java, C, C++, Go, TypeScript, JavaScript, SQL, C#, Bash, HTML, CSS

Web/Backend: React, Next.js, Node.js, FastAPI, Express, Spring Boot, Tailwind CSS, REST APIs, OAuth, JWT, RBAC, i18n

Data/Cloud: PostgreSQL, MySQL, SQLite, MongoDB, Supabase, Docker, Linux, AWS, Vercel, GitHub Actions

Systems/Security: Raspberry Pi, Arduino, QNX, OWASP Top 10, Vulnerability Assessment, Threat Modeling, Secure Coding

Data Science: NumPy, Pandas, scikit-learn, Jupyter, EDA, Data Cleaning, Feature Engineering, Model Evaluation

Engineering: Git (branching/rebasing/PRs), Testing (Pytest, JUnit), Debugging (GDB, VS Code), Agile

AWARDS AND CERTIFICATIONS

1st Place – IEEE uOttawa x HackTheBox Capture The Flag	2026
1st Place – Qiskit Fall Fest 2025 Hackathon	2025
2nd Place – University of Ottawa Computer Chess Hackathon	2025
1st Place - University of Ottawa Cyber Range FlagForce Capture The Flag	2025
School Champion and Distinction – Canadian Senior Mathematics Contest	2024
Meta Back-End Developer Professional Certificate	2023

EDUCATION

University of Ottawa

Ottawa, ON

Bachelor of Applied Science (BASc.) in Software Engineering (Génie logiciel)

Expected Graduation: 2029

- Relevant Coursework: **ITI1120 (Introduction to Computing I)** – Ranked **2nd out of 307 students**