Tawana Hondonga

tawanahondonga.com | tawanahondonga@cmail.carleton.ca | linkedin.com/in/tawana-hondonga | github.com/TawanaH

Education

Carleton University Ottawa, ON, Canada

Bachelor of Science in Computer Science, Minor in Business, ***GPA****: 4.0/4.0* *April 2026*

- **Coursework:** Data Structures & Algorithms, Systems Programming, Software Engineering, Web Applications, Discrete Math, Object-Oriented Programming, Linear Algebra
- **Awards:** Carleton University Faculty Scholarship ($16,000); Dean's Honour List (2022-Present)
- **Affiliations:** ColorStack Member (2024-Present)

Experience

Incoming AI/ML Engineering Co-op Sept. 2024 – Dec. 2024

Raven Connected *Ottawa, ON*

Software Engineering Fellow Jul. 2024 – Present

Headstarter AI *Remote, USA*

- Engineered 5+ diverse AI applications and APIs utilizing Next.js, OpenAI, Pinecone, StripeAPI.
- Led a team of 4 engineering fellows in developing and deploying 3 projects using MVC design patterns.
- Implemented Agile methodologies, CI/CD pipelines, and microservice patterns under mentorship of Amazon, Bloomberg, and Capital One engineers, improving project efficiency.

Undergraduate Teaching Assistant Sept. 2023 – Apr. 2024

Carleton University *Ottawa, ON*

- Developed and presented weekly Python code demos and presentations to over **75+** attendees, improving course content comprehension.
- Conducted weekly office hours, providing personalized assistance to **700+** students on course material.
- Assessed **60+** student assignments weekly, providing constructive feedback that improved average student performance.

Projects

iPantry | *React, Next.js, Firebase, GCP, Gemini API, Vercel, CI/CD*

- Engineered an AI-powered pantry tracker app using Gemini API, generating personalized recipe suggestions with **85%+** accuracy based on available ingredients.
- Implemented Firebase and GCP for backend services, deploying to Vercel with CI/CD, reducing deployment time by **80%+** and improving app reliability.

Migraine Classification Neural Network | *Python, TensorFlow, Pandas*

- Leveraged TensorFlow 2.0 and Pandas to develop a neural network that classifies seven types of migraines with **93%** accuracy, analyzing patient data and symptoms.

Phantom Pursuit | *C, Linux, Makefiles, Valgrind*

- Designed and implemented a sophisticated ghost hunting simulation in C, utilizing advanced memory management techniques to create a responsive environment with 4 concurrent hunter threads and 1 ghost thread
- Implemented multi-threaded programming in C to manage the concurrent operation of 5 entities (4 hunters, 1 ghost), improving simulation realism and performance by **55%+**
- Optimized development workflow using Valgrind for memory leak detection and Makefiles for automated compilation, reducing debugging time by **90%+** and improving code stability.

Certifications

AWS Certified Cloud Practitioner | AWS | July 2024

Machine Learning Specialization | DeepLearning.AI | August 2022

Technical Skills

Languages: C/C++, Java, Python, JavaScript, HTML/CSS, Visual Basic
Frameworks & Databases: Node.js, Next.js, Express.js, SQL, SQLite, PostgreSQL, Firebase
Developer Tools: AWS, GCP, Docker, Git, Vercel, Valgrind, Linux, Powershell, OpenStack, pgAdmin
Libraries & APIs: React, Material UI, Selenium, JavaFX, Websockets, Pandas, TensorFlow, Keras, Scikit-Learn, Gemini API, OpenAI API