

# AHMED ABDULJADER

Toronto, Ontario

☎ 416-854-8762

✉ [ahmedjader837@gmail.com](mailto:ahmedjader837@gmail.com)

🌐 [linkedin.com/in/Ahmed-Abduljader](https://www.linkedin.com/in/Ahmed-Abduljader)

📄 [Portfolio Website](#)

## Education

### York University

*Bachelor of Science in Computer Science*

Sep. 2023 – Apr. 2027

*Toronto, ON*

## Relevant Coursework

- Computer Organization
- Software Design
- Front-End Development
- Advanced OOP
- Python Programming
- Java Programming
- C# Programming
- Discrete Math

## Technical Skills

**Languages:** Python, Java, C#, JavaScript, Typescript, HTML/CSS, Tailwind

**Databases:** PostgreSQL, NeonDB, MongoDB, Drizzle ORM

**Libraries:** Next.js, React, Langchain, Ollama

**Specialization:** Generative AI, Large Language Models, Self Hosted LLMs, Agentic Tools, RAG Pipelines

## Experience

### Aether Research Club

*Co-President & Technical Director University of Ottawa*

**Present**

**REMOTE**

- Lead and oversee Aether's technical strategy, overseeing backend infrastructure and platform development.
- Built and manage Aether's web platform, offloading AI and backend tasks to a self-hosted Linux server reducing serverless compute resources
- Architected and responsible for the club's backend infrastructure, including an emailing service and member authentication system.
- Built projects like engineering a Linux Ubuntu Server and Integrated a self-hosted LLM for a high school tech department, enabling on-premises AI capabilities for educational use, while adhering to School District Data Privacy Policies.
- Developed a self-hosted research platform, allowing members to deploy LLM models, software projects, and internal tools.

## Projects

### Rag-Based Agentic Tutor | [GitHub](#) | *Next.js, FastAPI, Python, Ollama, LangChain, Chroma, SerpAPI*

- Developed a self-hosted Rag-Based Agentic Tutor using Ollama, LangChain, and Chroma to generate personalized learning paths based on public curriculum PDFs and quiz data.
- Offloaded LLM inference to Client Devices, **reducing token calls** with LangChain library by **40%**, and **ELIMINATING** compute cost leveraging end-user device by **100%**, and streamlining the pipeline compared to cloud-hosted methods.
- Benchmarked **20s** average inference time on LOW MODEL CPU-only consumer hardware.
- Enabled Agentic search allowing students to receive curated learning resources from VERIFIED platforms like Khan Academy with SerpAPI.
- Enabled multi-language support, environmental transparency, and equity-driven design to support global learners with low-cost, localized AI tutoring.

### Financial Management Tool | *Next.js, TypeScript, Express.js, PostgreSQL, Cohere AI API, Flask, Scikit-Learn*

- Built a financial management platform to help users track expenses, set goals, and analyze spending habits within 36 hours, at University of Toronto UofTHacks 12.
- Integrated Cohere AI API using JavaScript with TypeScript to provide personalized financial advice and offer users account security recommendations.
- Implemented JWT for secure user authentication with Bcrypt to hash and safely store user info alongside PostgreSQL for real-time financial record tracking.
- Developed a Flask-based machine learning model using Scikit-Learn to predict spending trends and optimize budgeting.

## Awards

Provost Scholarship Awarded by York University: \$500

B.E.S.T Startup Project Awarded by York University: \$600

Experience Venture Award Awarded by York University: \$325

Best Security App Awarded 1Password Company