

# Jawdat Al-Jabi

[✉](mailto:jawdotaljabi@gmail.com) [linked](https://www.linkedin.com/in/jawdotaljabi/) in.com/in/jawdotaljabi/ | [🌐](http://jawdotaljabi.com/) jawdotaljabi.com/

## EDUCATION

### McGill University

*Bachelor of Electrical Engineering — Minor in Applied Artificial Intelligence (GPA: 3.8/4.0)*

Montreal, Quebec, Canada

2023 – 2027

*Relevant Courses:* Machine Learning, Computer Vision, Natural Language Processing, Reinforced Learning

## WORK EXPERIENCE

### AI Software Developer Intern

UKG

May 2025 – August 2025

Montreal, Quebec, Canada

- Engineered advanced **Retrieval-Augmented Generation (RAG)** pipelines in **Python** by using **LangChain** and **Google Vertex AI**, improving document query relevance by **40%**.
- Automated ingestion of **10,000+** internal files on **Google Cloud Platform** by chunking and embedding into **MongoDB** with **MySQL**-backed metadata, streamlining **RAG** document retrieval.
- Built and deployed **15+** task-specific **Agents** in **Python** by using **LangGraph** and **LangChain**, orchestrating **REST APIs** and internal tools via **FastAPI** to enable dynamic, goal-driven workflows.
- Designed a modular **Agentic RAG service** that combined **multi-step retrieval** and **reasoning**, enabling agents to **iteratively select and invoke** multiple **API tools**, reducing incorrect or incomplete responses by **60%**.
- Applied **Object-Oriented Programming** to **RAG** and **Agent** architectures, enabling scalable orchestration, cleaner **API integration**, and more maintainable code.
- Integrated a **Redis-backed semantic caching** layer to eliminate redundant **LLM** calls, cutting token usage by **60%**, improving response speed by **23x**, and saving **\$200K+** annually in inference costs.
- Containerized all services with **Docker** and deployed across **Kubernetes clusters**, achieving **99.9%** up time.
- Tested and documented **RESTful APIs** using **Postman** and **Swagger** to validate proper functionality.

### Software Developer Intern

Biomomentum Inc.

May 2024 – August 2024

Montreal, Quebec, Canada

- Engineered a real-time signal processing pipeline in **Python** for biomechanical testing hardware, reducing latency by **80%** via **multithreading** and **algorithmic optimization**.
- Automated **QA** workflows in **Python**, cutting manual testing effort by **25%** and enabling **CI/CD** integration.

## EXTRACURRICULAR & LEADERSHIP

### Machine Learning Researcher — *McGill AI Lab*

Sept. 2024 – Present

- Designed and trained **deep learning models** in **PyTorch** and **NumPy** for **MNIST digit classification**, achieving **98%+ accuracy** via dropout, batch normalization, and hyperparameter optimization.

### System Manager — *McGill Robotics*

Sept. 2024 – Present

- Led a **15 member** software team, overseeing system architecture and improving task completion by **30%**.

### Software Developer — *McGill Robotics*

Sept. 2023 – Present

- Built real-time coordination scripts and debugging tools in **Python**, **C**, and **C++** enabling efficient control of **20+ hardware components** and reducing troubleshooting time by **40%** for **50+ robotics members**.

### Teaching Assistant — *Marianopolis College*

Jan. 2024 – Dec. 2024

- Graded assessments and assisted in delivering college Physics courses for **150+ students**.

## PROJECTS & HACKATHONS

### 🔗 AI Stock Market Predictor | *Python, Dash (Plotly), TensorFlow, Keras, Pandas*

January 2025

- Built an **LSTM-based** stock prediction web app with an interactive **Dash (Plotly) frontend**, achieving **90%+ accuracy** on real financial data and improving reliability by **40%** through cross-correlation matrices.

### 🔗 Car Dealership Chatbot | *Python, React, Next.js, CSS, SpaCy, Pandas, MongoDB, Flask*

November 2024

- Built a live **NLP** chatbot with custom **Named Entity Recognition** and **Sentiment Analysis** models, featuring a responsive **React/Next.js frontend**, cutting user search time by **90%** and boosting intent recognition to **95%**.

## TECHNICAL SKILLS

**Languages:** Python, C, C++, Java, JavaScript, CSS, HTML, SQL, VHDL, Verilog, SystemVerilog

**Libraries/Frameworks:** LangChain, LangGraph, PyTorch, Tensorflow, Pandas, Matplotlib, SQLAlchemy, FastAPI

**Tools:** GCP, Docker, Kubernetes, Git, GitHub, Postman, Swagger, MySQL, MongoDB, Grafana, Redis, Bash