

ANTOINE TAWIL

FULL STACK AND AI ENGINEER

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PROFESSIONAL EXPERIENCE

- Full Stack and AI Engineer, Nation.dev (Hybrid, Sweden)** **Apr 2023 - Present**
- Fine-tuned self-hosted, fully secure large language models (LLMs) using AWS Sagemaker for a leading US pharmaceutical giant, integrating GraphRAG and a custom search solution to revolutionize knowledge retrieval in a highly confidential initiative.
 - Architected a full-stack AI solution for G LNK, a US pharmaceutical startup, from scratch, leveraging self-hosted LLMs with OpenAI API enhancements for data labeling, advanced RAG techniques, and a patented OCR system achieving 99% accuracy; enabled millions in funding through this technology.
 - Led a 1.5-year ongoing project for Edurus, a major Swedish company, designing AI-driven image recognition and generation systems with adversarial robustness techniques, paired with an internal chatbot that slashed sales team workloads by 15+ hours weekly.
 - Created an AI-powered candidate assessment tool using NextJS and Python, featuring dynamically generated questions via carefully crafted prompts, a custom code editor with real-time AI grading, and tailored insights to optimize recruitment processes.

EDUCATION

- Software Engineering, Université Bourgogne Europe, Polytech Dijon** **Sep 2024 - Jun 2026**
- Specializing in Software Engineering and Artificial intelligence
 - Double diploma program
 - Ranked 3rd/70 for the school year 2024-25
- Computer and telecommunications engineering, Antonine University** **Sep 2021 - Jun 2024**
- Honors student with an 89.936 average GPA
 - President and founder of the Chess Club at the university

SKILLS

Artificial Intelligence: RAG, GraphRAG, AWS Sagemaker, Fine-tuning, LLMs, Prompt Engineering, Machine Learning, Pytorch, TensorFlow, Data Analytics, Image Processing, Image Generation, Pandas, Matplotlib

Web Development: TypeScript, JavaScript, React, NextJS, TailwindCSS, NodeJS, Python (Flask)

Database Management: MongoDB (Certified), PostgreSQL, Vector Database (Weaviate, Qdrant, ElasticSearch), Graph Databases (JanusGraph, CosmosDB)

DevOps: Docker, Kubernetes, GCP, Microsoft Azure

CERTIFICATES AND COURSES

IELTS IDP Academic (C2 CEFR Score)	Jan 2023
Harvard CS50: Intruction to computer science	Jan 2021 - Jun 2021
CCNA: Enterprise Networking, Security and Automation (ENSA)	Jun 2023
CCNA: Switching, Wireless and RoutingEssentials (SWRE)	Jan 2023
CCNA: Introduction to Networks (ITN)	Jun 2022
MongoDB Associate developer	Sep 2024
FUCE Summer School, Artificial Intelligence reshaping European Humanism	Jul 2024

PERSONAL PROJECTS

<https://popcorn.antoinetawil.com>

<https://github.com/TonyTawil>

LANGUAGES

English: C2 (IELTS)

French: Native speaker

Arabic: Native speaker