

2nd October 2025

To Whom It May Concern,

As an AI Engineer and Data Scientist with a Master's degree from Sorbonne University, I specialize in building and deploying impactful, end-to-end AI solutions that solve concrete business problems. My expertise spans from foundational research to production-level engineering.

A core area of my work is **AI Engineering** for autonomous systems. I recently engineered a sophisticated agentic system by designing a multi-tool **Retrieval-Augmented Generation (RAG)** architecture using LangChain. This agent could dynamically orchestrate capabilities such as documentation lookup from a Weaviate vector database, inventory management, and supplier comparison, demonstrating a complex and practical application of advanced RAG techniques for workflow automation.

My skills extend to the full deployment lifecycle. I am experienced in containerizing applications with **Docker** and orchestrating them at scale using **Kubernetes**. I am also proficient in leveraging core services on major **cloud platforms like AWS and Azure** for scalable model deployment and data storage. This ensures that the solutions I build are not just effective but also robust, scalable, and production-ready.

This practical engineering experience is grounded in a deep understanding of fundamental concepts, demonstrated through my research in computer vision and explainable AI. I have engineered robust pedestrian detection models using synthetic data and XAI to solve challenging occlusion problems, and I have developed a novel explainability method for Temporal Graph Neural Networks, as detailed in this [article](#).

I am actively seeking a full-time position (CDI) where I can apply my integrated skills in AI engineering, RAG, and cloud-native deployment to an innovative team. I am eager to tackle challenging problems and contribute to building the next generation of intelligent systems. Thank you for your time and consideration.

Yours sincerely,



ZAGHLAOUI Karim