

# Wiem Abbassi

Computer Science Graduate | AI Enthusiast

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## Experience

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### Artificial Intelligence Engineer *RFC*

*Feb 2025 – May 2025*

- Designed and deployed a RAG-based solution integrated with Microsoft Sentinel to automate incident investigation and enrich security alerts using threat intelligence sources (OTX, Maltiverse)
- Evaluated multiple LLMs on a cybersecurity query dataset and selected the optimal model for generating threat analysis and remediation recommendations
- Developed an automated SOAR playbook that orchestrates incident enrichment, analysis, and response workflows, improving investigation efficiency and scalability

### Business Intelligence Analyst *MAVISION*

*Aug 2024 (1 Month)*

- Cleaned and pre-processed raw datasets to ensure data quality, consistency and usability for analysis
- Aggregated key data points and implemented relevant metrics to support business insights and decision-making
- Designed and developed interactive dashboards using Microsoft Power BI to effectively communicate findings

## Projects

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### Threat Hunting Query Generator via AI

- Designed and implemented a multi-platform threat-hunting query generator utilizing local LLMs (Ollama) to translate natural language descriptions into syntactically validated queries for Splunk SPL, Microsoft Sentinel KQL and Elasticsearch DSL
- Developed a deterministic query parsing and post-processing engine that programmatically extracts search parameters, corrects time-window mismatches, and automatically aligns query outputs with specific threat hunts
- Integrated the MITRE ATT&CK framework to map threat scenarios to standardized adversary techniques (TTPs) and built an interactive Streamlit dashboard displaying real-time query generation, validation errors, and performance metrics

### AI-Based Data Poisoning Detection

- Contributed to the data poisoning detection module of an open source threat intelligence pipeline for SOC and cyber threat analysis workflows
- Developed anomaly detection mechanisms using IsolationForest and LLM-based semantic validation to identify poisoned or contradictory IOC feed data
- Implemented detection logic for threat intelligence inconsistencies including malware incompatibilities, APT sector mismatches, and implausible IOC combinations
- Improved IOC validation reliability before ingestion into MISP analyst queues through automated AI-driven verification and feedback retraining mechanisms

### Tunisian Darija Agricultural AI Assistant

- Build a multimodal AI assistant for olive growers, enabling voice-based question answering in Tunisian Arabic (Darija) using a verified agricultural knowledge base
- Designed a CNN-based olive leaf disease classifier and integrated image-based diagnosis with contextual crop management guidance
- Implemented a RAG pipeline with anti-hallucination safeguards, grounding responses exclusively in trusted agricultural sources (FAO, EPPO, CIHEAM)

## OWASP Top 10 for LLM Applications

- Explored the OWASP Top 10 vulnerabilities for LLM applications and analyzed their impact on AI-powered systems
- Used LLMGoat to further investigate LLM security vulnerabilities through practical hands-on testing scenarios
- Hosted Mistral 7B locally and performed adversarial testing, including prompt injection attacks, to evaluate model security risks
- Mitigated identified vulnerabilities by implementing input filters, validation rules, and safer prompt-handling mechanisms

## Education

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**Higher Institute of Computer Science (ISI)**  
*Bachelor in Computer Science*

*Sept 2022 – June 2025*

## Skills

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**AI & Machine Learning:** Machine Learning, Deep Learning, NLP, Computer Vision, Reinforcement Learning, Supervised & Unsupervised Learning, Anomaly Detection, Generative AI

**LLMs & GenAI:** Large Language Models (LLMs), Prompt Engineering, RAG (Retrieval-Augmented Generation), Fine-Tuning, LangChain, LlamaIndex, AI Agents, Multi-Agent Systems

**MLOps & Deployment:** REST APIs, HuggingFace, Vector Databases (Pinecone, ChromaDB, FAISS), Model Monitoring, Git/GitHub

**Programming & Data:** Python, Bash, JSON, Automation Scripting, Data Preprocessing, Feature Engineering, Pandas, NumPy

**AI Security & Safety:** LLM Security, Prompt Injection Defense, Responsible AI, Bias Detection

## Certifications

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**Building LLM Applications With Prompt Engineering** Nvidia, April 2026

**Claude code in action** Anthropic, March 2026

**Azure AI Fundamentals** Microsoft, November 2024

**Python** Kaggle, September 2024

## Languages

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English: Fluent    French: Fluent    Arabic: Native