Mahdi Chekir

 ♦ Ariana, Tunisia
 Imahdi.chekir@supcom.tn
 Imahdi.chekir@supcom.tn

SUMMARY

I am an ICT engineering student at SUPCOM with expertise in machine learning and Generative AI. I ranked 10th in the national pre-engineering exam and am currently pursuing a degree in ICT Engineering, supported by a strong foundation in advanced software development from my studies in Computer Science.

Education

Higher School of Communication of Tunis

Sept 2023 – Present

ICT Engineering Degree

• Relevant Coursework: Big Data, Cloud Computing, Artificial Intelligence, UML and Networking.

Preparatory Institute for Engineering Studies of Monastir

Sept 2021 - Jun 2023

Pre-Engineering Studies

 \circ Maths - Physics: Ranked 10/1200

Pioneer high school of Monastir

Sept 2017 - Jun 2021

Secondary Education

• Experimental Sciences Baccalaureate

Experience

Insightfull.pro

Jul 2024 - Aug 2024

DevOps intern

- Learned the basics of Docker, including images, containers, and related concepts.
- Created several Docker images for existing projects to facilitate future deployment.
- Developed strong teamwork skills, adhered to deadlines, and gained valuable experience working under the guidance of senior engineers.

Projects

Food Classification Project

Nov 2024

 Designed and trained a Convolutional Neural Network (CNN) with PyTorch to accurately classify food images across multiple categories.

Full-Stack Health & Fitness Web Platform:

Dec~2024

• Designed and built a full-stack web platform promoting healthy living, featuring personalized workouts, nutrition guidance, motivational content, and an integrated e-commerce store.

AI-Powered Smart Navigation App

Feb 2025 - Present

• Developed a Flutter mobile app integrating OpenStreetMap (OSM) for real-time navigation, implementing Dijkstra's algorithm and dynamic route optimization based on live traffic conditions.

Multimodal AI Chatbot with Web Search and Voice Input

Mar 2025

• Developed a conversational AI assistant with Streamlit, integrating voice and text recognition, Groq's Gemma 2 model, LangChain, and real-time web search for dynamic and up-to-date user interactions.

AI-Powered Math Problem Solver and Knowledge Assistant

Mar 2025

• Built a Streamlit app integrating Groq's Gemma 2 model with LangChain, enabling math problem solving, logical reasoning, factual retrieval, and step-by-step solution generation through multi-tool agents and Wikipedia search integration.

Skills

Programming Languages: Pyhton, C++, C, JavaScript, Dart Web Technologies: HTML, CSS, Node.js, Express, Laravel

Database Systems: Neo4j, ChromaDB, Qdrant, FAISS, MySQL, Firebase, MongoDB

Data Science & Machine Learning: PyTorch, LangChain, Numpy, Pandas

DevOps & Version Control: GitHub Actions, Docker

Competitions

2nd Place – ZEN Challenge, IEEE TSYP Competition

Nov 2024

IEEE Sup'Com Student Branch

 Developed a virtual try-on mobile app for clothing stores, allowing users to visualize outfits on themselves and enhance their shopping experience.

2nd Place – CAS Challenge, IEEE TSYP Competition

Nov 2024

IEEE Sup'Com Student Branch

• Built a smart home prototype using Arduino, cardboard, and plastic, with real-time control and automation via a custom mobile app.

AI Anatomy Hackathon

Apr 2025

Google Developer Student Club - Sup'Com Tunisia

Developed an NLP-powered model that emulates a medical expert by analyzing patient condition descriptions and accurately answering related diagnostic questions.

Volunteering

Vice-president

Jul 2024 - Present

Sup'Com Junior Entreprise

• Managing quality standards and process optimization.

Active member

Oct 2023 - Present

IEEE Sup'Com Student Branch

• Assisting with technical challenges and supporting events organization and execution.

Additional Informations

Languages: Arabic (Native), English (B2), French (B2), Spanish (A1)