

# Nour Firas Hijazi

Lebanon, Beirut  
(+961)-78-996-590  
[noorhijazi.12.2003@gmail.com](mailto:noorhijazi.12.2003@gmail.com)

## OBJECTIVE

---

highly skilled and innovative machine learning engineer. Critical thinker, employing analytical reasoning to effectively address complex challenges. I am also adept at collaborating within teams, leveraging my strong interpersonal skills to foster a cooperative and productive work environment. With a strong focus on building scalable and production-ready AI solutions, I conduct comprehensive testing and fine-tuning of AI models accordingly, proactively identify performance bottlenecks, and expertly resolve issues to ensure robust, reliable, and optimized deployment in enterprise environments.

## EDUCATION

---

### BEIRUT ARAB UNIVERSITY

*Bachelor of Electrical and Computer Engineering*

### Lebanese Evangelical School

*Secondary School Diploma*

## ACADEMIC PROJECTS

---

### AI-Powered Crop Monitoring System Using YOLOv11 and IoT Sensors

- Developed a cutting-edge agricultural monitoring solution leveraging the latest YOLOv11 object detection model to accurately identify crop ripeness and detect diseases achieving high accuracy in both models.
- Integrated data collection through a rover equipped with a high-resolution camera and soil sensors, capturing real-time environmental and crop condition data.
- Designed a web-based dashboard for visualization and analytics, providing farmers with immediate insights to optimize crop management and resource allocation.
- Utilized NPK sensor to collect essential soil data.

### Diabetes Prediction with MLOps Deployment

- Developed a machine learning model to predict diabetes risk using health metrics dataset.
- Implemented end-to-end AI/ML workflow including model training, validation and optimization.
- Containerized the application using Docker for consistent deployment environments.
- Deployed the solution on Kubernetes for scalable, production-level cloud orchestration.
- Gained practical experience in MLOps practices integrating ML model development with cloudnative deployment.

### **AI Chatbot with GPT-4 and Retrieval-Augmented Generation (RAG)**

- Implemented an AI-powered chatbot using GPT-4 API integrated with a document retrieval system based on RAG.
- Fine-tuned prompt engineering to enhance chatbot relevance and contextual understanding.
- Designed backend services in Python for seamless integration with enterprise systems using REST APIs.

### **Scikit-learn Machine Learning Prototype with Streamlit UI and Scalable Deployment**

- Developed a prototype machine learning model using Scikit-learn for predictive analytics.
- Created an interactive user interface with Streamlit to visualize model insights and predictions.
- Containerized the application with Docker to ensure consistent development.
- Deployed the solution on a Kubernetes cluster (Minikube).
- Demonstrated skills in end-to-end AI/ML application development, from algorithm implementation to cloud deployment.

## **LANGUAGES**

---

Arabic (native)

English(proficient)

Dutch(novice)

## **ADDITIONAL SKILLS**

---

- Technical skills: Python, TensorFlow, PyTorch, Keras, OpenCV, YOLO, GPT, Langchain, Docker, Kubernetes, AWS, MLOps.
- Expertise in AI model development, computer vision, natural language processing, large language model fine-tuning, cloud deployment, and collaborative software engineering practices.

## **CERTIFICATIONS**

---

- OpenAI ChatGPT Prompt Engineering for Developers
- OpenAI Introduction to Neural Networks