#### MohamadBaker YEHYA

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### **Summary**

Aspiring AI Engineer with a solid background as a Full Stack Developer and specialization in Deep Learning and Machine Learning. Experienced in developing web applications and implementing AI models for practical problem-solving. Eager to apply my programming skills and AI knowledge to contribute to innovative projects and grow in the field of artificial intelligence.

#### **Projects**

# PDF-RAG-FastAPI – Retrieval-Augmented Generation (RAG) Project

- Used SentenceTransformers to generate embeddings and FAISS for semantic search over PDF documents
- Integrated Ollama LLM locally to provide context-aware question answering.
- Developed a FastAPI backend to serve the Q&A system efficiently.
- Built and tested a minimal front-end to interact with the backend in real time.

## **Chest X-Ray Disease Detection – Deep Learning Project**

- Built a deep learning model to classify chest X-ray images as Normal or Pneumonia
- Preprocessed images: resizing, normalization, and data augmentation to handle class imbalance and reduce overfitting.
- Evaluated model using accuracy, precision, recall, F1-score, and confusion matrix.
- Visualized training and validation performance (loss & accuracy curves).

#### Credit Card Fraud Detection – Unsupervised Machine Learning Project.

- Built a machine learning model to detect fraudulent credit card transactions using real-world data.
- Performed data cleaning, preprocessing, and handled severe class imbalance using undersampling techniques.
- Evaluated model performance using accuracy, precision, recall, F1-score, and confusion matrix.
- Visualized results and comparisons through plots to interpret model effectiveness.

### Education

# Lebanese International University

Bachelor of Sciences Computer Science

Beirut 2022-Present

#### Skills

Programming Languages: Python, Java, Dart, SQL, PHP

Machine Learning & AI: Scikit-learn, TensorFlow, PyTorch, SentenceTransformers, RAG, LLMs,

Fine-Tuning

**Data Visualization:** matplotlib, seaborn, Plotly **Web Development:** HTML, CSS, JavaScript

Tools & Platforms: Git, GitHub, Jupyter Notebook, VS Code, Ubuntu, Google Colab

Database: MySQL, SQLite, FAISS

#### Languages

English: Full professional proficiency | Arabic: Native | French: Intermediate