Ahmed Achour

Sousse, Tunisia | achourahmed21@gmail.com | +216 29 106 529 | linkedin.com/in/ahmed-achour

Summary

Machine Learning Engineer with expertise in NLP, LLM integration, and cloud-based AI solutions. Skilled in optimizing ML workflows and deploying scalable systems.

Experience

Machine Learning Engineer, Linguamind Tunis, Tunisia   Nov 2024 – Present

- Developed and deployed an LLM-powered personalized newsletter system, where each watcher focuses on a specific type of foresight (strategic, regulatory, etc.), delivering regular updates to clients. This solution helps top North African banks and governmental institutions save time, stay informed, anticipate risks, and make better decisions.
- Automated data pipelines for scraping and extracting relevant information from news websites and social media platforms, streamlining the process of gathering insights.
- Created a reusable scraper boilerplate as an internal project, to streamline development of future web scraping projects.
- Orchestrated workflows using AWS Fargate and Cron jobs to ensure timely execution of newsletter generation and updates, optimizing for cost efficiency and scalability through serverless architecture.
- Provisioned and managed infrastructure with Terraform, and designed a PostgreSQL database for storing and managing newsletter data, implementing Flyway for schema migrations.

Machine Learning Engineer, Quicktext Sousse, Tunisia   2023 – 2024

- Participated in improving a multi-class classification model performance by using SHAP and Ferret benchmark for detailed evaluation, boosting accuracy by 7%.
- Played an active role in managing the end-to-end machine learning lifecycle, contributing to continuous model refinement and enhancement for intent classification.
- Assisted in guiding LLM output by designing effective prompts and utilizing prompt chaining. Contributed to fine-tuning the LLM to optimize performance for specific use cases and helped implement a RAG system to enhance access to domain-specific data.

Freelance Developer, Self-Employed Sousse, Tunisia   Sep 2023 – Oct 2024

- Developed a document processing pipeline for accurate text extraction from historical documents (19th century) using data pre-processing techniques and OCR.
- Built a question-answering API powered by GPT-3.5 for a specific book corpus.
- Performed text transliteration from English to Arabic with GPT-3.5, followed by text clustering of hotel names using Agglomerative Hierarchical Clustering.

Software Tester, Dräxlmaier Sousse, Tunisia   Sep 2023 – Oct 2024

Computer Vision Intern, ENOVA Robotics Sousse, Tunisia   Oct 2021 – Aug 2022

- Fine-tuned a CGAN model (pix2pixHD) for robotic anomaly detection in wire fences, using synthetically generated images.

Education

Université de Technologie de Sousse, Professional Master degree in Big Data   2020 – 2022

Coursework: Machine Learning, Cloud Computing, Deep Learning, Big Data Analytics, Statistical Analysis, Artificial Intelligence, Database Systems, NLP, Computer Vision.

École Polytechnique de Sousse, National Diploma in Civil Engineering   2014 – 2019

Courses & Trainings

CS231n by Andrej Karpathy	Winter 2016
NYU Deep Learning by Alfredo Canziani	Spring 2021
Complete Data Science Bootcamp by Udemy	
Datacamp: Developing AI Applications Track	

Technical Skills

Programming: Python, SQL, Bash

ML & NLP: PyTorch, scikit-learn, spaCy, SHAP, RAG, prompt engineering, fine-tuning

MLOps & Data: Docker, Terraform, Flyway, PostgreSQL

Cloud: AWS (Fargate, ECS, S3, IAM), Serverless orchestration

APIs & Frameworks: FastAPI, Flask

Tools: Git, Linux, Pandas, NumPy

Languages

Arabic: Native   French: Native   English: Professional