Yahya Momtaz



- Italy
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Programming Python, R

Machine Learning & Al

PyTorch, TensorFlow, scikit-learn, MLflow, Hugging Face Transformers, LangChain, OpenAl SDK

Database

SQL, Neo4j

Data & Visualization

Pandas, NumPy, Matplotlib, Plotly, Streamlit, Tableau

Cloud & DevOps

Docker, Kubernetes (familiar), Git, GitHub Actions (CI/CD), Google Cloud Platform (GCP), AWS

Frontend & UI/UX

React, JavaScript (ES6+), HTML, CSS, SwiftUI, Responsive Design, Accessibility (VoiceOver), UI/UX Prototyping

Web Development

Flask, React, JavaScript (ES6+), HTML, CSS, SwiftUI

(1) Certificates

https://www.linkedin.com/in/yahyamomtaz-601b34108/details/certifications/

Professional Experience

Researcher (Data Science & Machine Learning)

University of Naples Federico II

05/2024 - present | Naples, Italy

- Fine-tuning language model for early printed books to support research enrichment over 3,000 historical texts.
- Fine-tuned deep learning models using PyTorch, achieving a 15% reduction in character error rate (CER) for early printed books, enhancing the accuracy of automated transcriptions.
- Deployed machine learning models to enhance over 7,500 historical manuscript images, specifically reducing bleed-through and improving overall readability.
- Launched the project website (Fullstack): magic.unina.it

Data Scientist (internship)

Spici srl

01/2022 - 08/2022 | Naples, Italy

- Managed the design and implementation of a REST API for Neo4j, automating common tasks and diminishing graph database implementation time by 40% for data scientists on the team.
- Performed clustering analysis in Python on multiplatform client data to identify key customer segments.
- Conducted a customer segmentation model using clustering analysis in Python, identifying three highpotential customer groups that improved marketing campaign conversions by 4%.

Software Engineer

Saba INV

06/2018 - 11/2020 | Tehran, Iran

- Designed and maintained reliable systems ensuring secure and stable network environments
- Developed and maintained automation scripts to streamline network setup and monitoring

Master in Data Science

University of Naples Federico II 10/2021 - 03/2024 | Naples, Italy

Apple Developer Academy

09/2022 - 06/2023 | Naples, Italy

Collaborated in a team to develop an audio game through brainstorming and user research sessions.

The app is available on the App Store \square .

Bachelor in Software Engineering

Karaj Azad University

09/2011 - 09/2016 | Karaj, Iran



English - Fluent

Italian — Conversational



Al Image API:

- Developed and deployed a real-time API for object detection and image enhancement using YOLO + PyTorch.
- Built backend with Flask, containerized with Docker, and deployed on GCP.
- Created a responsive JavaScript frontend for live interaction.

Live demo: https://aiimagelive.web.app ☑

Retrieval Augmented Generation (RAG) Chatbot:

- Developed a document-based QA chatbot for Italian legal texts, combining LLMs + IR techniques for accurate, context-aware answers.
- Implemented backend in Python, web interface with Streamlit, and integrated text-mining algorithms.

Github: https://github.com/yahyamomtaz/ChatBot ♂

Prompt Analyzer

- Developed a Streamlit app for interactive dataset exploration with LLM-powered insights.
- Features include data summarization, plotting, and naturallanguage querying.
- Integrated OpenAI API for prompt-driven analysis.

Live Demo: https://pandasai-dataset-analysis.streamlit.app/ ☑

Publications

Preserving Clarity: The MAGIC project approach to ancient manuscripts ☑

Yahya Momtaz et al.

Presented at AIUCD Conference, Verona, Italy

Modular Pipeline for Text Recognition in Early Printed Books Using Kraken and ByT5 ☐

Yahya Momtaz et al.

Electronics 2025, 14(15), 3083