SVEVA PEPE

AI/ML Engineer

Rome, Italy | (+39) 328.44.23.627 | sveva.pepe@gmail.com

Open to relocation for on-site roles in Europe

PROFESSIONAL PROFILE

AI/ML Engineer with several years of experience applying NLP and LLM techniques to legal and administrative documents in the public sector. Over the past 12 months, transitioned from client delivery to product development, leading the architectural design of an enterprise platform for contract lifecycle management, built on microservice orchestration, LLM agents (LangChain/LangGraph), and large-scale document processing pipelines. Strong background in prompt engineering, named entity and relation extraction, and evaluation metric design for NLP systems in government contexts.

WORK EXPERIENCE

AI/ML Engineer — Almawave (Almaviva Group), Rome, Italy

March 2022 – Present

Product Development (2025 – Present)

- Led the architectural design of an enterprise document analysis module, developed in Python with a microservice architecture (FastAPI) and workflow orchestration (Temporal.io)
- Built APIs and containerized services (Docker, Kubernetes/AKS), with LLM agent orchestration based on LangChain/LangGraph, a document database (MongoDB), and cost-tracking systems for stage-level attribution
- Led technical coordination and key architectural decisions (workflow engine selection, data modeling, service boundaries), working with product management to shape the product roadmap
- Built a LangGraph-based agent for automated test generation (pytest/httpx), integrated into the team's pre-deployment testing framework (Temporal WorkflowEnvironment, testcontainers)

Client Delivery (2022 – 2025)

- Developed LLM-based solutions using Named Entity Recognition (NER) and relation extraction techniques for judicial documents for public administration clients, including fine-tuning transformer-based models (BERT, BART)
- Designed specialized prompt engineering strategies for legal terminology and complex sentence structures
- Defined custom evaluation metrics and standardized data preprocessing workflows for judicial and administrative documents, improving efficiency across multiple government projects

Performance Engineer — Moviri, Milan, Italy

November 2021 – March 2022

- Optimized performance testing frameworks using LoadRunner, AppDynamics, and Instana

SKILLS

AI & LLM: LangChain, LangGraph, Pydantic AI, Prompt Engineering, Agent Design (ReAct, multi-step reasoning, tool-calling), RAG, NER, Relation Extraction, Text Classification, Azure OpenAI

Backend & Orchestration: Python, FastAPI, Temporal.io, Docker, Kubernetes (AKS)

Data & Document Processing: MongoDB, Docling, PyMuPDF

Cloud & DevOps: Azure DevOps, CI/CD, Git, pytest, Locust

EDUCATION

M.Sc. in Artificial Intelligence & Robotics — Sapienza University of Rome

September 2019 – October 2021

- Graduated 110/110 cum laude
- Certificate of Excellent Student, Sapienza University of Rome, 2023

LANGUAGES

Italian — Native

English — B1