Refik Can MALLI *Vertical Technical Leader*

Milan, Italy

https://github.com/rcmalli

https://linkedin.com/in/refik-can-malli/

Google Scholar

Work Experience

Vertical Technical Leader Feb 2025 – present | Bergamo, Italy

Orobix

- Led development of Generative AI solutions combining VLMs, LLMs, vision, OCR, and layout models to power advanced PDF understanding for **TekiDoc** , improving document automation and information extraction.
- Designed and deployed **agentic-workflows** on Azure using LangGraph and FastAPI framework, including custom agent and tool design and MCP server integration for scalable, modular orchestration.

Data Scientist Jun 2021 – Feb 2025 | Bergamo, Italy

Orobix

- Built and optimized deep learning models using images (classification, segmentation, anomaly detection) for the pharmaceutical and packaging sectors and contributed to **AI-go** .
- Applied computer vision and deep learning for plant disease and fruit quality analysis, improving yield quality and efficiency across on-field and post-harvest processes for **QUALYFruit** .
- Developed **reinforcement learning agents** in PyTorch for simulations and games, achieving improved decision efficiency and seamless cross-platform integration.

Deep Learning Research Intern Nov 2020 – May 2021 | Milan, Italy

Polimi Artificial Intelligence and Robotics Laboratory

- Designed and trained **meta-learning algorithms** using distributed on-premise GPU infrastructure with PyTorch, improving training efficiency and scalability.
- Built efficient project tracking and experiment configuration tools to streamline AI model training workflows.

Education

Master of Science, Computer Science and Engineering

Politecnico di Milano

Bachelor of Science, Electronics and Communication Engineering

Istanbul Technical University

Projects

Quadra (Open Source Software)

Maintained and designed a reproducible deep learning experiment management framework integrating PyTorch Lightning and Hydra.

Robustness of Deep Neural Networks via Meta Learning and Feature Visualization (Master's Thesis)

Investigated adversarial attacks and defense methods in neural networks, analyzing robustness and vulnerability trade-offs.

Age and Gender Analysis from Facial Images (Bachelor's Thesis)

Developed deep learning models for facial age and gender estimation and deployed edge inference Android apps; Published and presented **a research paper** in ***CVPRW'16*** .

Skills

Programming & Frameworks: *Python, C, PyTorch, JAX, MLflow, FastAPI, Langgraph, Langfuse*

AI & Machine Learning: *VLMs, LLMs, RL, Supervised Learning, Anomaly Detection, Context Engineering, MCP, RAG*

Computer Vision: *Object Detection, Segmentation, OCR, Layout Understanding, Image Processing*

MLOps & DevOps: *Docker, Terraform, Azure, GCP, Git, Bitbucket, Model Optimization, Experiment Tracking*