MARCO PETRI

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SUMMARY

PhD student in deep learning at AIRLab, working on representation learning for world models and embodied robotics. Previously a software engineer and data scientist in industry, building ML models, microservices, data pipelines, CI/CD automation, and infrastructure as code.

EXPERIENCE

Data Scientist

Intesa Sanpaolo | Milan, Italy — Nov 2025 – Jan 2026

Designed and maintained machine learning models for anti-fraud risk classification systems and performance monitoring using Python, Scikit-Learn, Polars and PySpark.

Software Engineer

Reply | Milan, Italy — Oct 2023 – Nov 2025

Led a 3-person team migrating an on-premises application to Azure, building Databricks ELT pipelines and automating infrastructure with Terraform.
Developed backend services in Agile teams, including Python/FastAPI microservices on AKS and a Java Spring Boot e-commerce platform.
Engineered a RAG-based chatbot on Azure available to 10K+ users analyze documents, using LangChain and LangGraph.

EDUCATION

Doctor of Philosophy, Information Technology

Politecnico di Milano | Milan, Italy — Feb 2026 – Present

Master of Science, Computer Science and Engineering

Politecnico di Milano | Milan, Italy — Sep 2020 – May 2023

Bachelor of Engineering, Computer Science and Engineering

Politecnico di Milano | Milan, Italy — Sep 2017 – Sep 2020

PUBLICATIONS

[1] Niccolò Zangrando, Piero Fraternali, **Marco Petri**, Nicolò Oreste Pinciroli Vago & Sergio Luis Herrera González, 2023, “Anomaly detection in quasi-periodic energy consumption data series: a comparison of algorithms”. Energy Informatics. https://doi.org/10.1186/s42162-022-00230-7.

[2] Niccolò Zangrando, Piero Fraternali, Rocio Nahime Torres, **Marco Petri**, Nicoló Oreste Pinciroli Vago & Sergio Herrera, 2022, “ODIN AD: A Framework Supporting the Life-Cycle of Time Series Anomaly Detection Applications”. Advanced Analytics and Learning on Temporal Data. https://doi.org/10.1007/978-3-031-24378-3_12.

TEACHING

Teaching Assistant, Principles of Software Engineering and Data Bases

Università Vita-Salute San Raffaele | Milan, Italy — Fall Semester 2026

CORE SKILLS

Software architecture, system design, ML model development and evaluation, Python, PyTorch, NumPy, PySpark, Databricks, LangChain, Git, Docker, CI/CD, Terraform