■ ddperini@gmail.com

Verona, Italia

**\** +393384779193

## **Profile**

Master's in Applied Mathematics with 4+ years of proven hands-on experience designing and delivering production-ready ML and AI solutions for industrial and business challenges.

Track record in AI Engineering, deploying NLP pipelines, RAGs and agentic applications.

Proven experience in architecting end-to-end ML workflows, from data ingestion and feature engineering to deployment and maintenance.

Inspiring team leader and mentor, with experience in coordinating cross-functional teams and engaging stakeholders in dynamic, multi-project environments to drive innovation and impact.

# **Employment History**

ML & AI Lead Engineer, SBE - VARVIT, Monfalcone

January 2024 — Present

- LLM engineering: research, prompt engineering, tuning, evaluation, quantization and fine tuning of proprietary and open LLM.
- Al Engineering: deployment NLP pipelines such as RAG, agentic applications, voice-to-text, summarization, translation, document search, text-to-code.
- Full-stack developing: RESTful APIs and microservices development and deployment with Python, UX/UI developing with Javascript (Svelte and Angular).
- Cloud services manager: GCP, AWS and OVH.
- Architecture engineering: development, deployment and maintenance of our products via CI/CD pipelines, **Docker** containerization and **Kubernetes**.
- Team leading and project management: coordination, training and mentoring of other team members, project ownership, team building, reporting, stakeholder involvement, external consultants coordination.
- Python libraries and frameworks: PyTorch, Transformers, Hugging Face, Pandas, Flask, Scikit-learn, Langchain, LangGraph, SpaCy, Gradio, Tensorflow, OpenCV.
- CI/CD tools and frameworks: ArgoCD, Git, GitHub, Docker, Kubernetes and Jira.
- Databases: PostgreSQL, ElasticSearch, ChromaDB, MongoDB.
- Experimentation with new technologies and frameworks: Vertex AI, OpenAI models, Meta, Grok, Manus, Anthropic, Alibaba (Qwen), DeepSeek, Midjourney.

# Freelance AI & Innovation business consultant, Verona

January 2023 — Present

- Consulting services provided to companies across multiple sectors, to help stakeholders take the right decision in their first steps adopting Al.
- During this experience I helped company from a diverse set of industrial sectors:
   Logistics and Transportation, Human Resources, Manufacturing, Marketing and
   Communication

## Details

Nationality

Italiana

Date / Place of birth

20/01/1996

Quito, Ecuador

## Skills

LLMs evaluation, fine tuning, quantization

Designing NLP pipelines and agentic applications

Designing production-ready ML systems

Software engineering (Python)

Application deployment, versioning and CI/CD

Cloud services management (GCP, AWS, OVH)

Team Leading & Project Management

**Business Analysis** 

Mentoring and tutoring

Private consulting

# Languages

Italian

English

Spanish

# Data Scientist, HPA, Trento

September 2021 — January 2024

- Machine Learning engineering: Data analysis, feature engineering, metrics evaluation and development, model development, training, testing and evaluation.
- Al Engineering: prompt engineering, development and deployment of NLP pipelines for RAG and classification.
- Business Analysis: stakeholders involvement, requirements collection, definition
  of objectives, elicitation, reporting, task evaluation. (ECBA certification was
  work-in-progress)
- Team leading and project management: task management, team coordination,
- reporting, client management, deliverable production.
- Python libraries and frameworks: Pandas, NumPy, lightGBM, Scikit-learn, NLTK,
   OpenCV, Tensorflow, SpaCy, SciPy, Matplotlib, Seaborn, Flask, Hugging Face,
   Polar.
- Software engineering: relational databases (MySQL), NoSQL databases, design patterns, TDD, BDD, product deployment, versioning, best practices.

Freelance tutoring for Math, Physics and Computer Science, Verona

April 2016 — December 2023

- Math and physics tutoring for 20+ students from middle school, high school, technical and professional institutes and bachelor students.
- I tutored bachelor students for calculus, linear algebra, geometry, probability, statistics, computer science, etc.
- I obtained very high students' satisfaction, proved by their accomplishments and improvements with their involvement, motivation and commitment.

#### Education

Master course in Mathematics, Università degli Studi di Verona, Verona 2018 – 2023

Mathematics applied to Machine Learning and Data Science.

Thesis title: Twitter bot identification via CNNs-based image recognition

Final degree mark: 105/110

Bachelor Course in Applied Mathematics, Università degli Studi di Verona, Verona

2015 — 2018

Mathematics applied to numerical modeling for life sciences.

Thesis title: A ri-derivation of the Gauss linking number.

Final degree mark: 103/110

IT Expert, ITIS G. Marconi, Verona

2010 — 2015

Vocational High School for IT.

Secondary school diploma.

School-leaving examination mark: 94/100

## **Courses**

Advanced Topics in Financial Engineering, ARPM



2021

# ECBA (not completed), IIBA

2023

Al Week, Rimini

2024

Attented as partecipant and SBE representative.

Future Grid Day IKN, Milano

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Speaker as HPA & Terranova representative: Predictive workforce management.