# DANIELE D'AVINO

MACHINE LEARNING ENGINEER: CLOUD AI SPECIALIST

Milano/Domodossola – Italy | Phone: +393474375275 | Email: <u>daniele.davino12@gmail.com</u> <u>LinkedIn | GitHub | Personal Website</u>

### **SUMMARY**

Machine Learning Engineer with experience in transforming raw data into meaningful insights through the use of Al (Data-centric Al, ML Modeling, Al applications, MLOps, Generative Al) and statistics for better decision-making. Proven expertise in mathematical modeling, machine learning, and statistical techniques. Skilled in delivering technical leadership and managing teams of data scientists and analysts.

#### **SKILLS**

Math and Statistics: operative research (optimization), Bayesian statistics, simulation techniques, graph theory.

**Dev and Programming**: Python (Scikit-learn, PyTorch, Networkx, Streamlit, OpenCV), Docker, Git, SQL, Google Cloud (Cloud Run, Vertex AI, Big Query), JupyterLab, API, Generative AI (LLM), Linux environment.

**Data analysis and Machine learning**: Factor analysis, Dimensionality reduction, Network analysis, Regression, Classification, Clustering, Statistical programming, WebApp/POC prototyping, Embedding Techniques, NLP.

### **WORK EXPERIENCE**

## Machine Learning Engineer

02/2022 - Present

Sky Group, Milano

Work within the anti-piracy and cybersecurity team to develop network monitoring tools. I'm involved in the following tasks:

- Machine Learning development:
- o Optimizing algorithms for object detection tool, achieving a 10% improvement in accuracy.
- Developing Generative AI tools for language and computer vision tasks, reducing execution time by 50%.
- o Developing and cloud-deploying Machine Learning models for monitoring IP activities over broadcast networks.
- o Developed an optimization engine (ILP) to minimize the cost of API requests: saving expenses for about 30%.
- Cloud Engineering and deployment:
- Participating in the cloud migration strategy, transitioning from local VMs to a microservices architecture inside GCP, resulting in a 30% reduction in execution time and enhanced logging.
- o Conducting code reviews and debugging, ensuring robust and efficient team output.

**Data Scientist** 06/2018 – 02/2022

### Wealthype, Milano

Developed and maintained machine learning applications for both supervised and unsupervised analysis on mixed structured data. Led data enrichment, simulation, and optimization activities using a Bayesian programming framework.

- ML applications for wealth management sector that result in an average 5% increase in customer profitability.
- International PATENT about customized financial portfolio construction method.

### **Quantitative Analyst**

02/2016 - 06/2018

AdviseOnly, Milano

Worked on the digital asset management platform where my main focus was on developing and managing investment strategies for different financial goals pursued by end customers.

### **MAIN PERSONAL PROJECTS**

<u>Decision Intelligence Application</u>: web application developed for addressing fraud detection and clustering customers. Frontend and backend deployed on GCP with API management.

Meteo Adverse Classifier: classification algorithm for predicting climate adverse future condition with Open Data.

Network Analysis Pipeline: Analysis of submarine telecommunication network via graph theory.

### **MAIN EDUCATION & CERTIFICATIONS**

Machine Learning Engineering Curriculum at FourthBrain.ai

Google Cybersecurity Certificate at Google-Coursera

Deep Learning Specialization at DeepLearning.Al

Master degree in Quantitative Finance at Università degli studi di Milano – Bicocca