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 Platform (Cloud Run, Vertex AI, Big Query), API, Generative AI (LLM), Linux, Kubeflow Pipeline, Terraform.

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:
- 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