Simone MAGGI
Machine Learning and Software Engineer

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- Rome, Italy
- i Available for relocation in Toulouse, France.

Working as a machine learning engineer, I have bridged the gap between the latest research findings and real-world business use cases. My approach is organized, scientific and pragmatic, even though I love mind-wandering and chaotic team brainstorming sessions, which I love. My interests and academic background encompass math, statistics, and software engineering.

☰ SKILLS

Statistical Machine Learning	Knowledge of **Statistics** (Frequentist, Bayesian, Hypothesis Testing). Supervised/Unsupervised ML models in **Scikit-learn**. Deep Learning Models with **Pytorch**(CNN, GAN, Adversarial Autoencoder)
Programming	Designing Object-Oriented architectures using modern **C++, Python, Java**.
Micro-Services Architectures	Containerization with **Docker** and Docker-Compose. Worked with Nginx, Keycloack, Redis, RabbitMQ, Kafka.
Database	Relational databases SQL, NoSQL Elastic Search
OS and utility	Unix CLI, Visual Studio Code, GIT, Jenkins.

💼 WORKING EXPERIENCE

Today
October 2022

Machine Learning and Software Engineer, HCL SOFTWARE, Italy
- **Research**. Bringing new ideas and projects through POC and presentations.
- Worked on **multiple projects**, improving functionalities and bug fixing :
  - HCL AIDA : improved the ML Model Anomaly detection on multivariate time series.
  - HCL Accelerate : implemented a Bayesian Statistical Model (PyMC) for risk management in Agile software development.
  - HCL Clara : added functionalities in Rasa backend, RAG question answering using Langchain.
- **Mentoring** and tutoring newly hired colleagues, interns and teams in an internal Hackathon.

Python | Anomaly Detection | PyMC | Docker | Micro-services Architecture | RAG | Langchain

September 2022
April 2021

Research and Developmnet Engineer, CPM S.P.A., Italy
- AI for Robotics : Developed a system for navigation of Autonomous Guided Vehicle (SLAM LiDAR navigation), using cutting-edge technology in the field.
- Communication : Clear and simple presentations to deliver the results to the Stakeholders (Durr, Germany).
- Dynamic environment : Master a new subject 'AGV & SLAM Navigation' independently while delivering and testing piece of software(C++, Python, C#).

C++ | C# | WPF | SLAM Navigation

June 2018
March 2018

Machine Learning intern, SAN S.R.L., Italy
- Supervised Classification of ECG signals : ETL : Filter, Normalize and Label the biometric signals, and upload the processed data in a DataBase. ML : Implemented algorithm to extract biometric indicators (Python) from data to feed a Neural Network(TensorFlow) (86% accuracy). Train directly a multilayer 1-D CNN (Keras) on the signal (95% accuracy).

Python | GIT | Keras | Tensorflow

🎓 EDUCATION

2021	M. Sc. Stochastics and Data Science, University of Turin : 110/110 cum Laude, **Thesis** : Semi-Supervised Irregular heartbeat detection using Deep Generative modelling.
2018	Bachelor in Computer Engineering, Politecnico of Turin : 104/110

🌐 LANGUAGES

Italian ●●●●●
English ●●●●○