

Pietro Cagnasso

✉ pietro.cagnasso99@gmail.com —  [pietrocagnasso](#) —  [pietro-cagnasso](#)

🏠 February 20, 1999 — 📍 Alba and Turin, Italy



I am a Data Science and Engineering graduate with a strong foundation in Machine Learning and practical experience gained through research projects led by expert mentors. Deeply motivated by open scientific challenges, I aim to contribute to the advancement of the field by pursuing a Ph.D. or working in an AI-focused company. In my spare time, you can find me reading books of all kinds, bouldering, or just walking immersed in nature.

Experience

Sense Reply

Turin, Italy

SW and ML Consultant

Jan 2025 - **Present**

- Redesigned and implemented the IT infrastructure for an EV charging point management system to support multi-tenancy and reduce operational costs
- Building an internal **NLP-based** solution for automatic ticket labeling to reduce time-to-resolution for customer support cases, fine-tuning a Llama model for domain adaptation

Vandal @ PoliTO

Turin, Italy

Research Assistant

Jan 2024 - Jan 2025

- Caldarola, D., **Cagnasso, P.**, Caputo, B., & Ciccone, M. "Beyond Local Sharpness: Communication-Efficient Global Sharpness-aware Minimization for Federated Learning". In Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition, 2025 ([arXiv](#) , [repository](#) )

Nova Stark

Turin, Italy

Software Developer & Data Scientist

Aug 2023 - Dec 2023 and Aug 2024 - Jan 2025

- Designed a **clustering-based** approach to highlight hygrothermally similar areas for the piloting stage of a new product
- Automated critical processes and improved data visualizations to enhance proprietary software used to generate reports
- Explored in-barrel color analysis to **extract key oenological parameters** from sensor data

Education

Politecnico di Torino

Turin, Italy

M.Sc. in Data Science and Engineering · 110/110

Oct 2021 - Dec 2023

- Thesis: "Efficiency and Generalization in Federated Learning: Insights from Sharpness-Aware Minimization" supervised by Prof. Barbara Caputo, Drs. Debora Caldarola and Marco Ciccone

B.Sc. in Computer Engineering · 100/110

Oct 2018 - Jul 2021

Projects

Probabilistic Context Extraction For Extractive Highlights Extraction

[Report](#) 

Professors: Luca Cagliero, Moreno La Quatra

- Fine-tuned BART to generate scientific paper titles from abstract contexts
- Discovered **latent sentence distributions predictive of highlight-worthy content**, improving the state-of-the-art TExt algorithm

Understanding the Main Challenges of Federated Learning

[Report](#) 

Professors: Barbara Caputo, Debora Caldarola

- Explored **system and statistical heterogeneity**, and gradient inversion attacks in Federated Learning for Computer Vision

Sentiment Classification of Tweets

[Report](#) 

Professors: Elena Baralis, Giobergia Flavio, Giuseppe Attanasio

- Implemented **classical ML models** and **feature engineering** for sentiment classification on the Sentiment140 dataset

Volunteering

Italian Speaking Tutor

May 2024 - Present

- Helping immigrants improve their Italian speaking skills through weekly lessons organized by the local church

Computer Basics Tutor

Sep 2016 - Jun 2018

- Taught computer basics to Ferrero retirees in a non-profit organization

Skills

- Languages:** English (IELTS 7.0, May 2021), Italian (first language)
- Programming languages:** C, Java, **Python**
- Machine Learning:** **PyTorch**, Scikit-learn, JAX, HuggingFace, Weights & Biases
- Data:** Pandas, Numpy, Scipy, **Matplotlib**, Seaborn, Plotly
- Others:** GitHub, LaTeX, Slurm, **AWS**, Kafka

Rev. August 3, 2025

According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this resume.