MARTA MASTROPIETRO

📍 Resident: Pavia, Italy. Available for travel.

I authorize the processing of personal data contained in my curriculum vitae based on art. 13 GDPR 679/16.

WORK EXPERIENCE

Affiliated Scientist at RFF-CMCC EIEE

📅 Feb 2023 – Ongoing   📍 Milan, Italy

EDUCATION

Master of Science in Mathematical Engineering: Statistical Learning track

📅 Sept 2020 - Dec 2022   📍 Politecnico di Milano

Graduation grade: 110/110 with honors
Thesis: An evaluation of researchers' migrations in Europe using digital trace data

Erasmus +

📅 Jan 2022 - July 2022   📍 University of Oslo

Bachelor of Science in Mathematical Engineering

📅 Sept 2017 - Sept 2020   📍 Politecnico di Milano

Thesis: Why deep-learning AI's are so easy to fool: a review

TECHNICAL SKILLS

- Programming Languages: **C++**, **Python**
- Tools: **R**, **AMPL**, **MATLAB**
- Software: **Office Package**

LANGUAGES

Italian - mother tongue
English - C1

UNIVERSITY PROJECTS

A statistical investigation on researchers' migrations across Europe using ORCID data

📅 Apr 2021 - Nov 2022   📍 Politecnico di Milano

Investigate the migration patterns in Europe and build models aimed at policy proposal, identifying key investment areas.

A multi-armed-bandit strategy for e-commerce of cruise booking

📅 Apr 2022 - July 2022   📍 Politecnico di Milano

Explore *multi-armed-bandit* algorithms to determine optimal price configurations in e-commerce setting.

Comparing black box and white box classification. A case study on GTZAN music genres dataset

📅 Sept 2021 - July 2022   📍 Politecnico di Milano

Develop *CNN*s and *GLM*s for classification of audio files, exploring different techniques and comparing the two machine learning approaches.

A variational approach for novelty detection

📅 Sept 2021 - Jan 2022   📍 Politecnico di Milano

Adapt *variational* (optimization) techniques to efficiently solve novelty detection problems.

An overview of online learning with dueling bandits algorithms

📅 March 2022 - June 2022   📍 University of Oslo

Collect, compare and present advancements on Dueling Bandits methods.

RESEARCH

"Variational Inference for Semiparametric Bayesian Novelty Detection in Large Datasets," [Benedetti, Luca and Boniardi, Eric and Chiani, Leonardo and Ghirri, Jacopo and Mastropietro, Marta and Cappozzo, Andrea and Denti, Francesco], https://arxiv.org/abs/2212.01865, (2022) - *Preprint under review*

COURSES AND EXPERIENCES

Brattkort climbing certificate

📅 May 2022   📍 OSI Klatring, Oslo

Windsurf teaching

📅 Summer 2021   📍 Marina Maria windsurf, Olbia

Polimi Open Knowledge - Gestire il cambiamento

📅 Feb 2020   📍 Politecnico di Milano

CVC Sailing course

📅 Summer 2012,2014,2015   📍 CVC, Olbia

Acting course

📅 2015   📍 Ser Tea Zeit, Pavia