RICCARDO CADEI

Mathematical Engineer

Private information: @ riccardo.cadei@epfl.ch   📞 +39 3391232740   📍 Lausanne, Switzerland   🎂 16 November 1998 (ITA)
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Education

M.Sc. in Data Science
École polytechnique fédérale de Lausanne

📅 Sept 2020 – Aug 2022   📍 Lausanne, Switzerland

Relevant courses: Machine Learning, Applied Data Analysis, Artificial Neural Networks, Deep Learning, Systems for Data Science, Visual Intelligence.
Extra: Attending *'Mediterranean Machine Learning Summer School 2020'* organized by DeepMind.

B.Sc. in Mathematical Engineer   Vote: 110/110
Politecnico di Milano

📅 Sept 2017 – July 2020   📍 Milan, Italy

Associations: PoliMI Data Scientists, Associazione Ingegneri Matematici
Thesis: Optimization models for the planning of activities in an Oncology Day-Hospital.

Experience

École polytechnique fédérale de Lausanne

📅 Nov 2020 – present   📍 Lausanne, Switzerland

- **Research Assistant at VITA Lab**
  Introducing a causal formalism in motion forecasting and promoting robustness and reusability in Human Trajectory Prediction through Invariant Risk Minimization and modulare architectures. [1]
- **Teaching Assistant**
  in Introduction to Machine Learning for Bioengineers (BIO-322)
- **Summer Intern at MLO>iGH Lab**
  Developing a mobile app for (non-invasive) upper body posture detection using Deep Learning (supervised by Professor Martin Jaggi).
- **Research Assistant at LESO-PB Lab**
  Detecting available rooftop area to install photovoltaic panels from satellite images training a U-Net (FCNN) based model. [2]

L.O.L. Consultants

📅 Dec 2020 – Feb 2021   📍 [remote] Melbourne, Australia

- **Machine Learning Engineer**
  Detecting available rooftop area to install photovoltaic panels from high quality satellite images using Deep Learning.

Publications

[1] [SUBMITTED] Liu Yuejiang, Cadei Riccardo, and Alexandre, Alahi. "Towards Robust and Adaptable Motion Forecasting: A Causal Representation Perspective". In: *Workshop in Distribution Shifts at NeurIPS* (2021).

[2] Roberto Castello, Alina Walch, Raphael Attias, Riccardo Cadei, Shasha Jiang, and Jean-Louis Scartezzini. "Quantification of the available area for rooftop photovoltaic installation from overhead imagery using Convolutional Neural Networks." In: Special Issue of **Journal of Physics**: Conference Series, 2021.

Awards

Machine Learning

Generali Data Challenge	**2021**
Churn Classification Datahon: Best model and code out of 280 part.	
Oracle GraphML Contest	**2019**
1st pl. in the Kaggle final challenge of GraphML course at Politecnico di Milano in partnership with Oracle Labs (Zurich).	
ML4 Networking Contest	**2019**
1st pl. in the Kaggle final challenge of ML4 Networking course at Politecnico di Milano.	

Mathematics

International competition for mathematical and logical games	**2018**
5th national place (ITA), class L2.	
Grand Prix of Applied Mathematics	
5th national pl. out of 7500+ stud.	**2017**
6th national pl. out of 7500+ stud.	**2016**

Projects

For a structured summary of my projects visit my Personal Portfolio clicking **[here]** or scanning the QR Code on the right.

Coding

Machine Learning: Python , R , Julia
Deep Learning: PyTorch , Tensorflow
Math: MATLAB , Python , R , AMPL
Big Data: Spark , SQL , HDFS , AWS
Programming: Scala , C
App and Web: HTML , CSS , Andorid Studio

Languages

Italian: C2,   **English**: C1,   **French**: A1

Referees

Professor Martin Jaggi   **EPFL**
@ martin.jaggi@epfl.ch

Other Interests

- **Marathon Runner** for Atletica Paratico Marathon regional champion U23.   2018
- **Trainer** of the athletic team of Politecnico di Milano (50+ athletes).   2018-2020
- Long distance **hiker** and **cycle tourist**.