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] 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**.