

# Alberto Rumi

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I am a PhD Student at **Laboratory for Artificial Intelligence and Learning Algorithms (LAILA)** and **CENTAI S.p.A.** under the supervision of Nicolò Cesa-Bianchi and Fabio Vitale. My area of research centers around Reinforcement Learning, Online Learning, and Multi-Armed Bandits. I am particularly interested in designing algorithms that enable agents to learn from their interactions with the environment, allowing them to make optimal decisions under uncertain conditions. My focus is on developing methods that provide both theoretical guarantees and empirical validation.

## Education

- 2022 – Current 📖 **Ph.D. Student** under the supervision of Nicolò Cesa-Bianchi and Fabio Vitale at University of Milan and CENTAI S.p.A.  
*Main focus:* Reinforcement Learning, Multi-Agent Reinforcement Learning, Multi Armed Bandits and Online learning.
- 2020 – 2022 📖 **M.Sc. Computer Science** in University of Milan.  
*Selected coursework:* Statistical Methods for Machine Learning, Algorithms for massive datasets, Algorithms and complexity, Distributed Algorithms.  
*Thesis:* under the supervision of prof. Christian Quadri, "Multi-agent distributed reinforcement learning for multi-user edge service orchestration"  
**110 cum laude/110**
- 09/2021 – 02/2022 📖 **Exchange Student** at Université Catholique de Louvain.
- 2017 – 2020 📖 **B.Sc. Computer Science** in University of Milan.

## Projects

### University Projects

- 📖 · Frequent item sets for Imdb dataset
- Simulation of Multi-Access Edge Computing environment in AnyLogic
- Human breathing and heart rate detection with the phone accelerometer
- Prediction of active and inactive cis-regulatory regions with different Machine leaning algorithms. Implementations and reports are available in my [github](#) page

### Connets LAB

- 📖 Develop and implementation of the Host Level of the ETSI-MEC architecture in the OMNeT++ simulator. Done with the [CONNETS](#) LAB of University of Milan.

## Skills

- Coding 📖 *Experienced in:* Python, Erlang, Java, C++  
*Familiar of:* OCaml, Scala, C

## Hobbies

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### Sport

- I've always been a sports enthusiast, and I have dedicated a significant portion of my life to various athletic pursuits. I played basketball for 12 years as part of the representative team of Bergamo. After my time in basketball, I began practicing Muay Thai and MMA at the Top Team Fighting Bergamo. Currently I left the ring and I am practicing calisthenics and yoga at an amateur level.

### Music

- I am also a musician at heart, having played both piano and guitar since I was 14. Recently, I have been exploring music production using Ableton Live 10 Suite, and have several projects in progress.