

**Education** 

**EPFL** Lausanne, Switzerland

MSc in Computational Science and Engineering

Sept. 2021 - Aug. 2023

- GPA: 5.82/6. Keywords: Machine Learning, Networks, Computational Social Science and Data Science.
- Class delegate, representing 40+ students to the Section, the Executive Board and the General Student Association.
- Student Teaching Assistant for "Applied Data Analysis" (Fall 2022) and "Machine Learning for behavioral data" (Spring 2022).

University of Bologna Bologna, Italy

**BSc in Physics** 

Sept. 2018 - July 2021

- Grade: 110/110 cum laude. Final GPA: 29.96/30, top 0.25% of all UniBo students.
- UniBo grant for students with outstanding academic records, awarded to < 0.5% of students from the whole university.

## Experience.

Bain & Company | NPSx Munich, Germany

ASSOCIATE INTERN, DATA SCIENCE

July 2022 - Sept. 2022

- Created **predictive models for NPS and CLV**, cornerstones of a product now sold to Fortune 500 companies.
- Productionised the data pipeline by integrating MLOps practices, testing and automation within GCP.

# **Projects**

### Topical classification of Wikipedia images

RESEARCH PROJECT IN THE DATA SCIENCE LAB

Feb. 2022 - Present

- Developing a hierarchical classifier for Wikipedia images, categorizing them only by their topic.
- Designed a set of linguistically motivated heuristics to associate images with training labels within a custom taxonomy.
- Year-long collaboration with Wikimedia Research, soon to be wrapped up with a first-author publication (in preparation).

#### A data-driven Political Compass

APPLIED DATA ANALYSIS COURSE PROJECT

Sept. 2021 - Dec. 2021

- Analyzed a datased of ~180 mln quotations with **Apache Spark** within Python.
- · Leveraged Topic Extraction and Sentiment Analysis to infer a new Political Compass and curated a data story on US politics.

#### **Disambiguating Voynich Manuscript transliterations**

MACHINE LEARNING COURSE PROJECT

Sept. 2021 - Dec. 2021

- Fine-tuned word embedding models (fastText, Word2vec) on the task of disambiguating uncertain transliterations, with scarce data.
- · Built a benchmark on Italian and Latin and obtained a model with overall accuracy of 86%, subsequently employed with an unknown script.

# Extracurricular Activity \_\_\_\_\_

#### **Lead The Future**

MENTEE Sept. 2020 - Present

• Selected to be part of LeadTheFuture, a leading mentorship organization for Italian students in STEM, with acceptance rate < 20%.

Orienta Me Bologna, Italy

MENTOR

Apr. 2021 - July 2021

· Selected as Mentor in Orienta|Me, a project promoting university orientation by advising high school students in their academic choice.

## Italian Association of Physics Students (AISF)

Bologna, Italy

PRESIDENT OF BOLOGNA LOCAL COMMITTEE

June 2019 - June 2020

- Elected President of Bologna Local Committee of AISF, an association gathering toghether more than 1400 Italian physics students.
- · Organised conferences, scientific aperitifs, LaTeX courses, visits to research centres and social events with 50+ participants.

## Skills\_

Languages Italian (native language), English (C1 IELTS), French (B2 EsaBac) **Programming** Python (PyTorch, TensorFlow, Keras, pyspark), C++, MATLAB. ROOT, LabView, LaTeX, Git, GnuPlot, Google Cloud Platform.