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Education

University of Fribourg, eXascale Infolab

Fribourg, Switzerland

Ph.D. IN COMPUTER SCIENCE

Sep. 2025 - Present

- Doctoral research on Extreme Multi-Label Classification (XMLC) and taxonomy-aware learning, supervised by Prof. Philippe Cudré-Mauroux and Julien Audiffren.
- Collaborative project with armasuisse (Swiss Federal Defense Research).

Politecnico di Milano Milano Milano

MSc in Computer Science and Engineering - Artificial Intelligence

September 2022 - July 2025

 AI - Study Plan involving Machine Learning, Deep Learning, Computer Vision, Game Theory and Algorithmic Game Theory, NoSQL and Streaming Data systems

Technical University of Munich

Munich, Germany

ERASMUS SEMESTER• Courses followed: Machine Learning for 3D Geometry, Parallel Programming, Natural Language Processing Seminar course, Security Engineering

Università degli studi di Siena

Siena, Italy

September. 2019 - October. 2022

- BSc in Computer Science and Engineering
- Final grade: 110 with honorsNamed best graduate of the 2021-2022 academic year.

Projects

MSc thesis: Multimodal Deep Learning for Cancer Grading

Github Repo

PyTorch, numpy, DeepLearning, Pandas

 Ongoing research project @NECSTlab Politecnico di Milano for my MSc Thesis on multimodal learning over histopathology WSI and CT imaging data for cancer grading.

Deep Learning course's competition - Team project

Github Repo

Python, TensorFlow, Keras, Pandas, NumPy

• Secured **2nd place** in a Deep Learning competition (Artificial Neural Networks course) for binary image classification of vertical farm leaves. Achieved **90% accuracy** among 500 participants. Recognized in a LinkedIn post by Polimi AIRLab.

Shape Generation & Completion Through Point-Voxel Diffusion (Modified)

Github Repo

Python, PyTorch

• Course project for "Machine Learning for 3D Geometry" at TUM, modifying the original paper to: (1) enable shape completion from RGB images, (2) incorporate text-conditional generation, and (3) allow text-driven part editing.

Extracurricular_

Leonardo/NECSTCamp student

Milan, Italy

NECSTLAB

Sep. 2023 - Now

Multidisciplinary program powered by NECSTLab @ DEIB Politecnico di Milano, involving a research project for my Master's Thesis in multimodal Deep Learning for biomedical imaging and horizontal courses for soft skills (public speaking, creativity, stress-management, entrepreneurship, employability)

Hackathons

St.Gallen, Switzerland - Munich, Germany

STARTHACK AND HACKATUM

March 2024 - November 2024

Secured third place at HackaTUM with a project about automatic scraping, aggregation, selection and generation of news articles. Devpost article

AI4Sustainability Summer School

Milan, Italy

SUMMERSCHOOL ORGANIZED BY EIT DIGITAL IN COLLABORATION WITH HUAWEI

Sep. 2024

Skills and Languages _____

Languages

English: B2 Cambridge English First Certificate, Italian: Native

Skills PyT

PyTorch, TensorFlow, Python, C, C++, Java, Machine Learning, Deep Learning, Data Mining

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PIETRO CAFORIO · RÉSUMÉ

1