# HAMZA AMRANI

Imaging and Vision Laboratory  $\diamond$  University of Milan-Bicocca, Italy

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## **EDUCATION**

# Ph.D., Computer Science, University of Milan-Bicocca

2022 - now

Deep Learning, Signal Processing, Brain-Computer Interfaces, Neurocognitive Speech Production

Supervisors: Prof. Daniela Micucci, Prof. Paolo Napoletano

2018 - 2021

Master's degree, Computer Science, University of Milan-Bicocca Thesis: Model-centric and Data-centric AI for Personalization in Human Activity Recognition.

Graduated with 110/110 cum laude

# Bachelor's degree, Computer Science, University of Milan-Bicocca

2015 - 2018

Thesis: Recognition and Retrieval of logos from digital images.

Graduated with 104/110

# ACADEMIC EXPERIENCE

## Research Fellow, University of Milan-Bicocca

Nov 2019 - Oct 2021

Deep Learning for Inertial Sensor-based Movement Analysis.

Project: SideraB by Lombardy Region and European Union for home rehabilitation.

# Teaching Assistant, University of Milan-Bicocca

Mar 2021 - now

2021-3-E3101Q135, Mobile Programming, Bachelor's Degree in Computer Science, 3rd year 2021-1-E3501Q066, Computer Science and Maths Laboratory, Bachelor's Degree in Math, 1st year

# PROFESSIONAL EXPERIENCE

## Data Scientist

Mar 2022 - now

ContinuumLab.ai

San Francisco, CA, United States (Remote)

- Conducting exploratory data analysis to identify trends and patterns, and designing machine learning and statistical models to predict outcomes and optimize business processes
- Designed and implemented natural language processing (NLP) applications using pre-trained language models and custom training data
- Developed expertise in generative AI and large language models, including applications built on OpenAI's ChatGPT platform
- Collaborated with experts from Harvard Business School and Oxford University to develop data-driven solutions to business problems

# **High School Computer Science Teacher**

Nov 2018 - Jun 2019

I.T.I.S. P. Paleocapa

Bergamo, Italy

- Theory teacher of 5 classes (1st and 4th year)
- Subjects: Information technology, C++ programming, Systems and networks

## **PUBLICATIONS**

Amrani H., Micucci D., Napoletano P. (2022). Unsupervised Deep Learning-based clustering for Human Activity Recognition. 2022 IEEE 12th International Conference on Consumer Electronics (ICCE-Berlin), 1-6.

Amrani H., Micucci D., Mobilio M., Napoletano P. (2021). Homogenization of Existing Inertial-Based Datasets to Support Human Activity Recognition. NeurIPS Data-Centric AI Workshop 2021.

Amrani H., Micucci D., Napoletano P. (2021). Personalized Models in Human Activity Recognition using Deep Learning. 2020 25th International Conference on Pattern Recognition (ICPR), 9682-9688.