

# Hamza Amrani

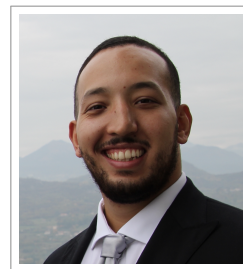
## Curriculum Vitae

✉ [hamza.amrani@unimib.it](mailto:hamza.amrani@unimib.it)

🌐 Personal website

🔗 <https://github.com/hamzi27>

ℹ <https://researchgate.net/profile/Hamza-Amrani-5>



### Education

- 2018 – 2021 **Master's Degree in Computer Science**, *University of Milano-Bicocca*, Milan (Italy).  
Graduated with 110/110 *cum laude*  
*Thesis*: Model-centric and Data-centric AI for Personalization in Human Activity Recognition.  
*Supervisors*: Prof. Paolo Napoletano, Prof. Daniela Micucci
- 2015 – 2018 **Bachelor's Degree in Computer Science**, *University of Milano-Bicocca*, Milan (Italy).  
Graduated with 104/110  
*Thesis*: Recognition and Retrieval of logos from digital images.  
*Supervisors*: Prof. Raimondo Schettini, Dr. Marco Buzzelli
- 2010–2015 **Technical High School**, *I.T.I.S. P. Paleocapa*, Bergamo (Italy).  
*Thesis*: An Android application that share contacts information with the NFC technology.

### Research Experience

- 2019 – 2021 **Fellow in Inertial Sensor-based movement analysis for Human Activity Recognition**, *University of Milano-Bicocca*, Milan (Italy), **Supervisor**: Prof. Daniela Micucci.  
*Sidera^B project by Lombardy Region and European Union (Announcement POR-FESR 2014-2020)*  
- Development of a framework for long term data collection to support automatic HAR;  
- Personalization of HAR models with Incremental Learning and Deep Learning approaches;  
- Unsupervised Learning in HAR with Clustering approaches based on Deep Learning.  
*Thesis supervision*: 3 BSc students and 1 MSc student.

### Teaching Experience

University of Milano-Bicocca, Milan (Italy)

- Spring, 2021 **Mobile Programming Assistantship**, 3rd year, *Bachelor's Degree in Computer Science*.
- Spring, 2021 **Computer Science and Maths Laboratory Assistantship**, 1st year, *Bachelor's Degree in Mathematics*.  
*I.T.I.S. P. Paleocapa*, Bergamo (Italy)
- 2018 – 2019 **High School Computer Science Teacher**, 5 classes, *Subjects*: C++ programming, systems and networks, information technology.

### Publications

- 2021 **Hamza Amrani**, Daniela Micucci, and Paolo Napoletano. Personalized models in human activity recognition using deep learning. In *2020 25th International Conference on Pattern Recognition (ICPR)*, pages 9682–9688, 2021.
- 2021 **Hamza Amrani**, Daniela Micucci, Marco Mobilio, and Paolo Napoletano. Homogenization of existing inertial-based datasets to support human activity recognition. In *NeurIPS Data-Centric AI Workshop (DCAI 2021)*, Virtual, 2021.

### Skills

Machine Learning, Deep Learning, Signal Processing, Computer Vision, Unsupervised Learning, Feature Extraction, Representation Learning, Information Retrieval

Programming Python (TensorFlow, Keras, PyTorch), MATLAB, R, C++, Java

Database SQL, MySQL, MongoDB

Web HTML5, PHP, Javascript

Languages Italian (native), English (advanced)