# GABRIELE MOSAICO
Genoa, Italy

## Experience

**2021–present**  **University of Genoa**                                             **Genoa**
*Teaching Assistant & Post-Doc Researcher*
- Mentoring several bachelors degree students in their thesis work
- Preparing and assisting exams for different courses
- Counseling a research and development company of a global ship manufacturer for data analytics solutions for onboard energy efficiency
- Continued the consulting work of the Phd period (leading company in the energy field, global electrotechnical manufacturer, AlgoWatt, IeSolutions)
- Published 5 more papers on data science applied to power system planning & operation.

**2018–2021**  *Teaching Assistant & PhD candidate*
- Mentored over 100 students in several courses of Matlab, R and Statistics for a total of 50 hours of teaching activity.
- Advised a leading company in the energy field on machine learning applied to load forecasting and electrical mobility infrastructure optimized operation with reinforcement learning.
- Authored a stream clustering algorithm for high frequency power data as result of a collaboration with a global electrotechnical manufacturer.
- Published 8 papers on data science applied to power system planning & operation.

**2020–2021**  **Algowatt S.p.A.**                                                     **Genoa**
*Consultant Scientist*
- Introduced a data-driven energy market simulator for an IT platform of Balancing Service Providers.
- Designed a distribution-grid aware net-load profile generator software.
- Contributed to the specification definition of the platform.

**2018**  **IeSolutions s.r.l.**                                                        **Genoa**
*Data Scientist*
- Engineered a Model Predictive Control solution for a non-residential building capable of saving thousands of euros per months leveraging a Deep Learning, text mining and web scraping based occupancy prediction pipeline.

**2018**  **Capgemini S.p.A.**                                                          **Milan**
*Data Scientist*
- Upgraded the virtual assistant of a major telco operator with an intent recognition solution based on recurrent Siamese neural network.
- Evaluated the feasibility of a predictive maintenance solution for a steel processing factory based on provided data.
- Delivered an image matching fraud detection application of an insurance company.
- Built a food recognition transfer learning model for an operation cost reduction of a global houseware retailer.
- Presented a Power BI dashboard with item expected sale potential solution for an italian sport fashion wholesaler and retailer.

## Education

**2018 – present**  **University of Genoa**                                            **Genoa**
*PhD in Electrical Engineering*

- Research on innovative use of big data from smart meters for a safer, greener and cheaper power and energy system.
- Won 3$^{rd}$ prize at IEEE Region 8 (Europe, Asia, Africa) Student Paper Contest 2019.
- Awarded Scholarship by ESRA (European Safety and Reliability Association) for participate in Advanced methods for Reliability, Availability, Maintainability, Prognostics and Health Management of industrial equipment (RAM&PHM4.0) Course, held at Polytechnic of Milan.
- Participated in Summer School "Data-Driven Analytics and Optimization for Energy Systems" of Danish Techical University and exchange with University of Liege (Belgium) on topics of Advanced Machine Learning and Planning and Operations of Energy Systems.
- Visiting PhD student at the University of Liege (Belgium).

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| 2015– 2017 | **University of Turin** | **Turin** |

*Master's Degree in Stochastics and Data Science*
- Achieved degree in due time.
- Refined knowledge and skills on time series and stochastic processes

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| 2012– 2015 | **University of Genoa** | **Genoa** |

*Bachelor's Degree in Mathematical Statistics and Data Management*
- Earned degree with full marks.
- Reviewed teaching courses feedback as student member of Internal Quality Assurance Board of the degree.
- Recipient of Minister of Education, University and Research Scholarship for passing first year exams in due time.

**Personal/Other**

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| 2014 – present | **Social Media Manager, Board Member** | **-** |

- Co-managed Facebook, Twitter, Instagram and LinkedIn profiles for several sport, educational and social empowerment associations
- Served as board member of those associations

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| 2018 –Present | **Savate Gym Member** | **Genoa** |
| Languages | **Italian, English, French (medium), German (low)** | **-** |
| IT Skills | **Matlab, Python, R, SQL, Power BI, C++, Java, SAS, Spark, Scala, BCVTB, EnergyPlus, AMPL, GAMS, Simulink, Git, Azure Machine Learning, DigSilent, Docker** | **-** |
| Interests | **Reading Biographies, Listening to Music, Sightseeing** | **-** |