

## CURRICULUM VITAE of Gabriele Mosaico

Gabriele Mosaico is researcher at the Department of Electrical, Electronics and Telecommunication Engineering and Naval Architecture (DITEN) of University of Genova (Italy). He is a member of the IEEE Power & Energy Society (IEEE PES). He received the master's degree in Stochastics and Data Science in 2017 from the University of Turin, and the Ph.D. in Electrical Engineering in 2022 from the University of Genova. From 2022 to 2023 he has been postdoctoral researcher at DITEN of the University of Genova. Before his doctorate, in 2018 he has worked for the Insights and Data Business Unit of Capgemini Italia S.p.A. and for IESolutions srl, as a Data Scientist. In 2020 and 2021 he was visiting scientist at algoWatt S.p.A., while in 2021 he was visiting Ph.D. student at the University of Liege (Department of Electrical Engineering and Computer Science), Belgium.

He is currently a member of the research team "Intelligent Electrical Energy Systems Laboratory" of the University of Genova (Italy).

The main field of his research is related to the study, the implementation and the effects of the penetration of the distributed generation, from renewable and conventional resources, in the distribution network and to the management of the energy consumption. In particular, his principal interests are probabilistic and statistical approaches, machine learning and artificial intelligence methods, as well as optimization algorithms applied to distribution management systems, forecasting of load/renewable energy resources, load modelling, load/energy management, buildings modelling and control, probabilistic security assessment, participation in flexibility markets. In all these topics he brings his statistical and mathematical background and expertise.

He is the author of more than 18 publications in international journals and conferences.

He holds the chair of "Elements of Statistics for Technical Professions" at the Polytechnic School of the University of Genova and he is Teaching Assistant of "Inferential Statistics" at the Department of Mathematics of the same University.

He has collaborated or is collaborating on a total of 11 research projects. In particular, he worked for 3 scientific research projects assigned with competitive tenders. As regards the 8 contracts financed by organizations and companies in which he has collaborated, we note the long-lasting collaborations with Ricerca sul Sistema Energetico – RSE S.p.A., ABB S.p.A. and Hitachi Energy.

Prof. Mosaico is currently a member of IEEE PES Big Data & Analytics Subcommittee.

The following is the list of his main publications

Pablo Almaleck, Stefano Massucco, **Gabriele Mosaico**, Matteo Saviozzi, Pietro Serra, and Federico Silvestro. *Electrical consumption forecasting in sports venues: A proposed approach based on neural networks and arimax models*. Sustainable Cities and Society, 100:105019, 2024.

Fiammetta Rita Bianchi, Barbara Bosio, Francesco Conte, Stefano Massucco, **Gabriele Mosaico**, Gianluca Natrella, and Matteo Saviozzi. *Modelling and optimal management of renewable energy communities using reversible solid oxide cells*. Applied Energy, 334:120657, 2023.

Stefano Massucco, **Gabriele Mosaico**, Matteo Saviozzi, and Federico Silvestro. *A hybrid technique for day-ahead pv generation forecasting using clear-sky models or ensemble of artificial neural networks according to a decision tree approach*. Energies, 12(7):1298, Apr 2019.

Stefano Massucco, **Gabriele Mosaico**, Matteo Saviozzi, Federico Silvestro, Antonio Fidigatti, and Enrico Ragaini. *An instantaneous growing stream clustering algorithm for probabilistic load modeling/profiling*. In 2020 International Conference on Probabilistic Methods Applied to Power Systems (PMAPS), pages 1–6, Aug 2020.

**Gabriele Mosaico**, Matteo Saviozzi, Federico Silvestro, Andrea Bagnasco, and Andrea Vinci. *Simplified state space building energy model and transfer learning based occupancy estimation for hvac optimal control*. In 2019 IEEE 5th International forum on Research and Technology for Society and Industry (RTSI), pages 353–358, Sep. 2019.