**CURRICULUM VITAE**

**di**

**Fabrizio De Caro**

Fabrizio De Caro is an energy engineer and a PhD student in "Information Technologies for Engineering" at the University of Sannio in Benevento since 2016. He is a research fellow in the power system research group under the supervision of Prof. A. Vaccaro.

He graduated with honors in both his three-year and master's degree in Energy Engineering, with a thesis on "Physical downscaling of weather forecasts for wind power forecasting" (2014) and "Spatial and temporal wind and power forecasting by knowledge discovery on big data" (2016), the latter developed in collaboration with the national transmission network operator Terna Rete Italia.

His research fields concern the development of tools for the effective integration of renewable energy systems into the electrical grid, such as advanced models of wind power forecasting and wind turbine generators, optimal strategies in new energy markets in the presence of uncertainty, probabilistic models of wind turbine reliability, knowledge extraction from big data in energy systems, and the development of strategies to increase the resilience of electrical systems.

These efforts are summarized in the production of 34 peer-reviewed publications, including 18 in international journals, 14 presented at international conferences, 1 editorial, and 1 as a chapter in a book.

In 2019, He collaborated with the Machine Learning Group, under the supervision of Prof. G. Bontempi, at the Université Libre de Bruxelles for the development of advanced wind power forecasting models using machine and deep learning techniques for a period of 3 months.

He was the secretary of the IEEE Task Force “Methods for analysis and quantification of power system resilience”.

From June 2023, He is a scientific collaborator of the Machine Learning Group, Université Libre de Bruxelles.

In addition, he has served as co-supervisor for several master's theses, as well as providing support in teaching activities for the courses "Electric Systems for Energy" and "Planning and Management of Electrical Systems".

He currently holds the position of adjunct professor in "Electric Systems for Energy" at the University of Sannio.