Chiara **Camerota**

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Education

Postdoctoral researcher   -

Saint Louis University   *Jan. 2025 –*

- Topic: *Deep Learning approach on IoT systems*

PhD in Information Engineering, DaCoNets   -

University of Florence   *Nov. 2021 – July 2025*

- Topic: *Deep Learning approach on Security Network*

Master in Statistics and Financial Science   *110/110 Summa cum laude*

University of Florence   *Sept. 2016 – Feb. 2019*

- Dissertation's title: *Graphical Models for circular data*

Bachelor in Statistics   *101/110*

University of Florence   *Sept. 2013 – Jul. 2016*

- Dissertation's title: *Metodi non parametrici per dati circolari*

Pubblication, conference and Worksho

- *accepted* Camerota C. , Pappone L., Esposito F. & Pecorella T. (2024, Oct). Addressing Data Security in IoT: Minimum Sample Size and Denoising Diffusion Models for Improved Malware Detection; CNSM 2024

- Donati, G., Basso, M., Mugnaini, M., & Camerota, C. (2024, May). A Convolutional Neural Network to Locate Unbalance in Turbomachinery Supported by AMBs. In 2024 IEEE International Workshop on Metrology for Industry 4.0 & IoT (MetroInd4. 0 & IoT) (pp. 274-279). IEEE.

- Donati, G., Basso, M., Manduzio, G. A., Mugnaini, M., Pecorella, T., & Camerota, C. (2023). A convolutional neural network for electrical fault recognition in active magnetic bearing systems. Sensors, 23(16), 7023.

- First International B5G Student Workshop, Madrid, July 2023

- Donati G, Basso M, Manduzio GA, Mugnaini M, Pecorella T, Camerota C.. A Convolutional Neural Network for Electrical Fault Recognition in Active Magnetic Bearing Systems. Sensors. 2023; 23(16):7023. https://doi.org/10.3390/s23167023

- Bellini, Pierfrancesco, Chiara Camerota, and Paolo Nesi. "Automating Heterogeneous IoT Device Networks from Multiple Brokers with Multiple Data Models." In Internet of Things: 5th The Global IoT Summit, GIoTS 2022, Dublin, Ireland, June 20–23, 2022, Revised Selected Papers, pp. 226-238. Cham: Springer International Publishing, 2023.

Work Experience

Network Lab - St. Louis University   *St. Louis, MO, USA*

Researcher   *Jan. 2024 - Jul. 2024*

- Visiting period

DACONETS - DINFO, University of Florence   *Florence, Italy*

Researcher   *Dec. 2021 -*

- Application of ML technique on industrial field

DISIT, University of Florence

RESEARCHER

Florence, Italy

Apr. 2021 - Nov. 2021

- Study and development of IOT platforms and solution to process data in the framework of smart city and industry 4.0
- Web Developer for Snap4city.org

Framework's team, Terranova Software

SOLUTION SPECIALIST

Florence, Italy

Jul. 2020 - Apr. 2021

- Research and design support for SPID system.
- Experience with complex testing delivery.
- Experience with project management framework (frontend and backend).
- Experience with configuration system and CRM.
- Good understanding of Cloud Native, Microservice and Portable Software.

External Advisor for Gucci Guccio, MAS Management Network

BUSINESS ANALYST JUNIOR

Florence, Italy

Nov. 2019 - Jun. 2020

- Research and design of IoT project.
- Experience with Agile Methodology.
- Experience with Digital integration.
- Experience with Information systems

School of Economics, University of Florence

UNIVERSITY TUTOR

Florence, Italy

Nov. 2017 - Oct.2018, Nov. 2018 - Oct. 2019

- Lectures planning.
- Frontal teaching.

School of Economics, VALMON S.R.L.

EXTERNAL COOPERATOR

Florence, Italy

Nov. 2017 - Marc. 2018

- Experience with Microlector Operator.
- Support for the preliminary data analysis.

Skills

TECHNICAL SKILLS

- Develop experience in Data Analysis and Visualization, Dynamic reports and graphs.
- Experience with Machine and Statistical Learning, such as MLP, Federated Learning, CNN.
- Experience with Spatial Statistics, in particular with Circular methods
- Experience with Frequentist and Bayesian Statistics, Multivariate Statistics, Demography and Social Statistics.
- Experience with circular data, Time Series, Panel Data and Social Network data

PROGRAMMING LANGUAGE

- R, Python
- Develop experience with SAS, STATA, Gretl, Matlab, LimeSurvey, Protegé and Fortran.
- Good understanding of Power BI, C++, JavaScripts, and Object-orient programming.
- Familar of data modeling languages: JSON, YAML, XML.

Languages

- English: Fluent
- Spanish: Intermediate
- Italian: mother tongue