Manuel Dileo

Ph.D. Student, University of Milan, Milan, Italy
dileomanuel0@gmail.com — www.manuel-dileo.github.io

Manuel Dileo received a master degree in computer science in 2022. He is currently a senior Ph.D. student at the Computer Science Department of the University of Milan, where he is also a tutor of machine learning courses. He has published works on machine learning for temporal networks, link prediction in online social networks, and temporal knowledge graphs.

RESEARCH INTERESTS

Graph Machine Learning, Network Science, Graph Neural Networks, Knowledge Graphs, Temporal Networks

RESEARCH EXPERIENCE

Ph.D Student, Connets Lab. October 2022 — Present
University of Milan Milan, Italy

- Research activities on temporal graph learning.
- Group leader of the research lab. on graph machine learning.
- Supervision and co-advisor of bachelor and master thesis.

Visiting Researcher June 2023 — August 2023
School of Informatics, University of Edinburgh Edinburgh, UK

- Research activities on temporal knowledge graphs.
- Research activities under the supervision of Dr. Pasquale Minervini.

Research Fellow May 2022 — October 2022
University of Milan Milan, Italy

- Research activities on heterogeneous graph learning.
- Research activities on biomedical knowledge graphs with Anacleto Lab.

TEACHING EXPERIENCE

Machine learning tutor October 2023 — Present
University of Milan Milan, Italy
Tutor for the lab sessions of the course "Machine learning, artificial neural networks and deep learning",
Bachelor degree in Artificial Intelligence.

Computer Programming tutor October 2021 — September 2022
University of Milan Milan, Italy
Tutor for the lab sessions of the course "Computer Programming I",
Bachelor degree in Computer Science.

EDUCATION

University of Milan, Milan, Italy October 2020 — April 2022
Master of Science in Computer Science
Grade: 110 / 110 cum laude
Thesis Title: Link Prediction in Blockchain Online Social Networks with contextual information

University of Milan, Milan, Italy October 2020 — April 2022
Bachelor of Science in Computer Science
Grade: 110 / 110 cum laude
Thesis Title: Data-driven induction of fuzzy sets in forensics

ACADEMIC ACTIVITIES

- IRonGraph - Graph-Based Approaches in Information Retrieval, workshop @ ECIR 2024, PC member
- TGL - Temporal Graph Learning, workshop @ NeurIPS 2023, PC member
- LIMBO - Learning and Mining for Blockchain workshop @ ECML PKDD 2023, Web Chair
- AIN4GO - AI on Networks for Social Good, workshop @ GoodIt 2023, organizer

GRANTS AND PROJECTS

- Winner of the January 2023 INDACO call for free dedicated high-performance computing power and data storage with a research proposal on "Graph Neural Networks for Knowledge Graphs".

PUBLICATIONS

Journal paper

- Ba, C. T., **Dileo, M.**, Galdeman, A., Zignani, M., Gaito, S. (2024). Analyzing User Migration in Blockchain Online Social Networks through Network Structure and Discussion Topics of Communities on Multilayer Networks. Distrib. Ledger Technol. https://doi.org/10.1145/3640020
- **Dileo, M.**, Zignani, M., Gaito, S. (2023). Temporal graph learning for dynamic link prediction with text in online social networks. Machine Learning. https://doi.org/10.1007/s10994-023-06475-x

Conference paper (in proceedings)

- Ba, C. T., Galdeman, A., **Dileo, M.**, Zignani, M., Gaito, S. (2023). User Migration Prediction in Blockchain Socioeconomic Networks Using Graph Neural Networks. Proceedings of the 2023 ACM Conference on Information Technology for Social Good, 333–341. https://doi.org/10.1145/3582515.3609552
- Ba, C. T., Galdeman, A., **Dileo, M.**, Quadri, C., Zignani, M., Gaito, S. (2022). Web3 Social Platforms: Modeling, Mining and Evolution. ItaDATA, 3340, 168–179.
- **Dileo, M.**, Ba, C. T., Zignani, M., Gaito, S. (2022). Link Prediction with Text in Online Social Networks: The Role of Textual Content on High-Resolution Temporal Data. In P. Pascal D. Ienco (Eds.), Discovery Science (pp. 212–226). Springer Nature Switzerland.