

Luca Mariotti

Curriculum Vitae

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Work Experience

06/2023 - 10/2023 Research Fellow (Grant Holder)

University of Modena and Reggio Emilia

Group leader: Federica Mandreoli

Topics: Machine Learning, Data Mining, Large Language Models, Graph Analytics

A.Y. 2022/2023 Adjunct Professor for Computer Science Course at FIM Dept.

University of Modena and Reggio Emilia

Course name: Database Systems (Basi di dati)

Module: 3 CFU

Topics: SQL, DBMS, Triggers, Relational algebra, Relational model

06/2022 - 06/2023 Research Fellow (Grant Holder)

University of Modena and Reggio Emilia

Group leader: Federica Mandreoli

Topics: Machine Learning, Data Mining, HRM, Graph Analytics

12/2021 - 04/2022 Curricular Internship

University of Modena and Reggio Emilia

Supervisor: Riccardo Martoglia

Topics: Graph Analytics, Big Data Analytics, Data Mining

03/2019 - 06/2019 Curricular Internship

University of Parma

Supervisor: Alessandro Dal Palù

Topics: Data Mining, Algorithms, Graph Analytics

Education

10/2023 - Present Ph.D. Student in Computer and Data Science

University of Modena and Reggio Emilia

Supervisor: Prof. Federica Mandreoli

Topics: Machine Learning, Deep Learning, Large Language Models, Knowledge Graphs

04/2022 Master's Degree in Computer Science, 110/110 cum Laude

University of Modena and Reggio Emilia

Thesis: "Research of the most influential users of Twitter in the pandemic period and analysis of their contribution using Text and Graph Analytics techniques"

Supervisor: Prof. Riccardo Martoglia

07/2019 Bachelor's Degree in Computer Science, 104/110

University of Parma

Thesis: "Analysis of student performance with graph algorithms"

Supervisor: Prof. Alessandro Dal Palù

Publications

Online Profiles [IRIS Unimore profile](#)

01/2026 Beyond Labeled Corpora: Rethinking Supervision in Knowledge Graph Enrichment from Text

Luca Mariotti, Veronica Guidetti, Federica Mandreoli, Simone Luseti, Pietro Foggia

34th Symposium on Advanced Database Systems

01/2026 SCoRE: Streamlined Corpus-based Relation Extraction using Multi-Label Contrastive Learning and Bayesian kNN

Luca Mariotti, Veronica Guidetti, Federica Mandreoli

Knowledge-Based Systems. ([link to the journal article](#))

05/2025 D2.6 – WASABI Digital Assistants: Integration, Validation, and Deployment Report

European Project WASABI (Grant Agreement No. 101058384), 2025.

01/2025 A novel Graph-based approach to identify Opinion Leaders in Twitter

Marco Furini, Luca Mariotti, Riccardo Martoglia, Manuela Montangero

IEEE Transactions on Computational Social Systems. ([link to the journal article](#))

08/2024 Combining large language models with enterprise knowledge graphs: a perspective on enhanced natural language understanding

Luca Mariotti, Veronica Guidetti, Federica Mandreoli, Andrea Belli, Paolo Lombardi

Frontiers in Artificial Intelligence. ([link to the journal article](#))

07/2023 Automated Knowledge Graph completion for Natural Language Understanding: known paths and future directions

Giovanni Buzzega, Veronica Guidetti, Federica Mandreoli, Luca Mariotti, Andrea Belli, Paolo Lombardi

31st Symposium on Advanced Database Systems ([link to the conference program](#)) .

09/2022 On Designing a Time Sensitive Interaction Graph to Identify Twitter Opinion Leaders

Marco Furini, Luca Mariotti, Riccardo Martoglia and Manuela Montangero

2nd ACM Conference on Information Technology for Social Good, GoodIT 2022 ([link to the conference program](#)) .

Submissions

08/2026 Supervision Quality in Knowledge Graph Enrichment: A Data-Centric Perspective to Refining Distant Supervision

Luca Mariotti, Veronica Guidetti, Simone Luseti, Federica Mandreoli

Frontiers in Artificial Intelligence - Natural Language Processing.

Research Interests

- Graph Analytics
- Big Data Analytics
- Automated Machine Learning (AutoML)
- Large Language Models
- Knowledge Graph Analytics

Participation in Conferences, Courses, and Seminars

06/2026 34th Symposium on Advanced Database Systems

Senigallia, Ancona, Marche, Italy

June 14-18, 2026.

Website: <https://sebd2026.dii.univpm.it>

Talk: Beyond Labeled Corpora: Rethinking Supervision in Knowledge Graph Enrichment from Text

07/2023 31st Symposium on Advanced Database Systems

Galzignano Terme, Italy

July 2-5, 2023.

Website: <https://sebd2023.dei.unipd.it/>

Talk: Automated Knowledge Graph completion for Natural Language Understanding: known paths and future directions

09/2022 2nd ACM Conference on Information Technology for Social Good, GoodIT 2022

Limassol, Cyprus

September 7-9, 2022.

Website: <https://cyprusconferences.org/goodit2022/>

Talk: On Designing a Time Sensitive Interaction Graph to Identify Twitter Opinion Leaders

09/2022 Seminar at the University of Parma

Presentation of a prototype for student career monitoring

Academic Service and Peer-Review

11/2025 Peer-review activity

Reviewer for the journal *Data Science and Engineering (Springer)*, 2025

10/2025 Peer-review activity

Reviewer for the *AAAI Conference on Artificial Intelligence (AAAI)*, 2026

05/2023 Peer-review activity

Sub-reviewer for the *35th International Conference on Scientific and Statistical Database Management (SSDBM 2023)*

Skills

Computer Skills Python, NoSQL, SQL, C, MATLAB, C++, Java, JavaScript, PHP

Foreign Language English: Intermediate (B2)
Skills

What is stated in this curriculum vitae is true in accordance with Articles 46 and 47 of the Italian Presidential Decree (D.P.R.) 445/2000.

In compliance with the Italian Legislative Decree no. 196 of 30/06/2003 and the GDPR (EU Regulation 2016/679), I hereby authorize the processing of my personal data contained in this document.

Modena, 07/09/2026