

EDUCATION

Roma Tre University M.Sc. Computer Engineering	Rome, IT 2017–2020
– Final grade: 110/110 with honours	
– Thesis: “Application and design of black-box model explanation methods”	
Roma Tre University B.Sc. Computer Engineering	Rome, IT 2014–2017
– Final grade: 110/110 with honours	
– Thesis: “Development of a web tool for the measurement of Internet access quality”	
Sapienza University National PhD in Artificial Intelligence	Rome, IT 2021–Present

EXPERIENCE

University of Alberta Visiting PhD student	Edmonton, CA May 2024 - Aug. 2024
SummerSOC Summer School	Hersonissos, GR Jul. 2023
Cyprus University of Technology Visiting PhD student	Limassol, CY Sep. 2022
SummerSOC Summer School	Hersonissos, GR Jul. 2022
Sapienza University of Rome Research Fellowship	Rome, IT Feb. 2021 - Oct. 2021
Fondazione Ugo Bordoni Internship	Rome, IT Jul. 2017 - Sep. 2017

TEACHING

- **Teaching Assistant** at Sapienza University, Rome Italy 2023-2024
Basi Di Dati
- **Lecturer** at Lazio Digital ITS, Rome, Italy Feb. 2023 - Mar. 2023
Metodologia di analisi e progettazione del software (UML)

- **Teaching Assistant** at Sapienza University, Rome Italy
Basi Di Dati

2022-2023

PROJECTS

INTEND

Sapienza University of Rome

2024 - Present

- INTEND is an EU-funded project that will deliver cutting edge AI solutions to enable a novel, intent-based data operation on the cognitive computing continuum, which continually learn how to adapt heterogeneous cloud and edge resources, make strategic decisions across the decentralized continuum, and collaborate with human stakeholders via shared intents.

Electrospindle 4.0

Sapienza University of Rome

2022 - Present

- Electrospindle 4.0 is industrial project that involves several enterprises and academic partners to apply Zero Defect Manufacturing (ZDM) principles in the production of spindles. The goal of this project is twofold: on one side to design a new production line according to the ZDM principle, and on the other side, to build an innovative family of spindles equipped with sensors and computing capabilities to improve their quality and performance.

TopKontrol

Sapienza University of Rome

2021 - Present

- TopKontrol is a product that leverages several technologies, including Internet-of-Things (IoT) sensors and Computer Vision (CV), to monitor and improve the die-cutting process for the production of corrugated cardboards.

DESTINI H2020 Twinning Project

Sapienza University of Rome

2021 - 2022

- DESTINI is a Horizon 2020 EU-funded project aimed at promoting research in Smart Data. It involves collaboration between Tilburg University, Sapienza University of Rome, and Cyprus University of Technology (CUT) to enhance CUT's research and scientific profile in this field.

PUBLICATIONS

- [1] V. Albano, D. Firmani, L. Laura, J. G. Mathew, A. L. Paoletti, and I. Torrente, "Resolving duplicates in large multiple-choice questions repositories", 2024.
- [2] D. Firmani, F. Leotta, J. G. Mathew, J. Rossi, L. Balzotti, H. Song, D. Roman, R. Dautov, E. J. Husom, S. Sen, *et al.*, "Intend: Intent-based data operation in the computing continuum", in *RPE @ CAiSE*, CEUR-WS, vol. 3692, 2024, pp. 43–50.
- [3] F. Monti, J. G. Mathew, F. Leotta, A. Koschmider, and M. Mecella, "On the application of process management and process mining to industry 4.0", *Software and Systems Modeling*, pp. 1–13, 2024.
- [4] V. Albano, D. Firmani, L. Laura, J. G. Mathew, A. L. Paoletti, and I. Torrente, "Nlp-based management of large multiple-choice test item repositories", *Journal of Learning Analytics*, vol. 10, no. 3, pp. 28–44, 2023.

- [5] A. Andreou, D. Firmani, J. G. Mathew, M. Mecella, and M. Pingos, “Using knowledge graphs for record linkage: Challenges and opportunities”, in *KG4SDSE*, 2023.
- [6] M. Calamo, A. De Franceschi, G. De Santis, F. Leotta, C. Mazzaroppi, J. G. Mathew, M. Mecella, F. Monti, C. Sabatino, L. Visani, and M. Visani, “Topkontrol: A monitoring and quality control system for the packaging production”, in *RPE@ CAiSE*, 2023.
- [7] D. Firmani, J. G. Mathew, D. Santoro, G. Simonini, and L. Zecchini, “Bridging the gap between buyers and sellers in data marketplaces with personalized datasets”, in *SEBD*, 2023.
- [8] F. Amadori, M. Bardani, E. Bernasconi, F. Cappelletti, T. Catarci, G. Drudi, M. Ferretti, L. Foschini, P. Galli, M. Germani, G. Grosso, F. Leotta, J. G. Mathew, L. Manuguerra, N. Mariucci, M. Mecella, F. Monti, F. Pierini, and M. Rossi, “Supporting zero defect manufacturing through cloud computing and data analytics: The case study of electrospindle 4.0”, in *RCIS*, 2022.
- [9] F. Leotta, F. Monti, J. Mathew, and M. Mecella, “Electrospindle 4.0: Towards zero defect manufacturing of spindles”, in *Ket4DF*, 2022.
- [10] S. Castano, A. Ferrara, D. Firmani, J. G. Mathew, and S. Montanelli, “Automatic entity labeling through explanation techniques”, in *Italian Symposium on Advanced Database Systems*, CEUR-WS, vol. 2994, 2021, pp. 299–306.
- [11] L. Esposito, S. Veneruso, F. Leotta, F. Monti, J. G. Mathew, and M. Mecella, “Unsupervised segmentation of human habits in smart home logs through process discovery”, in *ITBPM*, 2021.