

Luca Barbaro

EDUCATION AND TRAINING

PhD student in Computer Science

Sapienza University of Rome [01/06/2022 – Current]

Topic: Process Mining, AI, and Blockchain Technologies

Supervisor: Professor Claudio Di Ciccio

Visiting Researcher

Utrecht University [08/02/2024 – 08/05/2024]

Master in Customer Experience, Statistics, Machine Learning & Artificial Intelligence (II Lev.)

University of Tor Vergata [01/02/2023 – 04/02/2024]

Final grade: 110/110

- Advanced Data Analysis and Statistical Programming: Data manipulation, statistical analysis, Python, SQL, SAS.
- Machine Learning and Artificial Intelligence: Linear models, machine learning techniques, supervised and unsupervised learning, deep learning, convolutional neural networks, big data analysis (Hadoop, Spark).
- Text Mining and Customer Intelligence: Text analysis, sentiment analysis (WordCloud, Iramuteq), SAS tools, marketing automation, customer intelligence, real-time decision optimization.

Master's Degree: Business Economics (LM-77)

Sapienza University of Rome [30/09/2018 – 25/07/2021]

Final grade: 109/110 | Thesis: "Machine Learning in Finance: a neural network for economic and financial forecasts"

Bachelor's Degree: Business Economics (L-18)

Sapienza University of Rome [30/09/2015 – 05/12/2018]

Secondary School diploma: Classic High School

Liceo Classico Pio XI, Rome, Italy [31/08/2010 – 30/06/2014]

WORK EXPERIENCE

Teaching Assistant

University of Tor Vergata [30/09/2023 – 31/12/2023]

Tutor for Big Data and Statistics courses

Professor: Simone Borra

Staff Consultant

KPMG Italy [31/12/2021 – 31/05/2022]

City: Rome | Country: Italy

As a consultant, I revised planning and control models to ensure regulatory compliance for listed companies, supported organizational restructuring by defining roles and innovations, coordinated Business and IT stakeholders in implementing activity plans, and assisted in preparing financial reports for transaction services

Business Accountant

C.O.N.I. [30/06/2020 – 30/12/2021]

City: Rome | Country: Italy

My job consisted in controlling of accounting documentation and recording journal entries, expense reporting, auditing and controlling budgets and final balancing of sports activities.

LANGUAGE SKILLS

Mother tongue

Italian

Other language(s)

English

IELTS Certification 07/2022

COMPUTING LANGUAGES

Stand-alone

Python, Go, Sas, Sas Viya, R, Mathlab, Bash, GitHub, Docker

Web, mark-up

HTML, XML, LATEX

Querying

SQL

PUBLICATIONS

[2024]

CONFINE: Preserving Data Secrecy in Decentralized Process Mining

Valerio Goretti, Davide Basile, Luca Barbaro, Claudio Di Ciccio. "CONFINE: Preserving Data Secrecy in Decentralized Process Mining". In: ICPM 2024 (to appear), arXiv: 2410.04453.

[2024]

Trusted Execution Environment for Decentralized Process Mining

Valerio Goretti, Davide Basile, Luca Barbaro, Claudio Di Ciccio. "Trusted execution environment for decentralized process mining". In: CAiSE, Springer, 2024, pp. 509–527. doi: 10.1007/978-3-031-61057-8_30.

[2024]

Transforming Credit Guarantee Schemes with Distributed Ledger Technology

Sabrina Leo, Andrea Delle Foglie, Luca Barbaro, Edoardo Marangone, Ida Claudia Panetta, and Claudio Di Ciccio. "Transforming Credit Guarantee Schemes with Distributed Ledger Technology". In: Navigating the Technological Tide: The Evolution and Challenges of Business Model Innovation, ICBT 2024, Cambridge, UK, April 19-20, 2024. Springer, 2024, pp. 314–324. doi: 10.1007/978-3-031-67431-0_30.

[2024]

Measuring rule-based LTLf process specifications: A probabilistic data-driven approach

Alessio Cecconi, Luca Barbaro, Claudio Di Ciccio, Arik Senderovich. "Measuring rule- based LTLf process specifications: A probabilistic data-driven approach". In: Information Systems, 120, 102312, Elsevier; doi: 10.1016/j.is.2023.102312.

CONFERENCES AND SUMMER SCHOOLS

6th International Conference on Process Mining (ICPM 2024)

Technical University of Denmark (DTU), Copenhagen, Denmark, October 2024

36th International Conference on Advanced Information Systems Engineering (CAISE 2024)

Cyprus University of Technology, Limassol, Cyprus, June 2024

International Conference on Business and Technology (ICBT 2024)

Cambridge, United Kingdom, April 2024

5th International Conference on Process Mining (ICPM 2023) - Member of the Organizational Board

Sapienza University of Rome, Rome, Italy, October 2023

21th International Conference on Business Process Management (BPM 2023)

Utrecht Utrecht, Netherlands, September 2023

4th International Conference on Process Mining (ICPM 2023)

Free University of Bolzano, Italy, October 2022

Summer School Challenges in building Billion Users Cloud Applications (BUCA)

University Residential Centre of Bertinoro, Italy, June 2022

SEMINARS AND PRESENTATIONS

CONFINE: Preserving data secrecy in decentralized process mining

CONFINE: Preserving data secrecy in decentralized process mining at the 6th International Conference on Process Mining (ICPM 2024), Technical University of Denmark ,Copenhagen, Demark, October 2024

Trusted Execution Environment for Decentralized Process Mining

"Trusted Execution Environment for Decentralized Process Mining" at the 36th International Conference on Advanced Information Systems Engineering (CAISE 2024), Cyprus University of Technology, Limassol, June 2024.

Transforming Credit Guarantee Schemes with Distributed Ledger Technology

"Transforming Credit Guarantee Schemes with Distributed Ledger Technology" at the International Conference on Business and Technology (ICBT 2024), Cambridge, United Kingdom, April 2024

NATIONAL AND INTERNATIONAL PROJECTS

Distributed Ledger and Credit Guarantee Schemes - Research staff member

Sapienza research project "Distributed Ledger and Credit Guarantee Schemes" with the Departments of Computer Science and Management of Sapienza University of Rome, Italy. Funding: 33 890 €.

exPlainable kNowledge-aware PrOcess INTelligence (PINPOINT) - Research staff member

PRIN research project "exPlainable kNowledge-aware PrOcess INTelligence (PINPOINT)", grant number (CUP) B87G22000450001 with the Department of Computer Science of Sapienza University of Rome, Italy. Total funding: 794 578 € (Sapienza: 182 809 €).

HOBBIES AND INTERESTS

Saint Louis College of Music - Rome, Italy

Professional diploma course in Rock / Blues guitar.