






Francesco Vinci

+39-388-344-6145 | fvinci@math.unipd.it | francvinci.github.io

 [francesco-vinci](#) |  [franvinci](#) |  [Francesco Vinci](#)

EXPERIENCE

- **University of Padova**  April 2023 - Current
Teaching Assistant Padova (PD), Italy
 - Database Teaching Assistant in Computer Science Bachelor's degree.
- **RWTH Aachen University**  March 2025 - September 2025
Visiting Researcher Aachen, Germany
 - Visiting Researcher at the Process and Data Science (PADS) Research Group.
 - Supervised by Prof. Wil van der Aalst.
- **Fraunhofer FIT**  September 2024 - March 2025
Visiting Researcher Aachen, Germany
 - Visiting Researcher at the Process Mining Group in Aachen.
 - Supervised by Prof. Wil van der Aalst and Dr. Gyunam Park.
- **Danieli Automation**  March 2022 - August 2022
R&D Data Science Intern Buttrio (UD), Italy
 - Intern at the Danieli Research Center.
- **University of Padua**  September 2019 - December 2019
Librarian Padova (PD), Italy
 - Librarian at the "Giovanni Colombo" Statistical Sciences Library.
 - Assistant at the Central Interlibrary Loan (ILL) Office (UCPI).

EDUCATION

- **University of Padova** October 2022 - Current
Ph.D. in Brain, Mind & Computer Science Padova (PD), Italy
 - Curricula: Computer Science for Societal Challenges and Innovation
 - Project: *Data-driven Optimization of Processes in Public Administrations: When Human Perception meets Objectivity*
 - Supervisor: Prof. Massimiliano de Leoni
- **University of Padova** October 2020 - September 2022
M.Sc. in Data Science Padova (PD), Italy
 - Thesis: *Semi-supervised Deep Learning methods for Video Anomaly Detection applied to sticking identification during steelmaking continuous casting process*
 - Supervisor: Prof. Michele Rossi
 - Co-Supervisor: Andrea Zamolo
- **University of Padova** October 2016 - February 2020
B.Sc. in Mathematics Padova (PD), Italy
 - Thesis: *Enlargement of filtrations in discrete time and applications to finance*
 - Supervisor: Prof. Claudio Fontana

PUBLICATIONS

C=CONFERENCE, J=JOURNAL, *=UNDER REVIEW









- [C.6] **Francesco Vinci**, Gyunam Park, Wil van der Aalst, Massimiliano de Leoni (2025). **Reliable and Configurable Process Simulations via Probabilistic White-Box Models**. In *International Conference on Service Oriented Computing*. **Accepted**.
- [C.5] Ngoc-Diem Le, Alessandro Padella, **Francesco Vinci**, Massimiliano de Leoni (2025). **Leveraging Counterfactuals for Prescriptive Process Analytics**. In *Business Process Management: Responsible BPM Forum, Process Technology Forum, Educators Forum*. BPM 2025. Springer Nature Switzerland. DOI: 10.1007/978-3-032-02936-2_15.

- [C.4] **Francesco Vinci**, Gyunam Park, Wil van der Aalst, Massimiliano de Leoni (2025). **Online Discovery of Simulation Models for Evolving Business Processes**. In *International Conference on Business Process Management*, pp. 451-468. Springer Nature Switzerland. August 31- September 5, 2025, Seville, Spain. DOI: 10.1007/978-3-032-02867-9_27
- [J.1] **Francesco Vinci**, Massimiliano de Leoni (2025). **Balancing Fitness and Precision in Process Model Repair: Framework Formalization, Assessment, and Benefits for Simulation**. In *Process Science*, Vol. 2, n. 3, Best Process Science Conference Papers 2024 Collection. Springer Nature. DOI: 10.1007/s44311-025-00007-7
- [C.3] **Francesco Vinci**, Massimiliano de Leoni (2024). **Repairing Process Models Through Simulation and Explainable AI**. In *International Conference on Business Process Management*, pp. 129-145. Springer Nature Switzerland. September 1-6, 2024, Krakow, Poland. DOI: 10.1007/978-3-031-70396-6_8
- [C.2] Alessandro Padella, Felix Mannhardt, **Francesco Vinci**, Massimiliano de Leoni, Irene Vanderfeesten (2024). **Experience-Based Resource Allocation for Remaining Time Optimization**. In *International Conference on Business Process Management*, pp. 345-362. Springer Nature Switzerland. September 1-6, 2024, Krakow, Poland. DOI: 10.1007/978-3-031-70396-6_20
- [C.1] Massimiliano de Leoni, **Francesco Vinci**, Sander Leemans, Felix Mannhardt (2023). **Investigating the Influence of Data-Aware Process States on Activity Probabilities in Simulation Models: Does Accuracy Improve?**. In *International Conference on Business Process Management*, pp. 129-145. Springer Nature Switzerland. September 11-15, 2023, Utrecht, The Netherlands. DOI: 10.1007/978-3-031-41620-0_8

SKILLS

- **Specialized Area:** Process Mining, Business Process Management, Business Process Simulations, Event Data, Artificial Intelligence, Machine and Deep Learning
- **Programming Languages:** Python, R, MATLAB, C, C++, Julia
- **Data Science & Machine Learning:** TensorFlow, PyTorch, Keras, scikit-learn, XGBoost, Scipy, Catboost, SHAP, River, Pm4Py
- **Database Systems:** PostgreSQL, PgAdmin
- **Mathematical & Statistical Tools:** MATLAB, R Studio
- **Web Development:** Flask, JavaScript, HTML, CSS
- **Other Tools & Technologies:** Git, ProM Tools, CPN Tools, Apromore, Cortado

TRAINING AND DEVELOPMENT

- **23rd International Conference on Business Process Management (BPM 2025)** August 31 – September 5 2025
Universidad de Sevilla, Seville, Spain 
◦ Attendee and Speaker
- **7th International Workshop on Process-Oriented Data Science for Healthcare (PODS4H24)** 14 October 2024
Technical University of Denmark, Lyngby, Denmark 
◦ Attendee and Speaker
- **6th International Conference on Process Mining (ICPM 2024)** 14 October 2024
Technical University of Denmark, Lyngby, Denmark 
◦ Attendee
- **22nd International Conference on Business Process Management (BPM 2024)** 1-6 September 2024
AGH University, Krakow, Poland 
◦ Attendee and Speaker
- **12th European Big Data Management & Analytics Summer School (eBISS 2024)** 1-5 July 2023
University of Padova, Padova, Italy 
◦ Organizer
- **21st International Conference on Business Process Management (BPM 2023)** 11-15 September 2023
Utrecht University, Utrecht, The Netherlands 
◦ Attendee and Speaker
- **11th European Big Data Management & Analytics Summer School (eBISS 2023)** 3-7 July 2023
Universitat Politècnica de Catalunya, Barcelona, Spain 
◦ Attendee
- **Youth in Action for SDGs** 6 May 2022
Fondazione Italiana Accenture, Milan, Italy 
◦ Attendee
- **Web Summit 2021** 1-4 November 2021
Lisbon, Portugal 
◦ Attendee

HACKATHONS

- **World Data League**

World Data League

◦ Finalist

July 2021



- **Youth in Action**

Fondazione Italiana Accenture

◦ *Premio Promotori* Winner

April 2021



ADDITIONAL INFORMATION

Languages: Italian (C2), English (C1), German (A1), Spanish (A1)