

## PERSONAL INFORMATION

## Moreno Falaschi



**Affiliation**  
University of Siena  
Department of Information Engineering and Mathematics  
Via Roma 56, 53100 Siena (Italy)

**Phone** +39 0577 235961 **Mobile** +39 347 7052751

**Email** [moreno.falaschi@unisi.it](mailto:moreno.falaschi@unisi.it)

**Website** <https://sailab.diism.unisi.it/people/moreno-falaschi/>

**Sex** Male | **Date of birth** 13/09/1959 | **Nationality** Italian

Enterprise	University	EPR
<input type="checkbox"/> Management Level	<input checked="" type="checkbox"/> Full professor	<input type="checkbox"/> Research Director and 1st level Technologist / First Researcher and 2nd level Technologist / Principal Investigator
<input type="checkbox"/> Mid-Management Level	<input type="checkbox"/> Associate Professor	<input type="checkbox"/> Level III Researcher and Technologist
<input type="checkbox"/> Employee / worker level	<input type="checkbox"/> Researcher and Technologist of IV, V, VI and VII level / Technical collaborator	<input type="checkbox"/> Researcher and Technologist of IV, V, VI and VII level / Technical collaborator

## WORK EXPERIENCE

- 01/11/2004-present **Full Professor SSD INF/01 (Informatica)**  
University of Siena, Department of Information Engineering and Mathematics, Siena, Italy
- Teaching in courses at the BA, MSc and PhD level related to computer science (Programming in Java, Models and languages for bioinformatics, Foundations of Python). Member of the QA board for the 'Artificial Intelligence and Automation Engineering' degree course. Advisor of PhD students (12) and postdocs.
- His current main research activities concern bioinformatics and computational systems biology, in which he is active from more than 10 years and he has developed several computational models of biomedical systems, and the corresponding software tools for in silico simulations. He is also active on research in the field of Hybrid Artificial Intelligence for bioinformatics applications and is currently investigating the integration of symbolic constraint reasoning and neural networks. Another research activity concerns the design, analysis and implementation of (concurrent) constraint languages, in which the best numerical methods are applied to constraint programming.
- 2020-present **Proposer and Director of the (second level) Master in "Bioinformatics and Data Science" Univ. Of Siena.**
- 2014-present **Site director of CINI INFOLIFE national laboratory in bioinformatics** for the University of Siena.
- 2001-2004 **Vice-rector for Research and Technological Transfer**, University of Udine.
- 1998-2001 **Head of Department of Mathematics and Computer Science**, University of Udine.
- 01/11/1994-31/10/2004 **Full Professor SSD INF/01 (Informatica)**  
University of Udine, Department of Mathematics and Computer Science, Udine, Italy
- 01/11/1992-31/10/1994 **Associate Professor SSD ING-INF/05 (Information Processing Systems)**  
University of Padova, Department of Electronic Engineering and Informatics, Padova, Italy
- 01/11/1988-31/10/1992 **Researcher SSD INF/01 (Informatica)**  
University of Pisa, Department of Computer Science, Pisa, Italy

## EDUCATION AND TRAINING

- 1989-1990 **Post. Doc in Computer Science at the Weizmann Institute of Science** (group of Dr. Ehud Shapiro), Israel.  
Design and analyses based on abstract interpretation for concurrent constraint programming
- 1983-1987 **Ph.D. in Computer Science**  
University of Pisa, Italy
- Concurrent Constraint logic programming, Formal symbolic techniques of verification and analysis of programs

1978-1982 **Laurea Degree (MSc) in Computer Science (cum Laude)**  
University of Pisa, Italy

## WORK ACTIVITIES

**Invited scientist** Visiting scientist at LIX lab, Ecole Polytechnique, Palaiseau, France (July 2016, July 2019)

**Editorial activity** (2015-present) Associate editor of the journal "Information and Computation" (Elsevier)  
Member (or chair) of the program committee and reviewer of several major C.S. conferences (f.i. ICLP, PPDP, LOPSTR)

## PERSONAL SKILLS

**Mother tongue(s)** Italian.

**Other language(s)** English (advanced), French (intermediate low), Spanish (Intermediate)

## ADDITIONAL INFORMATION

**Publications** He has published more than 100 publications in peer-review journals and conferences.  
Google scholar profile: <https://scholar.google.com/citations?user=nDrV5GkAAAAJ>  
total number of citations: 2345  
Google scholar H index: 25

Linda Brodo, Roberto Bruni, Moreno Falaschi, Roberta Gori, Francesca Levi, Paolo Milazzo: Quantitative extensions of reaction systems based on SOS semantics. *Neural Comput. Appl.* 35(9): 6335-6359 (2023)

Michelangelo Diligenti, Francesco Giannini, Stefano Fioravanti, Caterina Graziani, Moreno Falaschi, Giuseppe Marra: Enhancing Embedding Representations of Biomedical Data using Logic Knowledge. *Proc. of International Joint Conference on Neural Networks (IJCNN)*, pp. 1-8, IEEE 2023.

Linda Brodo, Roberto Bruni, Moreno Falaschi: A logical and graphical framework for reaction systems. *Theor. Comput. Sci.* 875: 1-27 (2021)

Brodo, L., Bruni, R., Falaschi, M.: A process algebraic approach to reaction systems. *Theor. Comput. Sci.* 881, 62–82 (2021)

Falaschi, M., Palamidessi, C., Romanelli, M.: Derivation of constraints from machine learning models and applications to security and privacy. *OASlcs*, vol. 86, pp. 11:1–11:20. Schloss Dagstuhl - Leibniz-Zentrum für Informatik (2020).

Andrea Bernini, Linda Brodo, Pierpaolo Degano, Moreno Falaschi, Diana Hermith: Process calculi for biological processes. *Nat. Comput.* 17(2): 345-373 (2018)

Carlos Olarte, Davide Chiarugi, Moreno Falaschi, Diana Hermith: A proof theoretic view of spatial and temporal dependencies in biochemical systems. *Theor. Comput. Sci.* 641: 25-42 (2016)

Davide Chiarugi, Moreno Falaschi, Diana Hermith, Carlos Olarte, Luca Torella: Modelling non-Markovian dynamics in biochemical reactions. *BMC Syst. Biol.* 9(S-3): S8 (2015)

D. Chiarugi, M. Falaschi, C. Olarte, C. Palamidessi: A Declarative View of Signaling Pathways. *Programming Languages with Applications to Biology and Security*. LNCS 9465, pp. 183-201, Springer 2015

**Projects** (2018-2021) "A European AI On Demand Platform and Ecosystem" (AI4EU) - Horizon 2020 ICT-26-2018-2020 UNISI-DIISM Team member

(2022-2025) Next Generation EU programme PNRR ECS00000017 - "THE - Tuscany Health Ecosystem" - Spoke 3 - CUP I53C22000780001 -- UNISI-DIISM Team member

(2023-2025) Italian MUR PRIN 2022 project "MEDICA: Modelling and vErification of alkaptonuria and multiple sclerosis Driven by biomedical data" (2022RNTYWZ), PI for UNISI.

(2023-2026) EU programme PNRR ITEC0000018 – "Siena infrastructure for Artificial Intelligence and Life Science" - UNISI-DIISM Team member

25<sup>th</sup> January 2024

Moreno Falaschi