PERSONAL INFORMATION	LUCA BORTOLUSSI
OMISSIS	Department of Mathematics Informatics and Geosciences, University of Trieste, Via Valerio 6, 34127, Trieste
	[redacted]
	Email: lbortolussi@units.it
	http://ai-lab.units.it
	[redacted]
	h-index 23 Total citations: 1796 (source Scopus) h-index 32 Total citations: 3281 (source Scholar)

Enterprise	University	EPR
☐ Management Level	**X** Full professor	☐ Research Director and 1st level Technologist/First Researcher and 2nd level Technologist
☐ Mid-Management Level	☐ Associate professor	☐ Level III Researcher and Technologist
☐ Employee/worker level	☐ Researcher and Technologist of IV, V, VI and VII level/Technical collaborator	☐ Researcher and Technologist of IV, V, VI and VII level/Technical collaborator

WORK EXPERIENCE

2021 - present	Full Professor of Computer Science
	Department of Mathematics, Informatics and Geosciences, University of Trieste, Italy
	● Research Topics: Explainable AI, Neuro-symbolic AI, Simulation Intelligence, Robust Machine Learning, AI for sustainability, AI for health, AI for industry, Quantitative Formal Methods.
	Research
2015 - 2021	Associate Professor of Computer Science
	Department of Mathematics and Geosciences, University of Trieste, Italy
	● Research Topics: Quantitative Formal Methods, Neuro-symbolic AI, Simulation Intelligence, Robust Machine Learning
	Research
2006 - 2015	Assistant Professor
	Department of Mathematics and Informatics, University of Trieste, Italy
	● Research Topics: Quantitative Formal Methods, Computational Systems Biology.

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EDUCATION AND TRAINING

2007	PhD in Computer Science University of Udine ● Topics: computational biology and quantitative formal methods
2003	M. Sc. in Mathematics University of Trieste. ● Topics: fuzzy logic, interval probabilities

PROJECTS (last five years)

	With leadership roles
09/2019 – 08/2023	PRIN 2017 SEDUCE (PI of Trieste Unit): ~200k
11/2018 – 10/2021	DFK (German-funding Body) MULTIMODE (co-PI): ~300k
09/2022 – 08/2025	PNRR iNEST Spoke 9 (coordinator for UniTS): ~1m
11/2022 – 10/2025	INFINEON (AI for circuit design): 180k
03/2022 – 03/2024	GENERALI Invest (ML for asset allocation): 100k
09/2023 – 10/2024	TELEVITA (ML for Atrial Fibrillation detection): 40k

COMMUNITY SERVICE (last five years)

TPC Chair	QEST 2017 (Quantitative Evaluation of Systems, 17th edition, Berlin) CMSB 2019 (Computational Methods in Systems Biology, 19th edition, Trieste)
TPC member	Various years: QEST, AAAI, ATVA, CMSB, IJCAI, VALUETOOLS, ICPE

EDITORIAL ACTIVITY

2014-present	Information and Computation
2017-present	ACM Transactions of Modelling and Simulation

PHD SUPERVISION

Former phd students	Laura Nenzi, Roberta Lanciani, Simone Silvetti, Francesca Cairoli, Ginevra Carbone
Current phd students	Stefano Russo, Gaia Saveri, Federico Camerota, Lorenzo Basile, Valentina Blasone, Ilaria Vascotto, Emanuele Ballarin, Davide Scassola, Francesco Giacomarra, Irene Ferfoglia, Davide Basso, Andrea Mecchina, Nicholas Plasencia, Romina Doz, Nicholas Pearson.

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TEACHING

2021-present	Algoritmi e Strutture Dati (B.sc. AI and data analytics)
2017-present	Probabilistic Machine Learning (M.Sc Data Science and AI)
2017-2022	Stochastic Modelling and Simulation (M.Sc Data Science and AI)
2022-present	Introduction to Machine Learning (B.sc. AI and data analytics)

INSTITUTIONAL RESPONSIBILITIES

2023-present	Deputy Director of the Department of Mathematics, Informatics and Geosciences.
2023-present	Coordinator of the master program in Data Science and Artificial Intelligence, University of Trieste
2021-present	Deputy coordinator of the phd in Applied Data Science and Artificial Intelligence, University of Trieste
2017-2023	Coordinator of the master program in Data Science and Scientific Computing, University of Trieste
2020-2023	Coordinator of the bachelor program in Artificial Intelligence, and Data Analytics University of Trieste

INVITED TALKS

September 2018	CAP Workshop, sino-german CAP project, Beijing, China.
November 2018	DYNET 2018, Stochastic Dynamics on Large Networks, Prediction and Inference, Max Plank for Complex Systems, Dresden
December 2018	WSC 2018, Winter Simulation Conference, Goteborg, Sweden
November 2022	Overlay workshop, Udine, Italy

FELLOWSHIPS AND AWARDS

2010	Best paper award at ASMTA 2010
2011	Best paper award at QEST 2011
2013	Best paper award at QEST 2013
2018-2021	Mercator Fellow, awarded by DFG, Germany

ADDITIONAL INFORMATION

2018 2019	ASN in Computer Science (full professor) ASN in Computer Engineering (full professor)
2014-2015 2016 2018-2021	Guest professor of Modelling and Simulation, Saarland University, Germany

PUBLICATIONS

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Publications best and most relevant in the last 10 years	1. G. Saveri and L. Bortolussi. Retrieval-augmented mining of temporal logic specifications from data. Joint European Conference on Machine Learning and Knowledge Discovery in Databases, 2024. 2. F Randone, L Bortolussi, E Incerto, M Tribastone. Inference of Probabilistic Programs with Moment-Matching Gaussian Mixtures. Proceedings of the ACM on Programming Languages 8 (POPL), 1882-1912 3. L Nenzi, E Bartocci, L Bortolussi, S Silvetti, M Loreti. MoonLight: a lightweight tool for monitoring spatio-temporal properties. International Journal on Software Tools for Technology Transfer, 1-15, 2023. 4. L Bortolussi, GM Gallo, J Křetínský, L Nenzi. Learning model checking and the kernel trick for signal temporal logic on stochastic processes, TACAS 2022 5. L. Nenzi, E. Bartocci, L. Bortolussi, M. Loreti: A Logic for Monitoring Dynamic Networks of Spatially-distributed Cyber-Physical Systems. Log. Methods Comput. Sci. 18(1), 2022 6. T Waizmann, L Bortolussi, A Vandin, M Tribastone. Improved estimations of stochastic chemical kinetics by finite-state expansion. Proceedings of the Royal Society A 477 (2251), 2021. 7. F. Randone, L. Bortolussi, M. Tribastone: Refining Mean-field Approximations by Dynamic State Truncation. Proc. ACM Meas. Anal. Comput. Syst. 5(2): 25:1-25:30 (2021). 8. L. Bortolussi, F. Cairoli, N. Paoletti, S. Smolka, S. Stroller (2021). Neural Predictive Monitoring and a Comparison between a Frequentist and a Bayesian Approach. International Journal on Software Tools for Technology Transfer, 23(4): 615-640, 2021. 9. G. Carbone, M. Wicker, L. Laurenti, A. Patane, L. Bortolussi, G. Sanguinetti. Robustness of Bayesian Neural Networks to Gradient-Based Attacks. NeurIPS 2020. 10. L. Bortolussi, D. Milios, G. Sanguinetti. Smoothed Model Checking for Uncertain Continuous Time Markov Chains. Information and Computation. 247, 235-253, 2016 11. L. Bortolussi, G. Sanguinetti. Learning and Designing Stochastic Processes from Logical Constraints. Log. Methods Comput. Sci. 11, 2015. 12. E. Bartocci, L. Bortolussi, L. Nenzi, G. Sanguinetti. System Design of Stochastic Models using Robustness of Temporal Properties. Theoretical Computer Science. 587: 3–25, 2015.

According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV.

31 ottobre 2024

L'originale compilato e sottoscritto è depositato presso gli Uffici dell'Ente

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