


<b>PERSONAL INFORMATION</b>	<b>LUCA BORTOLUSSI</b>
	Department of Mathematics Informatics and Geosciences, University of Trieste, Via Valerio 6, 34127, Trieste
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	Email: _____
	<a href="http://ai-lab.units.it">http://ai-lab.units.it</a>
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	h-index 22 Total citations: 1722 (source Scopus) h-index 31 Total citations: 3163 (source Scholar)

<b>WORK EXPERIENCE</b>
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2021 - present	Full Professor of Computer Science
	Department of Mathematics, Informatics and Geosciences, University of Trieste, Italy
	<ul style="list-style-type: none"> <li>Research Topics: Explainable AI, Neuro-symbolic AI, Simulation Intelligence, Robust Machine Learning, AI for sustainability, AI for health, AI for industry, Quantitative Formal Methods.</li> </ul>
	Research
2015 - 2021	Associate Professor of Computer Science
	Department of Mathematics and Geosciences, University of Trieste, Italy
	<ul style="list-style-type: none"> <li>Research Topics: Quantitative Formal Methods, Neuro-symbolic AI, Simulation Intelligence, Robust Machine Learning</li> </ul>
	Research
2006 - 2015	Assistant Professor
	Department of Mathematics and Informatics, University of Trieste, Italy
	<ul style="list-style-type: none"> <li>Research Topics: Quantitative Formal Methods, Computational Systems Biology.</li> </ul>

<b>EDUCATION AND TRAINING</b>
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2007	PhD in Computer Science
	University of Udine
	<ul style="list-style-type: none"> <li>Topics: computational biology and quantitative formal methods</li> </ul>
2003	M. Sc. in Mathematics
	University of Trieste.
	<ul style="list-style-type: none"> <li>Topics: fuzzy logic, interval probabilities</li> </ul>

**PROJECTS (last five years)**

	<b>With leadership roles</b>
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, AAI, 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 Silveti, 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 Ferfoggia, Davide Basso, Andrea Mecchina, Nicholas Plasencia, Romina Doz, Nicholas Pearson.

**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

**PATENTS**

2016	Apparatus and method for control of parameters of an assisted ventilation machine. International patent number 102016000103298. University of Trieste. With U. Lucangelo, A. Casagrande, F. Fabris, M. Borelli, F. Quintavalle.
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**DISSEMINATION (selected)**

2019	Magazzino 26, episode 3, RAI Scuola. Interview on big data and artificial intelligence.
2020	Participation to "TG-COM24 - La città della scienza" on Artificial Intelligence.
2020	Panelist in "La Libertà al tempo dell'Intelligenza Artificiale", journalism festival "Dialoghi".

2022	Organizer and panelist in "Quando le Macchine Pensano Troppo", Museo Revoltella, Trieste Next.
2023	Panelist. "The Robot Journalist", Camera di Commercio
2023	La fuga del Pinguino Marco. Interactive AI-base game at the Sharper Night.
2023	Panelist in "I lost my job to an AI Chatbot", Trieste Next.
2023	Panelist in "Presentazione del Parco del Mare, Nautaverso" Trieste Convention Center
2023	Panelist in "Intelligenza Artificiale: le nuova opportunità di business tra privacy responsabilità copyright ed etica, Camera di Commercio.
2023	Panelist in "Intelligenza Artificiale e suoi riflessi sulla nostra Professione", annual meeting of Ordine dei Commercialisti.

#### ADDITIONAL INFORMATION

from 2020	head of the Artificial Intelligence Lab, University of Trieste, <a href="https://ai-lab.units.it">https://ai-lab.units.it</a>
2018	ASN in Computer Science (full professor)
2019	ASN in Computer Engineering (full professor)
2014-2015 2016; 2018-2021	Guest professor of Modelling and Simulation, Saarland University, Germany
2011-206	Honorary Fellow, School of Informatics, University of Edinburgh
2012-2017	Ricercatore Affiliato, ISTI CNR, Pisa.

#### PUBLICATIONS

Publications best and most relevant in the last 10 years	<ol style="list-style-type: none"> <li>1. L Nenzi, E Bartocci, L Bortolussi, S Silveti, M Loreti. MoonLight: a lightweight tool for monitoring spatio-temporal properties. International Journal on Software Tools for Technology Transfer, 1-15, 2023.</li> <li>2. L Bortolussi, GM Gallo, J Křetínský, L Nenzi. Learning model checking and the kernel trick for signal temporal logic on stochastic processes, TACAS 2022</li> <li>3. 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</li> <li>4. A Ceolin, C Guardiano, G Longobardi, MA Irimia, L Bortolussi, A Sgarro. At the boundaries of syntactic prehistory. Philosophical Transactions of the Royal Society B 376 (1824), 2021</li> </ol>
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	<ol style="list-style-type: none"> <li>5. T Waizmann, L Bortolussi, A Vandin, M Tribastone. Improved estimations of stochastic chemical kinetics by finite-state expansion. <i>Proceedings of the Royal Society A</i> 477 (2251), 2021.</li> <li>6. F. Randone, L. Bortolussi, M. Tribastone: Refining Mean-field Approximations by Dynamic State Truncation. <i>Proc. ACM Meas. Anal. Comput. Syst.</i> 5(2): 25:1-25:30 (2021).</li> <li>7. L. Bortolussi, F. Cairoli, N. Paoletti, S. Smolka, S. Stroller (2021). Neural Predictive Monitoring and a Comparison between a Frequentist and a Bayesian Approach. <i>International Journal on Software Tools for Technology Transfer</i>, 23(4): 615-640, 2021.</li> <li>8. G. Carbone, M. Wicker, L. Laurenti, A. Patane, L. Bortolussi, G. Sanguinetti. Robustness of Bayesian Neural Networks to Gradient-Based Attacks. <i>NeurIPS 2020</i>.</li> <li>9. L. Bortolussi, D. Milios, G. Sanguinetti. Smoothed Model Checking for Uncertain Continuous Time Markov Chains. <i>Information and Computation</i>. 247, 235-253, 2016</li> <li>10. L. Bortolussi, G. Sanguinetti. Learning and Designing Stochastic Processes from Logical Constraints. <i>Log. Methods Comput. Sci.</i> 11, 2015.</li> <li>11. E. Bartocci, L. Bortolussi, L. Nenzi, G. Sanguinetti. System Design of Stochastic Models using Robustness of Temporal Properties. <i>Theoretical Computer Science</i>. 587: 3–25, 2015.</li> </ol>
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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.

Autorizzo il trattamento dei miei dati personali ai sensi del Dlgs 196 del 30 giugno 2003 e dell'art. 13 GDPR.

Trieste, 4 Dicembre 2023