Bartolomeo Stellato

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Education

University of Oxford PhD in Engineering Science	Oxford, UK 2018
 Thesis: "Mixed-Integer Optimal Control of Fast Dynamical Systems" 	
- Supervision: P. Goulart	
ETH Zürich	Zürich, CH
MSc in Robotics, Systems and Control	2014
 Thesis: "Data-Driven Chance constrained Optimization" 	
- Supervision: B. Van Parys, J. Lygeros	
Politecnico di Milano	Milano, IT
BSc in Automation Engineering	2012

Research Interests

Data-driven computational tools to make decisions in highly dynamic and uncertain environments:

- **Research:** real-time and embedded optimization, robust optimization, optimization-based control, large scale optimization, machine learning for optimization.
- Applications: control of fast dynamical systems, robotics, finance, and autonomous systems.

Research Experience

Princeton University	Princeton, NJ
Assistant Professor, Dept. of Operations Research and Financial Engineering	Jul 2020 – Present
 Associated Faculty, Dept. of Electrical and Computer Engineering 	
 Associated Faculty, Dept. of Computer Science 	
 Associated Faculty, Center of Statistics and Machine Learning 	
 Affiliated Member, Robotics at Princeton Initiative 	
- Fellow, Whitman College	
MIT Sloan School of Management	Cambridge, MA
Postdoctoral Research Associate	Jan 2018 – Jul 2020
 Project: "Machine Learning for Optimization" 	
- Supervision: D. Bertsimas	
Stanford University	Stanford, CA
Visiting Student Researcher	2016
 Project: "OSQP: An Operator Splitting Solver for Quadratic Programs" 	
- Supervision: S. Boyd	
 Open-source software: OSQP (osqp.org). 50+ M downloads. 	
Widely used in academia and industry, including at Google, Blackrock, Lyft, etc.	
University of Oxford	Oxford, UK
European Union Marie Curie Fellow	Sep 2014 – Sep 2017
 Project: "TEMPO: Training in Embedded Predictive Control and Optimization" 	
- Supervision: P. Goulart	

Siemens, Building Technologies Division

Research Intern

- Project: "Adaptive Superheat Control on HVAC systems"
- Supervision: B. Baumann

Awards

Seed Grant (co-PI, \$50,000) Princeton School of Engineering and Applied Science (SEAS)	Feb 2024
CAREER Award (PI, \$500,000) National Science Foundation (NSF)	Mar 2023
 Franco Strazzabosco Young Investigator Award (\$3,000) Italian Scientists and Scholars in North America Foundation (ISSNAF) 	Nov 2022
Student Paper Award (as advisor) INFORMS Computing Society	Oct 2022
 Metropolis Project on Future Cities and Technologies (co-PI, \$100,000) Princeton School of Engineering and Applied Science (SEAS) 	Feb 2022
 Innovation Award in Data Science (PI, \$70,000) Princeton School of Engineering and Applied Science (SEAS) 	Feb 2022
 250th Anniversary Fund for Innovation in Undergraduate Education (\$23,000) Princeton University 	May 2021
Best Paper Award Mathematical Programming Computation	Jan 2021
Pierskalla Best Paper Award INFORMS Health Applications Society	Nov 2020
First Place Prize Paper Award (\$1000) <i>IEEE Transactions on Power Electronics</i>	Sep 2018
Vice-Chancellors' Fund (£3,000) University of Oxford	May 2017
Masterclass Award (£1,000) St Edmund Hall, University of Oxford	Apr 2015
Marie Curie PhD Fellowship (€250,000) <i>European Commission</i>	Sep 2014

Teaching Experience

Princeton University , Principal Lecturer ORF522: Linear and Nonlinear Optimization (PhD level, 30+ students)	Fall 2020 – Present
 Topics: linear optimization modeling, duality, sensitivity analysis and interior point methods. First order methods for nonlinear optimization, monotone operator theory, real-time optimization and data-driven algorithms. Applications: engineering, robotics, autonomous systems, finance, and machine learning 	Э.
Princeton University , Principal Lecturer ORF307: Optimization (BSc level, 95+ students)	Spring 2021 – Present
 Topics: least squares optimization with multiple objectives and constraints. Linear optimization modeling, duality, the simplex method, interior point methods, and network flow optimization. Integer programming and branch-and-bound algorithms. Applications: engineering, finance, and machine learning. 	

MIT, Teaching & Learning Laboratory Participant Kaufman Teaching Certificate Program	Aug 2019
 Completed teaching program based on eight workshops aimed at developing teaching skills, organizing new courses and interacting with the students. 	
University of Oxford , Tutor Courses: System Identification; Optimal Control; Linear Dynamical Systems	Sep 2015 – Jun 2016
 Responsible for holding weekly <i>tutorials</i>: small interactive teaching sessions with groups of four students with in-depth discussions. 	
University of Oxford , Laboratory Assistant Laboratories: LEGO Football; Instrumentation and Control; Helicopter	Jun 2015 Jun 2017
 Co-organized hands-on undergraduate laboratory courses. 	
Supervision	
Postdocs	
 Gabriele Dragotto, Princeton (co-advised with Prof. Fernández Fisac) 	2022-Present
 Princeton DataX Postdoc Fellowship 	
Graduate students	
 Yixuan Hua, PhD Princeton (co-advised with Prof. Amir Ali Ahmadi) PhD topic: Disjunctive Sum of Squares Optimization 	2023-Present
Stefan Clarke, PhD Princeton PhD topic: Data-Driven Multi-Agent Decision Making	2022-Present
Rajiv Sambharya, PhD Princeton PhD topic: Learning to Accelerate Optimizers	2021-Present
- Princeton Graduate School Excellence in Teaching Award (ORF307 course)	
Vinit Ranjan, PhD Princeton PhD topic: Performance Certification for Real-Time Optimization	2021-Present
Irina Wang, PhD Princeton PhD topic: Learning for Optimization under Uncertainty	2021-Present
 Wallace Memorial Fellowship in Engineering Princeton SEAS Award for Excellence INFORMS Computing Society Student Paper Award 	
 Shuvomoy Das Gupta, PhD MIT (co-supervised with Prof. B. Van Parys) PhD topic: First-order Methods for Nonconvex Optimization 	2019–2022
Liangyuan Na, PhD MIT (co-supervised with Prof. D. Bertsimas) PhD topic: Coupled adaptive and robust optimization	2019–2020
Luca Mingardi, MBAn MIT (co-supervised with Prof. D. Bertsimas) Master topic: Hearth disease predictions from ECG data	2019–2021
Senior thesis students (Princeton)	
Annie Liang	2023-Present
Sophia Fang	2023-Present
Anna Glowski	2022–2023
Title: "Optimizing Fun: A TSP-Based Approach to Route Optimization at Disneyland"	
Nishant Kumar Singhal Title: "Constructing Optimal Flow Naturation Contared on the U.S. Flight Nat	2022-2023
Title: "Constructing Optimal Flow Networks: An Exploration Centered on the U.S. Flight Net	
Elliott N. Strahan	2022–2023

Chen Leon Title: "A Mixed-Integer Optimization Approach to Allocating Housing Resources for the Homeless"	2022–2023
Cole Becker Title: "Data-Driven Methods for Decision-Making Under Uncertainty"	2021–2022
 John Ogden Bigelow Jr. Prize in Electrical Engineering Princeton SEAS Mueller Prize 	
 Joyce Luo Title: "Equitable Data-driven Resource Allocation to Fight the Opioid Epidemic: a Mixed-integer Optimization Approach" – Sigma Xi Book Award 	2021–2022
 Diana Zhang Title: "Applications of Deep Implicit Layers and Convex Optimization in Portfolio and Risk Management" 	2021–2022
Emma Zhao Title: "Don't Forget The Past: An Analysis Of Dementia Risk Factors Around The World"	2021–2022
Holly Cunningham Title: "Differentiable Transportation for On-Demand Transportation Systems"	2020–2021
Ava Jiang Title: "A Distributed Framework for Learning Agent Rationality"	2020–2021
Max Jun Kim Title: "A Computational Approach to Analyzing Supply Chain Sustainability"	2020–2021
Research software engineers (Princeton)	
Amit Solomon	2023–Present
Vineet Bansal	2021–2022

Service

Review

Mathematical Programming, Operations Research, Mathematics of Operations Research, Management Science, SIAM Journal on Optimization, Mathematical Programming Computation, IEEE Transactions on Automatic Control, ACM Transactions on Mathematical Software, The American Statistician, IEEE Transactions on Power Electronics, Autonomous Robots, INFORMS Journal of Optimization, Optimal Control Applications and Methods, Computers and Operations Research, IEEE Access, IEEE Transactions on Neural Networks and Learning Systems.

Societies and conference committees

 Vice-Chair of Computational Optimization and Software, INFORMS Optimization Society 	2023–2025
Cluster Chair: Computational Optimization and Software, INFORMS Annual Meeting	2024
• Cluster Chair (14 sessions): Emerging Appl. of Optimization, INFORMS Opt. Society Conference (IOS)	2024
 Program committee: 4th Learning for Dynamics and Control Conference (L4DC) 	2022
 Program committee: 3th Learning for Dynamics and Control Conference (L4DC) 	2021
Invited sessions and seminar organization	
 Chair of one invited session: Conference on Information Sciences and Systems (CISS) 	2024
Organizer: Princeton Optimization Seminars	2020–Present
Chair of one invited session: INFORMS Annual Meeting	2023
Chair of one invited session: Modeling and Optimization: Theory and Applications (MOPTA)	2023
 Organizer of two minisymposia (16 speakers): SIAM Conf. on Optimization (SIOPT) 	2023
Chair of one invited session: INFORMS Annual Meeting	2022

Chair of two invited sessions: International Conference on Continuous Optimization (ICCOPT)	2022
Chair of one invited session: European Conference on Computational Optimization (EUCCO)	2016
Organizer: Oxford Control and Optimization Seminars	2016-2017
PhD committees	
 Zheng Yu, Princeton ECE (advised by Prof. Mengdi Wang) 	2022
 Abhishek Cauligi, Stanford Aeroastro (advised by Prof. Marco Pavone) 	2021
 Cemil Dibek, Princeton ORFE (advised by Prof. Amir Ali Ahmadi) 	2021
 Zachary Hervieux-Moore, Princeton ORFE (advised by Prof. Alain Kornhauser) 	2021
 Sinem Uysal, Princeton ORFE (advised by Prof. John Mulvey) 	2021
 Hao Lu, Princeton ORFE (advised by Prof. Mengdi Wang) 	2021
Bachir El Khadir, Princeton ORFE (advised by Prof. Amir Ali Ahmadi)	2020
General examination committees	
Stefan Clarke, Princeton ORFE	2023
 Chenyu Yu, Princeton ORFE (advised by Prof. John Mulvey) 	2023
 Jennifer Sun, Princeton ORFE (advised by Prof. Elad Hazan) 	2023
Anjian Li, Princeton ECE (advised by Prof. Ryne Beeson)	2023
 Haimin Hu, Princeton ECE (advised by Prof. Jaime Fernández Fisac) 	2021
Rajiv Sambharya, Princeton ORFE	2021
 Pierfrancesco Beneventano, Princeton ORFE (advised by Prof. Boris Hanin) 	2021
Abraar Chaudhry, Princeton ORFE (advised by Prof. Amir Ali Ahmadi)	2021
 Yu Wu, Princeton ECE (advised by Prof. Mengdi Wang) 	2021
Academic advising	
 23 undergraduate students/year, ORFE, Princeton Universiy, 	2020–Present
 14 freshman students/year, Whitman college, Princeton University 	2021–Present
Other committees and panels	
NSF EPCN Proposal Reviewer	2024
Assoc. Director of Research Development hiring committee, Princeton Office of the Dean for Research	2023
Graduate Certificate Program Committee, Princeton Center for Statistics and Machine Learning	2023
 Independent Work grader, Princeton Center for Statistics and Machine Learning 	2022–2023
PhD admissions committee, Princeton ORFE	2022–2023
Open-source software	
 CVXPY project maintainer (as part of NumFOCUS) 	2021–Present
 OSQP project maintainer (supported by Princeton CSML and OIT) 	2022-Present

Publications

Journal articles

- [J13] J. Luo and **B. Stellato**, "Frontiers in operations: Equitable data-driven facility location and resource allocation to fight the opioid epidemic," *Manufacturing & Service Operations Management (to appear)*, Jun. 2024.
- [J12] D. Bertsimas and **B. Stellato**, "Online mixed-integer optimization in milliseconds," *INFORMS Journal on Computing*, vol. 34, no. 4, pp. 2229–2248, 2022.
- [J11] A. Cauligi, P. Culbertson, E. Schmerling, M. Schwager, B. Stellato, and M. Pavone, "CoCo: Online mixed-integer control via supervised learning," *IEEE Robotics and Automation Letters*, vol. 7, no. 2, pp. 1447–1454, 2022.

- [J10] M. Schaller, G. Banjac, S. Diamond, A. Agrawal, B. Stellato, and S. Boyd, "Embedded code generation with CVXPY," IEEE Control Systems Letters, vol. 6, pp. 2653–2658, 2022.
- [J9] D. Bertsimas, L. Boussioux, R. Cory Wright, A. Delarue, V. Digalakis, A. Jacquillat, D. Lahlou Kitane, G. Lukin, M. L. Li, L. Mingardi, O. Nohadani, A. Orfanoudaki, T. Papalexopoulos, I. Paskov, J. Pauphilet, O. Skali Lami, B. Stellato, H. Tazi Bouardi, K. Villalobos Carballo, H. Wiberg, and C. Zeng, "From predictions to prescriptions: A data-driven response to COVID-19," *Health Care Management Science*, vol. 24, pp. 253–272, Jun. 2021.
 TNFORMS Health Applications Society Pierskalla Best Paper Award
- [J8] D. Bertsimas, L. Mingardi, and B. Stellato, "Machine learning for real-time heart disease prediction," IEEE Journal of Biomedical and Health Informatics, vol. 25, no. 9, pp. 3627–3637, 2021.
- [J7] D. Bertsimas and B. Stellato, "The voice of optimization," Machine Learning, vol. 110, pp. 249–277, 2 Feb. 2021.
- [J6] D. Bertsimas, G. Lukin, L. Mingardi, O. Nohadani, A. Orfanoudaki, B. Stellato, H. Wiberg, S. Gonzalez-Garcia, C. L. Parra-Calderon, K. Robinson, M. Schneider, B. Stein, A. Estirado, L. a Beccara, R. Canino, M. Dal Bello, F. Pezzetti, and A. Pan, "COVID-19 mortality risk assessment: An international multi-center study," *PLOS One*, Dec. 2020.
- [J5] B. Stellato, G. Banjac, P. Goulart, A. Bemporad, and S. Boyd, "OSQP: An operator splitting solver for quadratic programs," *Mathematical Programming Computation*, vol. 12, no. 4, pp. 637–672, Oct. 2020.
 The second seco
- [J4] G. Banjac, P. Goulart, B. Stellato, and S. Boyd, "Infeasibility detection in the alternating direction method of multipliers for convex optimization," *Journal of Optimization Theory and Applications*, vol. 183, no. 2, pp. 490–519, 2019.
- [J3] B. Stellato, T. Geyer, and P. Goulart, "High-speed finite control set model predictive control for power electronics," *IEEE Transactions on Power Electronics*, vol. 32, no. 5, pp. 4007–4020, May 2017.

 First Prize Paper Award IEEE Transactions on Power Electronics
- [J2] B. Stellato, S. Ober-Blöbaum, and P. Goulart, "Second-order switching time optimization for switched dynamical systems," *IEEE Transactions on Automatic Control*, vol. 62, no. 10, pp. 5407–5414, Oct. 2017.
- [J1] **B. Stellato**, B. P. Van Parys, and P. Goulart, "Multivariate chebyshev inequality with estimated mean and variance," *The American Statistician*, vol. 71, no. 2, pp. 123–127, 2017.

Conference proceedings

- [C13] S. Clarke, G. Dragotto, J. Fernandez Fisac, and B. Stellato, "Learning rationality in potential games," in IEEE Conference on Decision and Control (CDC), Dec. 2023.
- [C12] R. Sambharya, G. Hall, B. Amos, and B. Stellato, "End-to-end learning to warm-start for real-time quadratic optimization," in *Proceedings of the 5th Annual Learning for Dynamics and Control Conference*, N. Matni, M. Morari, and G. J. Pappas, Eds., ser. Proceedings of Machine Learning Research, vol. 211, PMLR, Jun. 2023, pp. 220–234.
- [C11] M. Wang, I. McInerney, B. Stellato, S. Boyd, and H. So, "RSQP: Problem-specific architectural customization for accelerated convex quadratic optimization," in *Proceedings of the 50th Annual International Symposium on Computer Architecture*, ser. ISCA '23, Orlando, FL, USA: Association for Computing Machinery, 2023.
- [C10] J. Ichnowski, P. Jain, B. Stellato, G. Banjac, M. Luo, F. Borrelli, J. E. Gonzales, I. Stoica, and K. Goldberg, "Accelerating quadratic optimization with reinforcement learning," in Advances in Neural Information Processing Systems 35, Dec. 2021.
- [C9] T. Seyde, I. Gilitschenski, W. Schwarting, B. Stellato, M. Riedmiller, M. Wulfmeier, and D. Rus, "Is bang-bang control all you need? Solving continuous control with bernoulli policies," in Advances in Neural Information Processing Systems 35, Dec. 2021.
- [C8] A. Agrawal, S. Barratt, S. Boyd, and B. Stellato, "Learning convex optimization control policies," in *Proceedings of the 2nd Conference on Learning for Dynamics and Control*, ser. Proceedings of Machine Learning Research, vol. 120, PMLR, Jun. 2020, pp. 361–373.

- [C7] A. Cauligi, P. Culbertson, B. Stellato, D. Bertsimas, M. Schwager, and M. Pavone, "Learning mixed-integer convex optimization strategies for robot planning and control," in *IEEE Conference on Decision and Control (CDC)*, Dec. 2020.
- [C6] A. Cauligi, P. Culbertson, B. Stellato, M. Schwager, and M. Pavone, "CoCo: Learning strategies for online mixedinteger control," in *Learning Meets Combinatorial Algorithms at NeurIPS2020*, Dec. 2020.
- [C5] B. Stellato, V. V. Naik, A. Bemporad, P. Goulart, and S. Boyd, "Embedded mixed-integer quadratic optimization using the OSQP solver," in European Control Conference (ECC), Jul. 2018.
- [C4] G. Banjac, B. Stellato, N. Moehle, P. Goulart, A. Bemporad, and S. Boyd, "Embedded code generation using the OSQP solver," in IEEE Conference on Decision and Control (CDC), Dec. 2017.
- [C3] B. Stellato and P. Goulart, "High-speed direct model predictive control for power electronics," in European Control Conference (ECC), Jul. 2016, pp. 129–134.
- [C2] B. Stellato and P. Goulart, "Real-time FPGA implementation of direct MPC for power electronics," in IEEE Conference on Decision and Control (CDC), Dec. 2016, pp. 1471–1476.
- [C1] B. Stellato, S. Ober-Blöbaum, and P. Goulart, "Optimal control of switching times in switched linear systems," in IEEE Conference on Decision and Control (CDC), Dec. 2016, pp. 7228–7233.

Preprints

- [P11] F. Fabiani, B. Stellato, D. Masti, and P. Goulart, "A neural network-based approach to hybrid systems identification for control," arXiv e-prints, Apr. 2024. arXiv: 2404.01814.
- [P10] H. Hu, G. Dragotto, Z. Zhang, K. Liang, B. Stellato, and J. Fernández Fisac, "Who plays first? Optimizing the order of play in Stackelberg games with many robots," arXiv e-prints, Feb. 2024. arXiv: 2402.09246.
- [P9] V. Ranjan and B. Stellato, "Verification of first-order methods for parametric quadratic optimization," arXiv e-prints, Mar. 2024. arXiv: 2403.03331.
- [P8] I. Wang, C. Becker, B. Van Parys, and B. Stellato, "Learning decision-focused uncertainty sets in robust optimization," In preparation, 2024. arXiv: 2305.19225.
- [P7] D. Bertsimas, L. Na, and B. Stellato, "The benefit of uncertainty coupling in robust and adaptive robust optimization," arXiv e-prints, Feb. 2023. arXiv: 2302.10369.
- [P6] S. Das Gupta, B. Stellato, and B. P. G. Van Parys, "Exterior-point optimization for sparse and low-rank optimization," arXiv e-prints, Aug. 2023. arXiv: 2011.04552.
- [P5] T. Diamandis, Z. Frangella, S. Zhao, B. Stellato, and M. Udell, "Genios: An (almost) second-order operator-splitting solver for large-scale convex optimization," arXiv e-prints, Oct. 2023. arXiv: 2310.08333.
- [P4] G. Dragotto, S. Clarke, J. Fernandez Fisac, and B. Stellato, "Differentiable cutting-plane layers for mixed-integer linear optimization," arXiv e-prints, Nov. 2023. arXiv: 2311.03350.
- [P3] Z. Frangella, S. Zhao, T. Diamandis, B. Stellato, and M. Udell, "On the (linear) convergence of generalized Newton inexact ADMM," arXiv e-prints, Feb. 2023. arXiv: 2302.03863.
- [P2] R. Sambharya, G. Hall, B. Amos, and B. Stellato, "Learning to warm-start fixed-point optimization algorithms," arXiv e-prints, Sep. 2023. arXiv: 2309.07835.
- [P1] I. Wang, C. Becker, B. Van Parys, and B. Stellato, "Mean robust optimization," arXiv e-prints, Sep. 2022. arXiv: 2207.10820.
 INFORMS Computing Society Student Paper Award

Theses

- [T2] B. Stellato, "Mixed-integer optimal control of fast dynamical systems," PhD thesis, University of Oxford, 2017.
- [T1] B. Stellato, "Data-driven chance constrained optimization," MSc thesis, ETH Zürich, 2014.

Selected Invited Talks

Autonomy Talks, Virtual, Zoom	Apr 2024
 INFORMS Optimization Society Conference, Houston, TX 	Mar 2024
 Conference on Information Sciences and Systems, Princeton University, NJ 	Mar 2024
AAAI Workshop on Learnable Optimization, Vancouver, CA	Feb 2024
Discrete Optimization Talks, Virtual, Zoom	Feb 2024
INFORMS Annual Meeting, Phoenix, AZ	Oct 2023
Thematic Einstein Semester, Zuse Institute Berlin, DE	Sep 2023
 International Conference on Stochastic Programming, UC Davis, CA 	Jul 2023
SIAM Conference on Optimization, Seattle, WA	May 2023
Mixed-Integer Programming Workshop, University of Southern California, CA	May 2023
Conference on Information Sciences and Systems, Johns Hopkins University, MD	Mar 2023
 IPAM Workshop on Artificial Intelligence and Discrete Optimization, UCLA, CA 	Feb 2023
Mechanical Engineering Seminar, UC Berkeley, CA	Nov 2022
 Future of OR Workshop at INFORMS Annual Meeting, Indianapolis, IN 	Oct 2022
• DEIB Seminar, Politecnico di Milano, IT	Jun 2022
Cornell ORIE Seminar, Cornell Tech, NY	Mar 2022
NASA JPL Multi-Agent Tech Talks, Virtual, Zoom	Mar 2022
INFORMS Annual Meeting, Anaheim, CA	Oct 2021
 Joint Princeton Robotics and Optimization Seminar, Virtual, Zoom 	May 2021
Raytheon Technologies Research Center, Virtual, Zoom	Jan 2021
 Invited Session at the INFORMS Annual Meeting 2020, Virtual, Zoom 	Nov 2020
• Mathematics of Data and Decisions at Davis (MADDD) Seminars, UC Davis, CA	Jun 2020
• Fields Institute Focus Program on Data Science and Optimization, Fields Institute, CA	Nov 2019
IEOR Seminars, UC Berkeley, USA	Oct 2019
SISL Seminars, Stanford, USA	Oct 2019
 Invited Session at the INFORMS Annual Meeting 2019, Seattle, WA 	Oct 2019
Operations Research Center IAP Seminar, MIT, USA	May 2019
 IDSS Seminar on Algebra Statistics and Optimization, MIT, USA 	Jan 2019
 Intl. Symposium of Mathematical Programming (ISMP), Bordeaux, France 	Jul 2018
Mathematical Institute, University of Oxford, UK	Nov 2017
Control Systems Group, Cambridge University, UK	Jun 2017
Operations Research Center, MIT, USA	Jun 2017
DYSCO Research Group, IMT Lucca, Italy	Jan 2017
MPC Laboratory, UC Berkeley, USA	Oct 2016
• European Conf. on Computational Optimization (EUCCO), KU Leuven, Belgium	Sep 2016

Technical Skills

Languages

Programming: Python, Julia, C/C++
Web design: HTML, CSS, Javascript, React
Tech/Tools: Git, Docker, SLURM
Embedded design: Xilinx FPGA
Italian: Mother tongue
English: Fluent (C2)
French: Intermediate (B1)
German: Basic (A2)

Interests and Activities

- Music, Collection and playing
 - Piano diploma (5th year), Istituto Superiore di Studi Musicali "F. Vittadini", Pavia, Italy, Grade 8.50/10
 - Music theory and solfeggio diploma, *Istituto Superiore di Studi Musicali "C. Monteverdi"*, *Cremona, Italy*, Grade 9.60/10
- MITaly, Member of the MIT Italian Association Board.
 - Organized large events in collaboration with Italian communities and the Consulate General of Italy in Boston.
 - Organized seminar series with Italian professors at MIT and Harvard.
 - Developed the association main website (mitaly.mit.edu).