

Ferdinando FIORETTO

Assistant Professor

📍 Computer Science, University of Virginia, Charlottesville - VA 22903 - U.S.A.
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Research Interests: Machine Learning | Differential Privacy | Algorithmic Fairness | AI for Science and Engineering

PROFESSIONAL EXPERIENCE

Current	University of Virginia , <i>Computer Science</i> , Charlottesville, VA
Aug. 2023	ASSISTANT PROFESSOR
Jul. 2023	Syracuse University , <i>Electrical Engineering & Computer Science</i> , Syracuse, NY
Jan. 2020	ASSISTANT PROFESSOR
Dec. 2019	Georgia Institute of Technology , <i>School of Industrial and System Engineering</i> , Atlanta, GA
Sep. 2018	POST-DOCTORAL RESEARCHER
Dec. 2018	University of Michigan , <i>Industrial and Operations Engineering</i> , Ann Arbor, MI
Sep. 2016	RESEARCH FELLOW

EDUCATION

Aug. 2016	University of Udine ¹ , <i>Computer Science</i> , Udine, IT PH.D. IN COMPUTER SCIENCE (WITH MS IN 2012)
Nov. 2009	University of Parma , <i>Computer Science & Mathematics</i> , Parma, IT BS. IN COMPUTER SCIENCE

SELECTED HONORS AND AWARDS

2022	Caspar Bowden PET Award , Privacy Enhancing Technologies (PETs). 🔗 Link
2022	NSF CAREER Award , National Science Foundation. 🔗 Press
2022	Google Research Scholar Award , Google (Privacy). 🔗 Link
2022	Amazon Research Award , Amazon – AWS AI (Responsible AI). 🔗 Press
2022	Best Paper Award , IEEE Transaction of Power Systems. 🔗 Link
2022	Early Career Spotlight , International Joint Conference on Artificial Intelligence (IJCAI). 🔗 Link
2021	Early Career Researcher Award , Association for Constraint Programming. 🔗 Link
2021	Mario Gerla Young Investigator Award , ISSNAF. 🔗 Press
2021	Best Paper Award , IEEE Transaction of Power Systems. 🔗 Link
2017	Best AI Dissertation Award , AI*IA. 🔗 Press

OTHER AWARDS

2024	Outstanding Research Faculty Award , University of Virginia. 🔗 Link
2023	ICLR Notable Reviewer Award , International conference on Learning Representations (ICLR). 🔗 Link
2023	NMSU CS Star Award , New Mexico State University (NMSU). 🔗 Link
2022	Lightning Talk (Spotlight) , Conference on Neural Information Processing Systems (NeurIPS). 🔗 Link
2022	Top Reviewer Award , Conference on Neural Information Processing Systems (NeurIPS). 🔗 Link
2021	Outstanding Reviewer Award , Conference on Neural Information Processing Systems (NeurIPS). 🔗 Link
2020	Differentially Private Temporal Map Challenge Award, \$5000 , NIST. 🔗 Press
2020	Young Investigator Award Nomination , ISSNAF. 🔗 Press
2019	Invited journal paper , International Joint Conference on Artificial Intelligence (IJCAI). 🔗 Link
2017	Most Visionary Workshop Paper Award , International Conference of Autonomous Agents and Multiagent Systems (AAMAS). 🔗 Link
2016	Top Graduate Student Honor's Cord , NMSU.
2014	Outstanding Research Assistant Award , Computer Science, NMSU. 🔗 Press
2014	Outstanding Teaching Assistant Nomination , NMSU.
2013	Best Student Paper Award , Computational Methods in System Biology (CMSB). 🔗 Link
2013	Ph.D. Scholarship Award (~\$50,000) , University of Udine.


1. Dual degree with New Mexico State University

- 2013 **Outstanding Teaching Assistant Award**, Computer Science, NMSU. [Press](#)
- 2013 **Computer Science Scholarship (\$1500)**, NMSU.
- 2012 **Honors Graduate Recognition for Outstanding Academic Success**, NMSU.
- 2008 **Erasmus Scholarship (~ \$14, 000)**, University of Leeds.

PUBLICATIONS







Summary : > 77 Conference papers > 14 Journals articles > 2 Book chapters > 3 Editorial articles
> 31 Workshop papers > 20+ Preprints

Total citations : 2686 **H-index :** 26 [Google Scholar](#)














Names of students I supervise(d) are prepended with symbol .

RIGOROUSLY PEER REVIEWED CONFERENCES

2025

- c77.  Vincenzo Di Vito, Mostafa Mohammadian, Kyri Baker, **Ferdinando Fioretto**. “*Learning To Solve Differential Equation Constrained Optimization Problems*”. *Proceedings of the International Conference on Learning Representations (ICLR)*, 2025. Acceptance Rate : 32.02%.
- c76.  Jacob K. Christopher,  Michael Cardei, Brian R Bartoldson, Bhavya Kailkhura, **Ferdinando Fioretto**. “*Speculative Diffusion Decoding : Accelerating Language Generation through Diffusion*”. *Proceedings of the Annual Conference of the Nations of the Americas Chapter of the Association for Computational Linguistics (NAACL)*, 2025. Acceptance Rate : unknown.
- c75. **Ferdinando Fioretto**, Diptangshu Sen, Juba Ziani. “*Differentially Private Data Release on Graphs : Inefficiencies and Unfairness*”. *Proceedings of the International Conference on Artificial Intelligence and Statistics (AISTATS)*, 2025. Acceptance Rate : 31.3%.
- c74.  Joonhyuk Ko, Juba Ziani,  Saswat Das, Matt Williams, **Ferdinando Fioretto**. “*Fairness Issues and Mitigations in (Differentially Private) Socio-demographic Data Processes*”. *Proceedings of the AAAI Conference on Artificial Intelligence (AAAI)*, 2025. Acceptance Rate : 19%.
-  **Oral Presentation** (5%).
- c73. FairDP : Certified Fairness with Differential Privacy. “*Khang Tran, Ferdinando Fioretto, Issa Khalil, My T. Thai, Nhat-Hai Phan*”. In *IEEE Secure and Trustworthy Machine Learning Conference (SaTML 2025)*, 2025. Acceptance Rate : 29.4%.

2024

- c72.  Jacob K. Christopher, Stephen Baek, **Ferdinando Fioretto**. “*Constrained Synthesis with Projected Diffusion Models*”. *Proceedings of the Conference on Neural Information Processing Systems (NeurIPS)*, 2024. Acceptance Rate : 25.8%.
- c71.  Jacob K. Christopher, Stephen Baek, **Ferdinando Fioretto**. “*Physics-Aware Generative Diffusion Models for Microstructure Material Design*”. *AI 4 Material science, at NeurIPS*, 2024. Acceptance Rate : 39%.
-  **Spotlight presentation** (6%).
- c70.  Jacob K. Christopher,  Michael Cardei, Brian R Bartoldson, Bhavya Kailkhura, **Ferdinando Fioretto**. “*Speculative Diffusion Decoding : Accelerating Language Generation through Diffusion*”. *Efficient Natural Language and Speech Processing (ENLSP)*, at *NeurIPS*, 2024. Acceptance Rate : TBA.
- c69. Ethan King,  James Kotary, **Ferdinando Fioretto**, Jan Drgona. “*Metric Learning to Accelerate Convergence of Operator Splitting Methods for Differentiable Parametric Programming*”. *63rd IEEE Conference on Decision and Control (CDC)*, 2024. Acceptance Rate : TBA.
- c68.  James Kotary,  Vincenzo Di Vito,  Jacob K. Christopher, Pascal Van Hentenryck, **Ferdinando Fioretto**. “*Predict-Then-Optimize by Proxy : Learning Joint Models of Prediction and Optimization*”. *Proceedings of the European Conference of Artificial Intelligence (ECAI)*, 2024. Acceptance Rate : 23.3%.
- c67.  Sree Harsha Nelaturu,  Nishaanth Kanna Ravichandran,  Cuong Tran, Sara Hooker, and **Ferdinando Fioretto**. “*On The Fairness Impacts of Hardware Selection in Machine Learning*”. *Proceedings of the International Conference on Machine Learning (ICML)*, 2024. Acceptance Rate : 27.5%.
- c66.  Saswat Das, Marco Romanelli, **Ferdinando Fioretto**. “*Disparate Impact on Group Accuracy of Linearization for Private Inference*”. *Proceedings of the International Conference on Machine Learning (ICML)*, 2024. Acceptance Rate : 27.5%.



- c65. 🧑🏻 My H. Dinh, 🧑🏻 James Kotary, **Ferdinando Fioretto**. “End-to-End Learning for Fair Multiobjective Optimization Under Uncertainty”. *Proceedings of the Conference of Uncertainty on Artificial Intelligence (UAI)*, 2024. Acceptance Rate : 27.0%.
- c64. 🧑🏻 Cuong Tran, Keyu Zhu, Pascal Van Hentenryck, **Ferdinando Fioretto**. “Fairness Increases Adversarial Vulnerability”. *Proceedings of the International Joint Conference on Artificial Intelligence (IJCAI)*, 2024. Acceptance Rate : 13.9%.
- c63. 🧑🏻 My H. Dinh, 🧑🏻 James Kotary, **Ferdinando Fioretto**. “Learning Fair Ranking Policies via Differentiable Optimization of Ordered Weighted Averages”. *Proceedings of the ACM Conference on Fairness, Accountability, and Transparency (ACM FAccT)*, 2024. Acceptance Rate : 24.3%.
- c62. **Ferdinando Fioretto**, Keyu Zhu, Pascal Van Hentenryck, 🧑🏻 Saswat Das, Christine Task. “Finding ϵ and δ of Traditional Disclosure Control Systems”. *Proceedings of the AAAI Conference on Artificial Intelligence (AAAI)*, 2024. Acceptance Rate : 23.75%.
- c61. 🧑🏻 My H. Dinh, 🧑🏻 James Kotary, **Ferdinando Fioretto**. “Differentiable Approximations of Fair OWA Optimization”. *Workshop on Differentiable Almost Everything*, at ICML, 2024. Acceptance Rate : 27.0%.
- c60. **Ferdinando Fioretto**. “The Data Minimization Principle in Machine Learning”. *Workshop on Generative AI and Law*, at ICML, 2024. Acceptance Rate : 30.0%.

2023

- c60. 🧑🏻 Cuong Tran and **Ferdinando Fioretto**. “Data Minimization at Inference Time”. *Proceedings of the Conference on Neural Information Processing Systems (NeurIPS)*, 2023. Acceptance Rate : 23.0%.
- c59. Vladimir Dvorkin and **Ferdinando Fioretto**. “Price-Aware Deep Learning for Electricity Markets”. *Tackling Climate Change with Machine Learning*, at NeurIPS, 2023. Acceptance Rate : 35.0%.
- c58. 🧑🏻 James Kotary, 🧑🏻 My H. Dinh, **Ferdinando Fioretto**. “Folded Optimization for End-to-End Model-Based Learning”. *Proceedings of the International Joint Conference on Artificial Intelligence (IJCAI)*, 2023. Acceptance Rate : 15.0%.
- c57. 🧑🏻 James Kotary, 🧑🏻 Vincenzo Di Vito, **Ferdinando Fioretto**, Pascal Van Hentenryck. “SF-PATE : Scalable, Fair, and Private Aggregation of Teacher Ensembles”. *Proceedings of the International Joint Conference on Artificial Intelligence (IJCAI)*, 2023. Acceptance Rate : 15.0%.
- c56. 🧑🏻 James Kotary, 🧑🏻 Vincenzo Di Vito, **Ferdinando Fioretto**. “End-to-End Combinatorial Ensemble Learning”. *Proceedings of the International Joint Conference on Artificial Intelligence (IJCAI)*, 2023. Acceptance Rate : 15.0%.
- c55. 🧑🏻 Cuong Tran, **Ferdinando Fioretto**. “On the Fairness Impacts of Private Ensembles Models”. *Proceedings of the International Joint Conference on Artificial Intelligence (IJCAI)*, 2023. Acceptance Rate : 15.0%.
- c54. Terrence W.K. Mak, **Ferdinando Fioretto**, Pascal Van Hentenryck. “Load Encoding for Learning AC-OPF”. *Proceedings of the IEEE PES General Meeting (PES)*, 2023. Acceptance Rate : N/A.
- c53. 🧑🏻 My H. Dinh, **Ferdinando Fioretto**, Mostafa Mohammadian, and Kyri Baker. “An Analysis of the Reliability of AC Optimal Power Flow Deep Learning Proxies”. *IEEE PES Innovative Smart Grid Technologies*, 2023. Acceptance Rate : unknown.
- c52. 🧑🏻 James Kotary, 🧑🏻 Vincenzo Di Vito, **Ferdinando Fioretto**. “End-to-End Optimization and Learning for Multiagent Ensembles”. *Proceedings of the International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*, 2023. Acceptance Rate : 40.0%.

2022



- c51. 🧑🏻 Cuong Tran, **Ferdinando Fioretto**, Jung-Eun Kim, 🧑🏻 Rakshit Naidu. “Pruning has a disparate impact on model accuracy”. *Proceedings of the Conference on Neural Information Processing Systems (NeurIPS)*, 2022. Acceptance Rate : 25.6%.
- 🏆 **Lightning Talk (Spotlight)** (Typically assigned to ~3% out of all paper submissions (10,411, in 2022)).
- c50. Keyu Zhu, **Ferdinando Fioretto**, Pascal Van Hentenryck. “Post-processing of Differentially Private Data : A Fairness Perspective”. *Proceedings of the International Joint Conference on Artificial Intelligence (IJCAI)*, 2022. Acceptance Rate : 15.0%.
- c49. **Ferdinando Fioretto**, 🧑🏻 Cuong Tran, Keyu Zhu, Pascal Van Hentenryck. “Differential Privacy and Fairness in Decisions and Learning Tasks : A Survey”. *Proceedings of the International Joint Conference on Artificial Intelligence (IJCAI)*, 2022. Acceptance Rate : 18.0% (survey track).
- c48. **Ferdinando Fioretto**. “Integrating Machine Learning and Optimization to Boost Decision Making”. *Proceedings of the International Joint Conference on Artificial Intelligence (IJCAI)*, 2022. Acceptance Rate : Invited.
- 🏆 **Early Career Spotlight** (Accompanying paper).
- c47. 🧑🏻 James Kotary, **Ferdinando Fioretto**, Pascal Van Hentenryck, Ziwei Zhu. “End-to-end Learning for Fair Ranking Systems”. *Proceedings of the ACM Web Conferences (WWW)*, 2022. Acceptance Rate : 17.0%.

- c46.  James Kotary, **Ferdinando Fioretto**, Pascal Van Hentenryck. “Fast Approximations for Job Shop Scheduling : A Lagrangian Dual Deep Learning Method”. *Proceedings of the AAAI Conference on Artificial Intelligence (AAAI)*, 2022. Acceptance Rate : 15.0%.
- c45. Lesia Mitridati, Emma Romei, Gabriela Hug, **Ferdinando Fioretto**. “Differentially-Private Heat and Electricity Markets Coordination”. *Proceedings of the International Conference on Probabilistic Methods Applied to Power Systems (PMAPS)*, 2022. Acceptance Rate : N/A.
- c44. Mostafa Mohammadian, Kyri Baker,  My H. Dinh, **Ferdinando Fioretto**. “Learning Solutions for Intertemporal Power Systems Optimization with Recurrent Neural Networks”. *Proceedings of the International Conference on Probabilistic Methods Applied to Power Systems (PMAPS)*, 2022. Acceptance Rate : N/A.

2021

- c43.  Cuong Tran,  My H. Dinh, **Ferdinando Fioretto**. “Differentially Private Deep Learning under the Fairness Lens”. *Proceedings of the Conference on Neural Information Processing Systems (NeurIPS)*, 2021. Acceptance Rate : 26.0%.
- c42.  James Kotary, **Ferdinando Fioretto**, Pascal Van Hentenryck. “Learning Hard Optimization Problems: A Data Generation Perspective”. *Proceedings of the Conference on Neural Information Processing Systems (NeurIPS)*, 2021. Acceptance Rate : 26.0%.
- c41.  Cuong Tran, **Ferdinando Fioretto**, Pascal Van Hentenryck,  Zhiyan Yao. “Decision Making with Differential Privacy under the Fairness Lens”. *Proceedings of the International Joint Conference on Artificial Intelligence (IJCAI)*, 560–566, 2021. Acceptance Rate : 13.9%.
-  **2022 Caspar Bowden PET Award** (Selected among all papers about Privacy Enhancing Technologies published in international conferences between 2020–2022.).
- c40.  James Kotary, **Ferdinando Fioretto**, Pascal Van Hentenryck, Bryan Wilder. “End-to-End Constrained Optimization Learning : A Survey”. *Proceedings of the International Joint Conference on Artificial Intelligence (IJCAI)*, 4475–4482, 2021. Acceptance Rate : 30.1%.
- c39. Keyu Zhu, Pascal Van Hentenryck, **Ferdinando Fioretto**. “Bias and Variance of Post-processing in Differential Privacy”. *Proceedings of the AAAI Conference on Artificial Intelligence (AAAI)*, 11177–11184, 2021. Acceptance Rate : 21.0%.
- c38.  Cuong Tran, **Ferdinando Fioretto**, Pascal Van Hentenryck. “Differentially Private and Fair Deep Learning : A Lagrangian Dual Approach”. *Proceedings of the AAAI Conference on Artificial Intelligence (AAAI)*, 9932–9939, 2021. Acceptance Rate : 21.0%.
- c37.  Anudit Nagar,  Cuong Tran, **Ferdinando Fioretto**. “A Privacy-Preserving and Accountable Multi-agent Learning Framework”. *Proceedings of the International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*, 1605–1606, 2021. Acceptance Rate : 40.0%.
- c36. **Ferdinando Fioretto**. “Constrained-based Differential Privacy”. *Proceedings of the International Conference on Principles and Practice of Constraint Programming (CP)*, 1868–8969, 2021. Acceptance Rate : Invited.
- c35. Vladimir Dvorkin, **Ferdinando Fioretto**, Pascal Van Hentenryck, Jalal Kazempour, Pierre Pinson. “Differentially Private Optimal Power Flow for Distribution Grids”. *IEEE PowerTech*, 2021. Acceptance Rate : N/A.

2020

- c34. **Ferdinando Fioretto**, Pascal Van Hentenryck, Terrence W.K. Mak,  Cuong Tran, Federico Baldo, Michele Lombardi. “A Lagrangian Dual Framework for Deep Neural Networks with Constraints”. *Proceedings of the European Conference on Machine Learning (ECML)*, 18–135, 2020. Acceptance Rate : 19.0%.
- c33. **Ferdinando Fioretto**, Lesia Mitridati, Pascal Van Hentenryck. “Differential Privacy Stackelberg Games”. *Proceedings of the International Joint Conference on Artificial Intelligence (IJCAI)*, 3480–3486, 2020. Acceptance Rate : 12.6%.
- c32. **Ferdinando Fioretto**, Pascal Van Hentenryck. “OptStream : Releasing Time Series Privately”. *Proceedings of the International Joint Conference on Artificial Intelligence (IJCAI)*, 5135–5139, 2020. Acceptance Rate : invited.
-  **Invited to the IJCAI journal track .**
- c31. Terrence W.K. Mak, **Ferdinando Fioretto**, Pascal Van Hentenryck. “Privacy-Preserving Obfuscation for Distributed Power Systems”. *Proceedings of the Power Systems Computation Conference (PSCC)*, 2020. Acceptance Rate : 20.5%.
- c30. **Ferdinando Fioretto**, Terrence W.K. Mak, Pascal Van Hentenryck. “Predicting AC Optimal Power Flows : Combining Deep Learning and Lagrangian Dual Methods”. *Proceedings of the AAAI Conference on Artificial Intelligence (AAAI)*, pages 630–637, 2020. Acceptance Rate : 20.6%.

- c29. Atena Tabakhi, William Yeoh, **Ferdinando Fioretto**. “*The Smart Appliance Scheduling Problem : A Bayesian Optimization Approach*”. *Proceedings of the International Conference on Principles and Practice of Multi-Agent Systems (PRIMA)*, 100–115, 2020. Acceptance Rate : 38.0%.

2019

- c28. **Ferdinando Fioretto**, Pascal Van Hentenryck. “*Privacy-Preserving Federated Data Sharing*”. *Proceedings of the International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*, pages 638–646, 2019. Acceptance Rate : 24.0%.
- c27. **Ferdinando Fioretto**, Terrence W.K. Mak, Pascal Van Hentenryck. “*Privacy-Preserving Obfuscation of Critical Infrastructure Networks*”. *Proceedings of the International Joint Conference on Artificial Intelligence (IJCAI)*, pages 1086–1092, 2019. Acceptance Rate : 17.9%.
- c26. **Ferdinando Fioretto**, Pascal Van Hentenryck. “*Differential Privacy of Hierarchical Census Data : An Optimization Approach*”. *Proceedings of the International Conference on Principles and Practice of Constraint Programming (CP)*, pages 639–655, 2019. Acceptance Rate : 37.0%.
- 🏆 **Invited to Constraint journal** (selected papers – declined).

2018

- c25. **Ferdinando Fioretto**, Hong Xu, Sven Koenig, TK Satish Kumar. “*Solving Multiagent Constraint Optimization Problems on the Constraint Composite Graph*”. *Proceedings of the International Conference on Principles and Practice of Multi-Agent Systems (PRIMA)*, pages 106–122, 2018. Acceptance Rate : 26.2%.
- c24. **Ferdinando Fioretto**, Chansoo Lee, Pascal Van Hentenryck. “*Constrained-based Differential Privacy for Private Mobility*”. *Proceedings of the International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*, pages 1405–1413, 2018. Acceptance Rate : 25.2%.
- c23. Khoi Hoang, **Ferdinando Fioretto**, William Yeoh, Enrico Pontelli, Roie Zivan. “*A Large Neighboring Search Schema for Multi-Agent Optimization*”. *Proceedings of the International Conference on Principles and Practice of Constraint Programming (CP)*, pages 688–706, 2018. Acceptance Rate : 33.0%.
- c22. **Ferdinando Fioretto**, Pascal Van Hentenryck. “*Constrained-based Differential Privacy : Releasing Optimal Power Flow Benchmarks Privately*”. *Proceedings of the International Conference on the Integration of Constraint Programming, Artificial Intelligence, and Operations Research (CPAIOR)*, pages 215–231, 2018. Acceptance Rate : 48.0%.
- c21. **Ferdinando Fioretto**, Hong Xu, Sven Koenig, TK Satish Kumar. “*Constraint Composite Graph-Based Lifted Message Passing for Distributed Constraint Optimization Problems*”. *International Symposium on Artificial Intelligence and Mathematics (ISAIM)*, 2018. Acceptance Rate : N/A.

2017

- c20. **Ferdinando Fioretto**, William Yeoh, Enrico Pontelli, Ye Ma, Satishkumar J. Ranade. “*A Distributed Constraint Optimization (DCOP) Approach to the Economic Dispatch with Demand Response*”. *Proceedings of the International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*, pages 999–1007, 2017. Acceptance Rate : 24.9%.
- c19. **Ferdinando Fioretto**, William Yeoh, Enrico Pontelli. “*A Multiagent System Approach to Scheduling Devices in Smart Homes*”. *Proceedings of the International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*, pages 981–989, 2017. Acceptance Rate : 24.9%.
- c18. Khoi Hoang, Ping Hou, **Ferdinando Fioretto**, Makoto Yokoo, William Yeoh, Roie Zivan. “*Infinite-Horizon Proactive Dynamic DCOPs*”. *Proceedings of the International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*, pages 212–220, 2017. Acceptance Rate : 24.9%.
- c17. Atena M. Tabakhi, Tiej Le, **Ferdinando Fioretto**, William Yeoh. “*Preference Elicitation for DCOPs*”. *Proceedings of the International Conference on Principles and Practice of Constraint Programming (CP)*, pages 278–296, 2017. Acceptance Rate : 43.0%.

≤2016

- c16. Khoi Hoang, **Ferdinando Fioretto**, Ping Hou, Makoto Yokoo, William Yeoh, Roie Zivan. “*Proactive Dynamic Distributed Constraint Optimization Problems*”. *Proceedings of the International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*, pages 597–605, 2016. Acceptance Rate : 24.9%.
- c15. Tiej Le, **Ferdinando Fioretto**, William Yeoh, Enrico Pontelli, Tran Cao Son. “*ER-DCOPs : A Framework for Distributed Constraint Optimization Problems With Uncertainty*”. *Proceedings of the International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*, pages 606–614, 2016. Acceptance Rate : 24.9%.

- c14. **Ferdinando Fioretto**, William Yeoh, Enrico Pontelli. “Multi-Variable Agent Decompositions for DCOPs”. *Proceedings of the AAAI Conference on Artificial Intelligence (AAAI)*, pages 2480–2486, 2016. Acceptance Rate : 25.7%.
- c13. **Ferdinando Fioretto**, William Yeoh, Enrico Pontelli. “A Dynamic Programming-Based MCMC Framework for Solving DCOPs with GPUs”. *Proceedings of the International Conference on Principles and Practice of Constraint Programming (CP)*, pages 813–831, 2016. Acceptance Rate : 35.0%.
- c12. **Ferdinando Fioretto**, Tiep Le, Enrico Pontelli, William Yeoh, Tran Cao Son. “Exploiting GPUs in Solving (Distributed) Constraint Optimization Problems with Dynamic Programming”. *Proceedings of the International Conference on Principles and Practice of Constraint Programming (CP)*, pages 121–139, 2015. Acceptance Rate : 48.7%.
- c11. **Ferdinando Fioretto**, Federico Campeotto, Agostino Dovier, Enrico Pontelli, William Yeoh. “Large Neighborhood Search with Quality Guarantees for Distributed Constraint Optimization Problems”. *Proceedings of the International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*, pages 1835–1836, 2015. Acceptance Rate : 46.0%.
- c10. **Ferdinando Fioretto**, William Yeoh, Enrico Pontelli. “Multi-Variable Agents Decomposition for DCOPs to Exploit Multi-Level Parallelism”. *Proceedings of the International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*, pages 1823–1824, 2015. Acceptance Rate : 46.0%.
- c9. **Ferdinando Fioretto**. “Exploiting the Structure of Distributed Constraint Optimization Problems”. *Proceedings of the International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*, pages 2007–2008, 2015. Acceptance Rate : N/A.
- c8. **Ferdinando Fioretto**. “Exploiting the Structure of Distributed Constraint Optimization Problems”. *Proceedings of the AAAI Conference on Artificial Intelligence (AAAI)*, pages 4233–4234, 2015. Acceptance Rate : N/A.
- c7. (α - β) Federico Campeotto, Agostino Dovier, **Ferdinando Fioretto**, Enrico Pontelli. “A GPU Implementation of Large Neighborhood Search for Solving Constraint Optimization Problems”. *Proceedings of the European Conference of Artificial Intelligence (ECAI)*, pages 189–194, 2014. Acceptance Rate : 28.0%.
- c6. **Ferdinando Fioretto**, Tiep Le, William Yeoh, Enrico Pontelli, Tran Cao Son. “Improving DPOP with Branch Consistency for Solving Distributed Constraint Optimization Problems”. *Proceedings of the International Conference on Principles and Practice of Constraint Programming (CP)*, pages 307–323, 2014. Acceptance Rate : 49.8%.
- c5. (α - β) Federico Campeotto, Alessandro Dal Palù, Agostino Dovier, **Ferdinando Fioretto**, Enrico Pontelli. “Exploring the Use of GPUs in Constraint Solving”. *Proceedings of the Practical Aspects of Declarative Languages (PADL)*, pages 152–167, 2014. Acceptance Rate : 55.0%.
- c4. **Ferdinando Fioretto**, Federico Campeotto, Luca Da Rin Fioretto, William Yeoh, Enrico Pontelli. “GD-Gibbs : A GPU-based Sampling Algorithm for Solving Distributed Constraint Optimization Problems”. *Proceedings of the International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*, pages 1339–1340, 2014. Acceptance Rate : 46.0%.
- c3. **Ferdinando Fioretto**, Enrico Pontelli. “Constraint Programming in Community-based Gene Regulatory Network Inference”. *Proceedings of the Computational Methods in System Biology (CMSB)*, pages 135–149, 2013. Acceptance Rate : 55.0%.
- 🏆 **Best Student Paper Award** .
- c2. (α - β) Federico Campeotto, Alessandro Dal Palù, Agostino Dovier, **Ferdinando Fioretto**, Enrico Pontelli. “A Filtering Technique for Fragment Assembly-based Proteins Loop Modeling with Constraints”. *Proceedings of the International Conference on Principles and Practice of Constraint Programming (CP)*, pages 850–866, 2012. Acceptance Rate : 36.0%.
- c1. Michael R. Best, **Ferdinando Fioretto**, Alessandro Dal Palù, Enrico Pontelli, Tran Son, TuShun R. Powers, Elba E. Serrano. “The role of secondary and tertiary structure prediction in determining the function of novel genes found in *Xenopus Leavis*”. *Neuroscience*, 2011, (518.20/ZZ45). Acceptance Rate : N/A.

JOURNALS

- j14. Jayanta Mandi, 🌟 James Kotary, Senne Berden, Maxime Mulamba, Victor Bucarey, Tias Guns, **Ferdinando Fioretto**. “Decision-Focused Learning : Foundations, State of the Art, Benchmark and Future Opportunities”. *Journal of Artificial Intelligence Research (JAIR)*, (81), pages 1623–1701, 2024.
- j13. Mostafa Mohammadian, Kyri Baker, **Ferdinando Fioretto**. “Gradient-Enhanced Physics-Informed Neural Networks for Power Systems Operational Support”. *Electric Power Systems Research* (223), pages 109551, 2023.
- j12. Khoi D. Hoang, **Ferdinando Fioretto**, Ping Hou, William Yeoh, Makoto Yokoo, Roie Zivan. “Proactive Dynamic Distributed Constraint Optimization Problems”. *Journal of Artificial Intelligence Research (JAIR)*, (73), pages 179–225, 2022.
- j11. **Ferdinando Fioretto**, Pascal Van Hentenryck, Keyu Zhu. “Differential Privacy of Hierarchical Census Data : An Optimization Approach”. *Artificial Intelligence Journal (AIJ)*, (296), pages 103475, 2021.

- j10 Vladimir Dvorkin, **Ferdinando Fioretto**, Pascal Van Hentenryck, Pierre Pinson, Jalal Kazempour. “Differentially Private Optimal Power Flow for Distribution Grids”. *IEEE Transactions on Power Systems*, 36(3), pages 2186–2196, 2021.
- 🏆 **Best IEEE TPS paper award** (given to 8 out of all TPS papers published in 2019–2021).
- j9. **Ferdinando Fioretto**, Terrence W.K. Mak, Pascal Van Hentenryck. “Differential Privacy for Power Grid Obfuscation”. *IEEE Transactions on Smart Grids*, 11(2), pages 1356–1366, 2020.
- j8 Terrence W.K. Mak, **Ferdinando Fioretto**, Lyndon Shi, Pascal Van Hentenryck. “Privacy-Preserving Power System Obfuscation : A Bilevel Optimization Approach”. *IEEE Transactions on Power Systems*, 35(2), pages 1627–1637, 2020.
- 🏆 **Best IEEE TPS paper award** (given to 7 out of all TPS papers published in 2018–2020).
- j7 **Ferdinando Fioretto**, Pascal Van Hentenryck. “OptStream : Releasing Time Series Privately”. *Journal of Artificial Intelligence Research (JAIR)*, (65) pages 423–456, 2019.
- 🏆 **Invited to IJCAI 2020 journal track**.
- j6 **Ferdinando Fioretto**, Agostino Dovier, Enrico Pontelli. “Distributed Multi-Agent Optimization for Smart Grids and Home Automation”. *Intelligenza Artificiale (IA)*, 12 (2), pages : 67–87, 2019.
- 🏆 **Best 2018 Thesis in Artificial Intelligence (AI*IA)** (Accompanying paper).
- j5. **Ferdinando Fioretto**, Enrico Pontelli, William Yeoh. “Distributed Constraint Optimization Problems and Applications : A Survey”. *Journal of Artificial Intelligence Research (JAIR)*, 61, pages 623–698, 2018.
- j4. **Ferdinando Fioretto**, William Yeoh. “AI Buzzwords Explained : Distributed Constraint Optimization Problems”. *AI Matters*, 3 (4), pages 8–13, 2018.
- j3. **Ferdinando Fioretto**, Enrico Pontelli, William Yeoh, Rina Dechter. “Accelerating Exact and Approximate Inference for (Distributed) Discrete Optimization with GPUs”. *Constraints*, 23 (1), pages 1–43, 2018.
- j2. **Ferdinando Fioretto**, Agostino Dovier, Enrico Pontelli. “Constrained Community-based Gene Regulatory Network Inference”. *ACM Transactions on Modeling and Computer Simulation (TOMACS)*, 25 (2), pages 11:1–11:26, 2015.
- j1. $(\alpha-\beta)^2$ Federico Campeotto, Alessandro Dal Palù, Agostino Dovier, **Ferdinando Fioretto**, Enrico Pontelli. “A Constraint Solver for Flexible Protein Models”. *Journal of Artificial Intelligence Research (JAIR)*, 48, pages 953–1000, 2013.

BOOK CHAPTERS AND EDITORIAL ARTICLES

- j5. **Ferdinando Fioretto**, et al.. “Reports of the Workshops Held at the 2022 AAAI Conference on Artificial Intelligence”. *AI Magazine*, 2022.
- j4. **Ferdinando Fioretto**, et al.. “Reports of the Workshops Held at the 2021 AAAI Conference on Artificial Intelligence”. *AI Magazine*, 2021.
- j3. **Ferdinando Fioretto**, et al.. “Reports of the Workshops Held at the 2020 International Association for the Advancement of Artificial Intelligence Conference on Web and Social Media”. *AI Magazine*, 41(4) 2020.
- j2. William Kluegel, Muhammad A. Iqbal, **Ferdinando Fioretto**, William Yeoh, Enrico Pontelli. “A Realistic Dataset for the Smart Home Device Scheduling Problem for DCOPs”. *Lecture Notes in Computer Science (LNCS)*, LNCS, volume 10643 pages 125–142, Springer, 2017.
- 🏆 **Visionary Paper Award** (AAMAS workshop series).
- j1. Moinul M.P. Chowdhury, Russell Y. Folk, **Ferdinando Fioretto**, Christopher Kiekintveld, William Yeoh. “Investigation of Learning Strategies for the SPOT Broker in Power TAC”. *AgentMediated Electronic Commerce : Designing Trading Strategies and Mechanisms for Electronic Markets*, volume 271 of *Lecture Notes in Business Information Processing*, pages 96–111, Springer, 2017.

PEER REVIEWED WORKSHOPS

- w31. Joonhyuk Ko, Juba Ziani, Saswat Das, Matt Williams, **Ferdinando Fioretto**. “Fairness Issues and Mitigations in (Differentially Private) Socio-demographic Data Processes”. *AAAI Workshop on Privacy Preserving Artificial Intelligence (PPAI)–at AAAI*, 2022.
- 🏆 **Oral Presentation**.
- w30. Low-rank finetuning for LLMs : A fairness perspective. Saswat Das, Marco Romanelli, Cuong Tran, Zarreen Reza, Bhavya Kailkhura, **Ferdinando Fioretto**. *AAAI CoLoRAI Workshop*, 2025.

2. Author list is order alphabetically.

- w29.  Jinhao Liang,  Jacob Christopher, Sven Koenig, **Ferdinando Fioretto**. “Multi-Agent Path Finding in Continuous Spaces with Projected Diffusion Models”. **Combining AI and OR/MS for Better Trustworthy Decision Making**, at AAAI, 2025.
-  **Oral Presentation.**
- w28.  Vincenzo Di Vito, Mostafa Mohammadian, Kyri Baker, **Ferdinando Fioretto**. “OPF-Net : Real-Time Stability Constrained AC Optimal Power Flow”. **AAAI 2025 Bridge on Explainable AI, Energy and Critical Infrastructure Systems**.
- w27.  Jacob K. Christopher, Stephen Baek, **Ferdinando Fioretto**. “Physics-Aware Diffusion Models for Micro-structure Material Design”. **ELLIS ML for Molecules and Materials in the Era of LLMs Workshop**, 2024.
- w26.  Jacob K. Christopher, Michael Cardei, Brian R Bartoldson, Bhavya Kailkhura, **Ferdinando Fioretto**. “Speculative Diffusion Decoding : Accelerating Language Generation through Diffusion”. **Efficient Natural Language and Speech Processing (ENLSP) workshop – at NeurIPS**, 2024.
- w25.  Jacob K. Christopher, Stephen Baek, **Ferdinando Fioretto**. “Constrained Synthesis with Projected Diffusion Models”. **Machine Learning and the Physical Sciences Workshop – at NeurIPS**, 2024.
- w24. Prakhar Ganesh,  Cuong Tran, Reza Shokri, **Ferdinando Fioretto**. “The Data Minimization Principle in Machine Learning”. **Workshop on Regulatory ML – at NeurIPS**, 2024.
- w23.  My H. Dinh,  James Kotary, **Ferdinando Fioretto**. “Differentiable Approximations of Fair OWA Optimization”. **Workshop on Differentiable Almost Everything – at ICML**, 2024.
- w22. **Ferdinando Fioretto**. “The Data Minimization Principle in Machine Learning”. **Workshop on Generative AI and Law – at ICML**, 2024.
- w21. Vladimir Dvorkin, **Ferdinando Fioretto**, Pascal Van Hentenryck, Pierre Pinson, Jalal Kazempour. “Privacy-Preserving Convex Optimization : When Differential Privacy Meets Stochastic Programming”. **Workshop on Climate Change AI – at NeurIPS**, 2023.
- w20.  Cuong Tran,  My H. Dinh, **Ferdinando Fioretto**. “A Fairness Analysis on Private Aggregation of Teacher Ensembles”. **AAAI Workshop on Privacy Preserving Artificial Intelligence (PPAI)–at AAAI**, 2022.
-  **Spotlight Paper.**
- w19.  Cuong Tran, **Ferdinando Fioretto**. “Decision Making with Differential Privacy under the Fairness Lens”. **Theory and Practice of Differential Privacy (TPDP) – at ICML**, 2021.
- w18.  Anudit Nagar,  Cuong Tran, **Ferdinando Fioretto**. “A Privacy-Preserving and Accountable Multi-agent Learning Framework”. **International Workshop on Learning and Optimization in Multi-Agent Systems (OPTLearnMAS)–at AAMAS**, 2021.
- w17.  Cuong Tran, **Ferdinando Fioretto**, Pascal Van Hentenryck. “Differentially Private and Fair Deep Learning : A Lagrangian Dual Approach”. **AAAI Workshop on Privacy Preserving Artificial Intelligence (PPAI)–at AAAI**, 2021.
- w16. **Ferdinando Fioretto**,  Cuong Tran, Pascal Van Hentenryck. “Lagrangian Duality for Constrained Deep Learning”. **INFORMS**, 2020.
- w15. Lesia Mitridati, **Ferdinando Fioretto**, Pascal Van Hentenryck. “Differential Privacy For Stackelberg Games : An Application To Gas And Electricity Markets”. **INFORMS**, 2020.
- w14. Khoi Hoang, **Ferdinando Fioretto**, William Yeoh, Enrico Pontelli, Roie Zivan. “A Large Neighboring Search Schema for Multi-Agent Optimization”. **International Workshop on Optimization in Multi-Agent Systems (OPTMAS)–at AAMAS**, 2019.
- w13. **Ferdinando Fioretto**, Hong Xu, Sven Koenig, TK Satish Kumar. “Solving Multiagent Constraint Optimization Problems on the Constraint Composite Graph”. **International Workshop on Optimisation in Multi-Agent Systems (OptMAS)–at AAMAS**, 2018.
- w12. William Kluegel, Muhammad Aamir Iqbal, **Ferdinando Fioretto**, William Yeoh, Enrico Pontelli. “A Realistic Dataset for the Smart Home Device Scheduling Problem for DCOPs”. **International Workshop on Optimisation in Multi-Agent Systems (OPTMAS)–at AAMAS**, 2017.
- w11. **Ferdinando Fioretto**, William Yeoh, Enrico Pontelli. “A Multiagent System Approach to Scheduling Devices in Smart Homes”. **Workshop on AI for Smart Grids and Smart Buildings (AISGSB)–at AAAI**, 2017.
- w10. Atena M. Tabakhi, **Ferdinando Fioretto**, William Yeoh. “A Preliminary Study on Preference Elicitation in DCOPs for Scheduling Devices in Smart Buildings”. **10th Workshop on Advances in Preference Handling (MPREF)–at IJCAI**, 2016.
- w9. Porag Chowdhury, Russell Y. Folk, **Ferdinando Fioretto**, Christopher Kiekintveld, William Yeoh. “Investigation of Learning Strategies for the SPOT Broker in Power TAC”. **International Workshop on Agent Mediated Electronic Commerce and Trading Agents Design and Analysis (AMEC/TADA)–at AAMAS**, 2016.
- w8. Khoi Hoang, **Ferdinando Fioretto**, Ping Hou, Makoto Yokoo, William Yeoh, Roie Zivan. “Proactive Dynamic DCOPs”. **Workshop on AI for Smart Grids and Smart Buildings (AISGSB)–at AAAI**, 2016.

- w7. **Ferdinando Fioretto**, Federico Campeotto, Agostino Dovier, Enrico Pontelli, William Yeoh. “*Large Neighborhood Search with Quality Guarantees for Distributed Constraint Optimization Problems*”. In **International Workshop on Optimization in Multi-Agent Systems (OptMAS)**– at AAMAS, 2015.
- w6. **Ferdinando Fioretto**, Tiep Le, William Yeoh, Enrico Pontelli, Tran Cao Son. “*Improving DPOP with Branch Consistency for Solving Distributed Constraint Optimization Problems*”. In **International Workshop on Optimization in Multi-Agent Systems (OptMAS)**– at AAMAS, 2015.
- w5. (α - β) Federico Campeotto, Alessandro Dal Palù, Agostino Dovier, **Ferdinando Fioretto**, Enrico Pontelli. “*Experimenting with FIASCO for protein structure prediction*”. **Workshop on Constraint Based Methods for Bioinformatics (WCB)**–at CP, 2014.
- w4. (α - β) Federico Campeotto, Alessandro Dal Palù, Agostino Dovier, **Ferdinando Fioretto**, Enrico Pontelli. “*Towards a complete constraint solver on GPU*”. In **Workshop on Parallel Methods for Search & Optimization (ParSearchOpt)**–at ECAI, 2014.
- w3. **Ferdinando Fioretto**, Enrico Pontelli. “*Community-based Gene Regulatory Network Inference via Constraint Programming*”. **Workshop on Constraint Based Methods for Bioinformatics (WCB)**–at CP, 2013.
- w2. (α - β) Federico Campeotto, Alessandro Dal Palù, Agostino Dovier, **Ferdinando Fioretto**, Enrico Pontelli. “*Protein Loop Modelling via Constraints and Fragment Assembly*”. **Workshop on Constraint Based Methods for Bioinformatics (WCB)**–at CP, 2012.
- w1. (α - β) Michael R. Best, Kabi Bhattarai, Federico Campeotto, Alessandro Dal Palù, Hung Dang, Agostino Dovier, **Ferdinando Fioretto**, Federico Fogolari, Tiep Le, Enrico Pontelli. “*Introducing FIASCO : Fragment-based Interactive Assembly for protein Structure prediction with COntstraints*”. **Workshop on Constraint Based Methods for Bioinformatics (WCB)**–at CP, 2011.

PRE-PRINTS AND IN-PRESS

- w7. 🧑‍🔬Jinhao Liang, 🧑‍🔬Jacob K. Christopher, Sven Koenig, Ferdinando Fioretto. “*Multi-Agent Path Finding in Continuous Spaces with Projected Diffusion Models*”. **CoRR abs/2412.17993**, 2025.
- w6. 🧑‍🔬Vincenzo Di Vito, Mostafa Mohammadian, Kyri Baker, **Ferdinando Fioretto**. “*OPF-Net : Real-Time Stability Constrained AC Optimal Power Flow*”. **Submitted**.
- w5. 🧑‍🔬My H. Dinh, 🧑‍🔬James Kotary, Lauryn P. Gouldin, William Yeoh, **Ferdinando Fioretto**. “*End-to-End Optimization and Learning of Fair Court Schedules*”. **Submitted**.
- w4. 🧑‍🔬Saswat Das, Marco Romanelli, 🧑‍🔬Cuong Tran, 🧑‍🔬Zarreen Reza, Bhavya Kailkhura, **Ferdinando Fioretto**. “*Low-rank finetuning for LLMs : A fairness perspective*”. (under review) **CoRR abs/2405.18572**, 2024.
- w3. Prakhar Ganesh, 🧑‍🔬Cuong Tran, Reza Shokri, **Ferdinando Fioretto**. “*The Data Minimization Principle in Machine Learning*”. (under review) **CoRR abs/2405.19471**, 2024.
- w2. 🧑‍🔬James Kotary, **Ferdinando Fioretto**. “*Learning Constrained Optimization with Deep Augmented Lagrangian Methods*”. **CoRR abs/2403.03454**, 2024.
- w1. 🧑‍🔬James Kotary, 🧑‍🔬Jacob K. Christopher, 🧑‍🔬My H. Dinh, and **Ferdinando Fioretto**. “*Analyzing and Enhancing the Backward-Pass Convergence of Unrolled Optimization*”. (under review in INFORMS journal of computing) **CoRR abs/2301.12047**, 2024.

ARCHIVED AND EXTENDED VERSIONS OF PUBLISHED PAPERS

- w12. 🧑‍🔬My H. Dinh, **Ferdinando Fioretto**. “*Context-Aware Differential Privacy for Language Modeling*”. **CoRR abs/2301.12288**, 2023.
- w11. Sawinder Kaur, **Ferdinando Fioretto**, Asif Salekin. “*Deadwooding : Robust Global Pruning for Deep Neural Networks*”. **CoRR abs/2202.05226**, 2022.
- w10. 🧑‍🔬My H. Dinh, **Ferdinando Fioretto**, Mostafa Mohammadian, Kyri Baker. “*Towards Understanding the Unreasonable Effectiveness of Learning AC-OPF Solutions*”. **CoRR abs/2111.11168**, 2021.
- w9. 🧑‍🔬Cuong Tran, 🧑‍🔬My H. Dinh, **Ferdinando Fioretto**. “*Differentially Private Deep Learning under the Fairness Lens*”. **CoRR abs/2106.02674**, 2021 (**extended NeurIPS-21 version**).
- w8. 🧑‍🔬Anudit Nagar, 🧑‍🔬Cuong Tran, **Ferdinando Fioretto**. “*A Privacy-Preserving and Trustable Multi-agent Learning Framework*”. **CoRR abs/2106.01242**, 2021. (**extended AAMAS-21 version**).
- w7. 🧑‍🔬James Kotary, **Ferdinando Fioretto**, Pascal Van Hentenryck, Bryan Wilder. “*End-to-End Constrained Optimization Learning : A Survey*”. **CoRR abs/2103.16378**, 2021. (**extended IJCAI-21 version**).
- w6. Terrence W.K. Mak, **Ferdinando Fioretto**, Pascal Van Hentenryck. “*Load Embeddings for Scalable AC-OPF Learning*”. **CoRR abs/2101.03973**, 2021.
- w5. Keyu Zhu, Pascal Van Hentenryck, **Ferdinando Fioretto**. “*Bias and Variance of Post-processing in Differential Privacy*”. **CoRR abs/2010.04327**, 2020 (**extended AAAI-21 version**).

- w4. Minas Chatzos, **Ferdinando Fioretto**, Terrence W.K. Mak, Pascal Van Hentenryck. “High-Fidelity Machine Learning Approximations of Large-Scale Optimal Power Flow”. **CoRR abs/2006.16356**, 2020.
- w3. Vladimir Dvorkin, **Ferdinando Fioretto**, Pascal Van Hentenryck, Jalal Kazempour, Pierre Pinson. “Differentially Private Convex Optimization with Feasibility Guarantees”. **CoRR abs/2006.12338**, 2020.
- w2. **Ferdinando Fioretto**, Terrence W.K. Mak, Pascal Van Hentenryck. “Predicting AC Optimal Power Flows : Combining Deep Learning and Lagrangian Dual Methods”. **CoRR abs/1909.10461**, 2019 (**extended AAAI-20 version**).
- w1. **Ferdinando Fioretto**, Terrence W. K. Mak, Pascal Van Hentenryck. “Privacy-Preserving Obfuscation of Critical Infrastructure Networks”. **CoRR abs/1905.09778**, 2019 (**extended IJCAI-19 version**).

TEACHING

Responsible AI (CS 7000), *University of Virginia*

Spring 2024 | COURSE EVALUATION : 4.8 (class), 4.82 (instructor) / 5.00

Artificial Intelligence (CS 4710), *University of Virginia*

Fall 2023 | COURSE EVALUATION : 4.33 (class), 4.5 (instructor) / 5.00

Security and Privacy of Machine Learning (CS 700), *Syracuse University*

Spring 2020 | COURSE EVALUATION : 4.55/5.00 (median 5.00)

Spring 2021 | COURSE EVALUATION : 4.46/5.00 (median 5.00)

Spring 2022 | COURSE EVALUATION : 4.93/5.00 (median 5.00)

Introduction to Artificial Intelligence (CIS 467), *Syracuse University*

Fall 2020 | COURSE EVALUATION : 4.56/5.00 (median 5.00)

Fall 2021 | COURSE EVALUATION : 4.48/5.00 (median 5.00)

Fall 2022 | COURSE EVALUATION : 4.45/5.00 (median 5.00)

Fall 2023 | COURSE EVALUATION : 4.15/5.00 (median 5.00)

Discrete Mathematics (CS 375), *Syracuse University*

Spring 2023 | COURSE EVALUATION : 4.60/5.00 (median 5.00)

MENTORING

Current PhD Students

- › **Vincenzo Di Vito** (UVA CS)

RESEARCH : Physics Informed Machine Learning.

Fall 2022 – current
- › **My Dinh** (UVA CS)

RESEARCH : Deep Learning, Optimization, Fairness.

Spring 2021 – current
- › **Saswat Das** (UVA CS)

RESEARCH : Responsible AI, Differential Privacy.

Fall 2023 – current
- › **Jacob K. Christopher** (UVA CS)

RESEARCH : Responsible AI in Generative Models.

Fall 2023 – current
- › **Jinhao Liang** (UVA CS)

RESEARCH : Differentiable Optimization.

Fall 2024
- › **Michael Cardei** (UVA CS)

RESEARCH : Responsible Generative AI.

Fall 2024

Past (Graduated) Students

- › **James Kotary** (UVA, CS)

RESEARCH : Integration of Deep Learning and Optimization.

DISSERTATION TITLE : Integrating Constrained Optimization with Machine Learning to Enhance Data-Driven Decision Making

NEXT POSITION : Research Scientist, Pacific Northwest National Laboratory.

Fall 2020 – Fall 2024
- › **Cuong Tran** (PHD, SYRACUSE UNIVERSITY, CISE)

RESEARCH : Differential Privacy and Fairness.

DISSERTATION TITLE : The Interplay between Privacy and Fairness in Learning and Decision-making Problems

NEXT POSITION : Research Scientist, Amazon.

Spring 2020 – Spring 2023

- > **Jacob Kennedy Christopher** (MS, SYRACUSE UNIVERSITY)
 RESEARCH : Differentiable Optimization.
 NEXT POSITION : PhD student at *University of Virginia*.

Spring 2023
- > **Yehya Farhat** (MS, SYRACUSE UNIVERSITY)
 DISSERTATION TITLE : Surrogate ML models for optimization.
 NEXT POSITION : PhD student at *Rice University*.

Fall 2022

Current MS and BS Students

- > **Joonhyuk Ko** (BS, UVA CS)

Fall 2023 – current
- > **Jameson Sandler** (BS, UVA CS)

Fall 2024 – current

Other Advised Students and Visitors

- > **Cuong Tran** (POSTDOC)
 RESEARCH : Data Minimization, Fairness in Large Language Models.

Sep 2023 – Mar 2024
- > **Razan Tajeddine**, PhD at U of Helsinki (VISITING POSTDOC)
 RESEARCH : Differential Privacy and Fairness.

Sep 2023 – Mar 2024
- > **St John Grimbly**, MS at UniSA (VISITING STUDENT RESEARCHER)
 NEXT POSITION : PhD student at *University of South Africa*.

Spring 2023
- > **Jayanta Mandi**, PhD at KU Leuven (VISITING STUDENT RESEARCHER)
 RESEARCH : Decision Focused Learning.

Jun 2022 – Sep 2022
- > **Rakshit Naidu**, MS at CMU (INTERN)
 RESEARCH : Privacy and Fairness in ML. NEXT POSITION : PhD student at *Georgia Tech*

Summer 2022

BS and High-School Students

Shujun Xia (BS, City University of Hong Kong, Summer 2024), **Zarreen Reza** (BS, OpenMined, Spring 2024), **Eric Nguyen** (BS, University of Virginia, Fall 2023), **Catherine Smolka** (HS, Deep Run High School, VA, 2023-2024), **Pranav Putta** (BS, GaTech, Summer 2023) [NSF REU], **Winston Tsui** (BS, SU Summer 2023), **Zhongquan Cheng** (BS SU, Summer 2023), **Adya Parida** (BS SU, Fall 2022) [NSF REU], **Deniz Gursoy** (HS, Fayetteville High School, Summer 2022), **Saswat Das** (BS, ITS, Summer 2022), **Utsav Pathak** (BS, Alliance University, Bengaluru, Summer 2022), **Daiwei Shen** (BS, Northwestern, Summer 2022), **Sunisth Kumar** (BS, Bennett University, Summer 2022), **Kyle Beiter** (BS, SU, Summer 2021) [NSF REU], **Shantanu Jhaveri** (BS, USC, Summer 2021) [NSF REU], **Dayong Gu** (BS, SU, Summer 2021), **Guoliang Chen** (BS, SU, Summer 2021), **Pradyumn Yadav** (BS, SU, Summer 2021), **Anudit Nagar** (BS, SU, Summer 2020 – Current), **Zhiyan Yao** (BS, SU, Summer 2020 – Current), **Zifei Lu** (BS, SU, Summer 2020), **Thomas Montfort** (BS, SU, Summer 2020), **Cong Liu** (BS, SU, Summer 2020), **Pratik Paranjape**, (BS, SU, Summer 2020), **Pavan Kumar Vaddineni** (BS, SU, Spring 2020), **William Kluegel**, (BS, NMSU, 2016 – 2018), **Lyndon Shi** (BS, UMich, 2018), **Jiayu Chen** (BS, UMich, 2018), **Eric Frechette** (BS, NMSU, 2016).

PhD Dissertation Committee

- > **Guangtao Zheng**, (UNIVERSITY OF VIRGINIA)

2024
- > **Dung Nguyen**, (UNIVERSITY OF VIRGINIA)

2023
- > **Elena Long**, (UNIVERSITY OF VIRGINIA)

2023
- > **Khang Tran**, (NEW JERSEY INSTITUTE OF TECHNOLOGY)

2023
- > **Keyu Zhu**, (GEORGIA INSTITUTE OF TECHNOLOGY)

2023
- > **Adrià Fenoy Barcel**, (UNIVERSITY OF VERONA)

2023
- > **Jeroen Fransman**, (DELFT UNIVERSITY OF TECHNOLOGY)

2022
- > **Pegah Hozhabrierdi**, (SYRACUSE UNIVERSITY)

2022
- > **Carlos Pinzon**, (ÉCOLE POLYTECHNIQUE)

2022
- > **Baocheng Geng**, (SYRACUSE UNIVERSITY)

2021
- > **Pranay Sharma**, (SYRACUSE UNIVERSITY)

2021

TUTORIALS, SELECTED INVITED TALKS AND MEDIA INTERVIEWS

- > **Keynote talk** : Privacy and Fairness issues in Large Language Models.
S-HPC Workshop, at Supercomputing 24

Nov 2024
- > **Invited talk** : Unfairness in Constrained Machine Learning.
Ohio State University, Department of Computer Science

Nov 2024

- › **Invited talk** : Constraining diffusion models for scientific applications.
[UVA LLM Workshop](#)

Oct 2024
- › **Invited talk** : Privacy and Fairness in Resource Allocations.
[2024 Federal Committee on Statistical Methodology \(FCSM\) Research and Policy Conference](#)

Oct 2024
- › **Invited talk** : Constrained Diffusion for Science and Engineering.
[Oklahoma State University, School of Industrial Engineering and Management](#)

Oct 2024
- › **Invited talk** : Constrained Diffusion for Science and Engineering.
[University of Virginia, Department of Systems and Information Engineering](#)

Sep 2024
- › **Podcast invited speaker** : NSI Cyber and Tech Center : "Unleashing Innovation : Navigating Game Changing Technologies"
 – episode on open source large language model.
[National Security Institute at George Mason University's Antonin Scalia Law School](#)

Jul 2024
- › **Invited participant and group lead** : US-UK Scientific Forum on Science in the Age of AI.
[National Academy of Sciences](#)

Jun 2024
- › **Panelist** : AI and OR summer school.
[AI-SCORE](#)

May 2024
- › **Invited talk** : Fairness in ML : The curious case of computational shortcuts and hardware choices.
[BuzzRobot](#)

May, 2024
- › **Invited talk** : The Principle of Data Minimization in Machine Learning.
[Google Research Seminars](#)

Apr, 2024
- › **Media cover** : Building fairness into AI is crucial – and hard to get right.
[The Conversation](#) , [CHED/QR Radio](#)

Mar 2024
- › **Invited talk** : Responsible AI in Decision Making Processes.
[Amazon Research Seminars](#)

Feb 2024
- › **Keynote talk** : Privacy and Fairness in Societal Systems.
[Workshop on the Tradeoffs in Ethical AI](#), INRIA, France

Nov 2023
- › **Invited talk** : Responsible AI : Privacy and Fairness in Decision Making and Learning Tasks.
[TOC FOR FAIRNESS, Simons Collaboration on the Theory of Algorithmic Fairness](#)

Nov 2023
- › **Panelist** : Navigating the Frontiers of Artificial Intelligence.
[The Center for Politics, University of Virginia](#)

Oct 2023
- › **Invited talk** : Optimization and Learning for Science and Engineering.
[Conference on Complex Systems 2023](#)

Oct 2023
- › **Invited talk** : ML for Optimization and Optimization for ML.
[AI/ML Seminar Series, University of Virginia](#)

Sep 2023
- › **Keynote talk** : The Unintended Societal Effects of Privacy in Decision and Learning Tasks.
[IJCAI-2023, International Workshop on Mining Actionable Insights from Social Networks](#)

Aug 2023
- › **Invited talk** : End-to-end Constrained Optimization Learning.
[AC Summer School : Machine Learning for Constraint Programming](#)

Jul 2023
- › **Invited talk** : Differential Privacy for Power Systems.
[DTU PES Summer School](#)

Jun 2023
- › **Invited talk** : Optimization Proxies and Differentiable Optimization for Decision Making.
[MARS Seminar, Pacific Northwest National Laboratory \(PNNL\)](#)

Jun 2023
- › **Invited talk** : Constrained-aware Machine Learning in Energy Systems.
[IEEE Power and Energy Society webinar series](#)

Jun 2023
- › **Invited talk** : Responsible AI : Privacy and Fairness in Decision and Learning Tasks.
[UC San Diego](#)

Apr 2023
- › **Panelist** : ChatGPT : Charms and Challenges.
[Syracuse University](#)

Apr 2023
- › **Invited talk** : Responsible AI : Privacy and Fairness in Decision and Learning Tasks.
[University of Virginia](#)

Mar 2023
- › **Invited talk** : Constrained-Aware Machine Learning.
[Washington University in St. Louis](#)

Feb 2023
- › **Invited talk** : Differential Privacy for Power Systems.
[Los Alamos National Lab's 5th Grid Science Winter School and Conference](#)

Jan 2023

- > **Panelist** : Algorithmic Fairness and its Intersections.
[🔗 Thirty-sixth Conference on Neural Information Processing Systems \(NeurIPS\)](#)

Dec 2022
- > **Tutorial** : End-to-end constrained optimization learning.
[🔗 21st International Conference of the Italian Association for Artificial Intelligence \(AlxIA 2022\)](#)

Dec 2022
- > **Media cover** : How network pruning can skew deep learning models.
[🔗 Science Daily](#) [🔗 TechXplore](#) [🔗 AAAS EurekAlert](#)

Nov 2022
- > **Invited talk** : Disparate Impacts in Privacy-preserving Machine Learning.
Washington University in St. Louis

Nov 2022
- > **Tutorial** : Decision Focused Learning.
Dagstuhl seminar on Data-Driven Combinatorial Optimisation

Oct 2022
- > **Media interview** : Privacy and Fairness in AI.
[🔗 Syracuse Media Report](#) [🔗 NMSU News](#) [🔗 Sun News](#)

Jul/Sep 2022
- > **Media interview** : Google Scholar Research Award.
[🔗 Syracuse Media Report](#)

Jun 2022
- > **Tutorial** : Impacts of Data Privacy and Equity on Public Policy.
[🔗 ACM Conference on Fairness, Accountability, and Transparency \(FACCT\)](#)

Jun 2022
- > **Panelist** : Fostering the Use of AI for Power System Transformation.
[🔗 Climate Change AI](#)

Jun 2022
- > **Media interview** : NSF CAREER Award.
[🔗 Syracuse Media Report](#)

Jun 2022
- > **Invited talk** : End-to-end constrained deep learning optimization.
Hall of Science (Kantar.com)

Mar 2022
- > **Panelist** : AAAI-22 DC - Career Panel.
[🔗 36th AAAI Conference on Artificial Intelligence \(AAAI\)](#)

Feb 2022
- > **Invited talk** : Privacy-preserving ML and decisions-making : uses and unintended disparate effects.
[🔗 PriSec-ML \(virtual seminars\)](#)

Feb 2022
- > **Media interview** : AI for Climate Change.
[🔗 RaiNews](#)

Dec 2021
- > **Popular Media Report** : ISSNAF Young Investigator Award.
[🔗 New York Voice](#) [🔗 AISE](#) [🔗 Il Mattino](#) [🔗 Startuptalia](#) [🔗 Zox](#) [🔗 PugliaNews](#)

Nov 2021
- > **Invited talk** : Deep Constraint Learning : Applications and Privacy Considerations.
[🔗 Italian Scientists & Scholars in North America Foundation](#)

Nov 2021
- > **Plenary Keynote talk** : Constraint-based Differential Privacy.
[🔗 The International Conference on Principle and Practice of Constraint Programming \(CP 2021\)](#) ,

Oct 2021
- > **Popular Media interview** : Deep Learning for Engineering Applications.
[🔗 Blum News](#)

Nov 2021
- > **Invited talk** : Privacy-Preserving Machine Learning : Uses and Unintended Disparate Effect.
ASPI Seminar (Syracuse University)

Sep 2021
- > **Invited talk** : Differential Privacy and Machine Learning.
SUPA ECS workshop for High School Teachers

May 2021
- > **Invited talk** : Deep Constraint Learning for Critical Engineering Systems.
[🔗 Italian Scientists & Scholars in North America Foundation](#)

Nov 2020
- > **Tutorial** : Tutorial on Multiagent Optimization.
[🔗 AAAI Conference on Artificial Intelligence \(AAAI 2020\)](#)

Feb 2020
- > **Media cover** : Multiagent Systems.
[🔗 NetworkDigital360](#)

Feb 2020
- > **Invited talk** : Privacy-Preserving Artificial Intelligence.
University of Parma (CS Dept)

Jun 2019
- > **Tutorial** : Tutorial on Multiagent Optimization for IoT Applications.
[🔗 International Conference on Autonomous Agents and Multiagent Systems \(AAMAS 2019\)](#)

May 2019
- > **Invited talk** : Differential Privacy for AI Applications
University of Southern California - Information Sciences Institute.
Michigan State University.

Jan 2019

Feb 2019

- › **Invited talk** : *Privacy Preserving Artificial Intelligence*
Syracuse University.
Drexel University.
University of Arkansas.
Colorado State University.
University of Connecticut.

Feb 2019
Feb 2019
Feb 2019
Mar 2019
Mar 2019
- › **Tutorial** : *Tutorial on Constrained Multi-agent Optimization.*
[AAAI Conference on Artificial Intelligence \(AAAI 2018\)](#)

Feb 2018
- › **Plenary Keynote talk** : *Distributed Constraint Optimization for Smart Energy Networks.*
Italian Conference on Artificial Intelligence (AI*IA 2017)

Nov 2017
- › **Invited talk** : *Distributed Constraint Optimization*
Delft University (TU Delft).
University of Udine.
New Mexico State University.

Apr 2016
Apr 2016
Mar 2016
- › **Invited talk** : *Large Neighboring Search for Distributed Constrained Optimization.*
Ben-Gurion University of the Negev

Mar 2016

RESEARCH GRANTS AND GIFTS

Summary : Total External : \$2,848,003 Total Internal : \$81,000

- › **COHERE FOR AI**, Cohere For AI Research Grant (LLM credits) (\$20,000)
Role : PI

12/24
- › **UNIVERSITY OF VIRGINIA (RESEARCH INNOVATION AWARD)** (\$60,000)
Project title : *Understanding and Mitigating Privacy Leakage Risks for Large Language Model Applications*
Role : PI (with David Evans as coPI)

8/24-7/25
- › **NATIONAL SCIENCE FOUNDATION (CISE - RI)** (\$600,000 - UVA portion : \$350,000)
Project title : *Collaborative Research : End-to-end Learning of Fair and Explainable Schedules for Court Systems*
Role : Lead PI (with L. Gouldin (SYR) as coPI and W. Yeoh WASHU as collaborative PI)

08/23-07/26
- › **NATIONAL SCIENCE FOUNDATION (EECS - EPCN)** (\$520,000 - UVA portion : \$260,000)
Project title : *Collaborative Research : Physics Informed Real-time Optimal Power Flow*
Role : PI (with Kyri Baker (UC BOULDER) as collaborative PI)

08/23-07/26
- › **AMAZON RESEARCH AWARDS AWS AI** (\$55,000)
Project title : *Toward Understanding the Unintended Disparate Impacts of Private Machine Learning Systems*
Role : PI

01/23
- › **NATIONAL SCIENCE FOUNDATION (CAREER, CISE - RI)** (\$515,403)
Project title : *CAREER : End-to-end Constrained Optimization Learning*
Role : PI

03/22-02/27
- › **GOOGLE RESEARCH SCHOLAR AWARD** (\$60,000)
Project title : *On the Equity of Differentially Private Decision Processes*
Role : PI

06/22
- › **NATIONAL SCIENCE FOUNDATION (CISE - SATC)** (\$500,000 - UVA portion : \$281,000)
Project title : *Collaborative Research : SaTC : Core : Small : Privacy and Fairness in Critical Decision Making*
Role : Lead PI (with P. Van Hentenryck (GEORGIA TECH) as collaborative PI)

10/21-09/25
- › **NATIONAL SCIENCE FOUNDATION (CISE - RI)** (\$500,000 - UVA portion : \$266,000)
Project title : *Collaborative Research : RI : Small : Deep Constrained Learning for Power Systems*
Role : PI (with P. Van Hentenryck (GEORGIA TECH) as collaborative PI)

10/20-09/24
- › **CUSE PROGRAM** (\$21,000)
Project title : *On the Potential Perils of Fairness Algorithms in Decision Making and Learning Tasks*
Role : PI (with S. Soundarajan (SYR) as coPI)

07/21-06/23

TRAVEL AND SERVICE GRANTS

- › **National Science Foundation** (\$50,000)
Project title : *Conference : Artificial Intelligence Summer School for Computer Science and Operations Research Education*
Role : coPI (with Lavanya Marla (UIUC) as PI)

05/24

<ul style="list-style-type: none"> Artificial Intelligence Journal (\$4,000) Project title : <i>Student Support AU-SCORE 2024</i> Role : PI (with Lavanya Marla) 	03/24
<ul style="list-style-type: none"> Artificial Intelligence Journal (\$15,000) Project title : <i>Student Support for AAMAS 2023</i> Role : PI (with Ana L. C. Bazzan) 	01/23
<ul style="list-style-type: none"> National Science Foundation (\$25,000) Project title : <i>Travel : Travel : Doctoral Mentoring Consortium at the 22nd International Conference on Autonomous Agents and Multiagent Systems</i> Role : PI 	05/23
<ul style="list-style-type: none"> OpenDP (\$500) Project title : <i>Support for Scholarship awards to attend the 2025 AAAI Privacy Preserving AI workshop</i> Role : PI 	02/24
<ul style="list-style-type: none"> Google (\$5,000) Project title : <i>Support for Scholarship awards to attend the 2023 AAAI Privacy Preserving AI workshop</i> Role : PI 	02/24
<ul style="list-style-type: none"> Google (\$2,500) Project title : <i>Support for Scholarship awards to attend the 2023 AAAI Privacy Preserving AI workshop</i> Role : PI 	02/23

SERVICE

CONFERENCE CHAIR

<ul style="list-style-type: none"> International Conference on Principles and Practice of Constraint Programming (CP) <i>with Roie Zivan</i> 	2022
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WORKSHOP CHAIR

<ul style="list-style-type: none"> Sixth AAAI Workshop on Privacy Preserving Artificial Intelligence (PPAI), at AAAI <i>with Juba Ziani, Wanrong Zhang, and Jeremy Seeman</i> 	2025
<ul style="list-style-type: none"> Algorithmic Fairness through the lens of Metrics and Evaluation (AFME), at NeurIPS <i>with Awa Dieng, Miriam Rateike, and Golnoosh Farnadi</i> 	2024
<ul style="list-style-type: none"> AAAI Workshop on Learnable Optimization (LEARNOPT), at AAAI <i>with Elias B. Khalil, Pascal Van Hentenryck, Jan Drgona, Draguna Vrabie, and Priya Donti</i> 	2024
<ul style="list-style-type: none"> Fifth AAAI Workshop on Privacy Preserving Artificial Intelligence (PPAI), at AAAI <i>with Juba Ziani, Christine Task, and Niloofar Miresghallah</i> 	2024
<ul style="list-style-type: none"> Algorithmic Fairness through the lens of Time (AFT), at NeurIPS <i>with Awa Dieng, Miriam Rateike, and Golnoosh Farnadi</i> 	2023
<ul style="list-style-type: none"> Workshop on Optimization and Learning in Multi-Agent Systems, at AAMAS <i>with Hau Chan, Jiaoyang Li, Filippo Bistaffa, and James Kotary</i> 	2023
<ul style="list-style-type: none"> Fourth AAAI Workshop on Privacy Preserving Artificial Intelligence (PPAI), at AAAI <i>with Catuscia Palamidessi, and Pascal Van Hentenryck</i> 	2023
<ul style="list-style-type: none"> Algorithmic Fairness through the lens of Causality and Privacy (AFCP), at NeurIPS <i>with Awa Dieng, Miriam Rateike, and Golnoosh Farnadi</i> 	2022
<ul style="list-style-type: none"> Workshop on Optimization and Learning in Multi-Agent Systems, at AAMAS <i>with Hau Chan and Jiaoyang Li</i> 	2022
<ul style="list-style-type: none"> Third AAAI Workshop on Privacy Preserving Artificial Intelligence (PPAI), at AAAI <i>with Aleksandra Korolova and Pascal Van Hentenryck</i> 	2022
<ul style="list-style-type: none"> AAAI Workshop on Machine Learning for Operational Research (ML4OR), at AAAI <i>with Emma Frejinger, Elias Khalil, and Pashootan Vaezipoor</i> 	2022
<ul style="list-style-type: none"> Second AAAI Workshop on Privacy Preserving Artificial Intelligence (PPAI), at AAAI <i>with Pascal Van Hentenryck and Richard W. Evans</i> 	2021
<ul style="list-style-type: none"> Workshop on Optimization and Learning in Multi-Agent Systems (OptLearnMAS), at AAMAS <i>with Amulya Yadav, Gauthier Picard, and Bryan Wilder</i> 	2021
<ul style="list-style-type: none"> First AAAI Workshop on Privacy Preserving Artificial Intelligence (PPAI), at AAAI <i>with Pascal Van Hentenryck and Rachel Cummings</i> 	2020
<ul style="list-style-type: none"> Workshop on Optimization and Learning in Multi-Agent Systems (OptLearnMAS), at AAMAS <i>with Bryan Wilder and Long Tran-Thanh</i> 	2020
<ul style="list-style-type: none"> Workshop on Optimization in Multi-Agent Systems (OptMAS), at AAMAS <i>with Archie Chapman and Long Tran-Thanh</i> 	2019
<ul style="list-style-type: none"> Workshop on Optimization in Multi-Agent Systems (OptMAS), at FAIM18 <i>with Archie Chapman, Long Tran-Thanh, and Roie Zivan</i> 	2018

CONFERENCE ORGANIZING COMMITTEE

- **Demo Track Chair** : International Joint Conference on Artificial Intelligence (IJCAI) 2023
- **Scholarship Chair** : International Conference on Autonomous Agents and Multiagent Systems (AAMAS) 2023
- **Tutorial Chair** : International Conference on Autonomous Agents and Multiagent Systems (AAMAS) 2022
- **Track Chair** : International Conference on Principles and Practice of Constraint Programming (CP) 2018 – 2019
- **Publicity Chair** : International Conference on Logic Programming (ICLP) 2019
- **Track Chair** : International Symposium on Mathematical Programming (ISMP) 2018

AWARD COMMITTEE

- ACP Early Career Researcher Award committee 2024
- ISSNAF Mario Gerla Young Investigator Award 2023

SERVICE TO JOURNALS

- **Editorial Board Member** : Artificial Intelligence 2024–present
- **Associate Editor** : IJSE Transactions *Special issue on Federated Learning* 2023
- **Guest Editor** : Theory and Practice of Logic Programming (TPLP) *Past and Present (and Future) of Parallel and Distributed Computation in (Constraint) Logic Programming* 2018

SENIOR AREA CHAIR

- AAAI Conference on Artificial Intelligence (AAAI) 2025
- ACM Conference on Fairness, Accountability, and Transparency (FACCT) 2023 – 2025
- International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS) 2024 – 2025
- International Joint Conference on Artificial Intelligence (IJCAI) 2024 – 2025
- European Conference on Artificial Intelligence (ECAI) 2023 – 2024

AREA CHAIR

- AAAI Conference on Artificial Intelligence (AAAI) 2020 – 2024
- International Joint Conference on Artificial Intelligence (IJCAI) 2021 – 2023
- International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS) 2023
- International Conference on Principles and Practice of Constraint Programming (CP) 2018, 2019, 2022
- Neural Information Processing Systems (NeurIPS) 2024
- International Conference on Machine Learning (ICML) 2025

WORKSHOP/TUTORIAL PROPOSAL REVIEWER

- International Conference on Machine Learning (ICML) 2024 – 2025
- Neural Information Processing Systems (NeurIPS) 2023, 2024
- International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS) 2022

PROGRAM COMMITTEE

- ACM Computer and Communications Security (CCS) 2025
- Bridge Program on AI and OR, at AAAI 2024
- Neural Information Processing Systems (NeurIPS) 2020 – 2023
- International Conference on Machine Learning (ICML) 2021 – 2024
- International Conference on Learning Representations (ICLR) 2021 – 2025
- Privacy Enhancing Technologies Symposium (PETS) 2021 – 2023
- Electric Power System Research (PSCC) 2022
- International Conference on Logic Programming (ICLP) 2021
- International Conference on Principles and Practice of Constraint Programming (CP) 2016 – 2018, 2021
- International Joint Conference on Artificial Intelligence (IJCAI) 2016 – 2020
- European Conference on Machine Learning (ECML) 2020
- International Symposium on Combinatorial Search (SoCS) 2015 – 2020
- International Workshop on Optimization and Learning in Multi-Agent Systems (OptLearnMAS) 2020
- AAAI Conference on Artificial Intelligence (AAAI) 2018 – 2019
- Italian Conference on Computational Logic (CILC) 2017 – 2019

› Distributed Artificial Intelligence (DAI)	2019
› European Conference on Artificial Intelligence (ECAI)	2016 – 2018
› International Workshop on Optimization in Multi-Agent Systems (OptMAS)	2016 – 2017
› Italian Conference on Artificial Intelligence (AI*IA)	2017

JOURNAL REVIEWER

› Harvard Data Science Review	2024
› INFORMS Journal on Computing	2022, 2023
› Transactions on Machine Learning Research (TMLR)	2022
› Journal of Artificial Intelligence Research (JAIR)	2016 – 2022
› Artificial Intelligence Journal (AIJ)	2016 – 2021
› Journal of Machine Learning Research (JMLR)	2021
› IEEE Transactions on Smart Grid	2019 – 2021
› IEEE Transactions on Power Systems	2020 – 2021
› IEEE Transactions on Dependable and Secure Computing	2020
› IEEE Transactions on Information Forensics & Security	2019 – 2020
› Gates Open Research	2020
› Patterns	2020
› Autonomous Agents and Multi-Agent Systems (JAAMAS)	2014 – 2017, 2019 – 2020, 2023
› Artificial Intelligence Review (AIR)	2016 – 2017
› Fundamenta Informaticae Journal	2016 – 2017
› AI Communications	2017
› Algorithms for Molecular Biology (AMB)	2014

DOCTORAL CONSORTIA MENTORING

› AAAI Conference on Artificial Intelligence (AAAI)	2022
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CONFERENCE/SYMPOSIUM/WORKSHOP REVIEWER

› European Control Conference (ECC)	2021
› AAAI Conference on Artificial Intelligence (AAAI)	2014 – 2017
› International Conference on Autonomous Agents and Multiagent Systems (AAMAS)	2014 – 2016
› International Conference on Principles and Practice of Constraint Programming (CP)	2016 – 2017
› International Conference on Principles and Practice of Multi-Agent Systems (PRIMA)	2016
› International Joint Conference on Artificial Intelligence (IJCAI)	2015
› International Conference on Logic Programming (ICLP)	2015
› International Symposium on Combinatorial Search (SoCS)	2014
› International Workshop on Distributed Constraint Reasoning (DCR)	2014
› EURO-Par Parallel Processing (EUROPAR)	2014
› Principles and Practice of Declarative Programming (PPDP)	2014

PANEL REVIEWER

› NSF, CISE Panel (×2)	2024
› Austrian Research Promotion Agency (FFG)	2023
› NSF, Eng Panel	2023
› NSF, NRT Panel	2022
› NSF, SaTC Panel	2022
› NSF, CISE Panel	2022
› Israel Science Foundation (IIS) (external reviewer)	2022 – 2023
› Climate Change AI (CCAI) Grant	2022 – 2023
› CUSE Grant, Syracuse University	2020 – 2021
› NSF, CISE RI (external reviewer)	2020

SCHOOL/DEPARTMENT SERVICE (AT UVA)

- › Search Committee (Teaching track) 2024
- › Graduate Program Committee 2023 – 2024
- › Advisor ACM SIGAI at UVA 2023 – 2024

SCHOOL/DEPARTMENT SERVICE (AT SU)

- › Curriculum Committee 2023 – 2024
- › Prepare and Grade Qualifier exam (Programming/Data Structure) 2022 – 2023
- › Academic Integrity panelist 2021 – 2022
- › Remembrance Scholars Selection Committee 2022