# Ferdinando FIORETTO

### **Assistant Professor**

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Research Interest: Artificial Intelligence | Differential Privacy | Algorithmic Fairness | Optimization

Machine Learning | Power Systems.

### Professional Experience

Current | Syracuse University, Electrical Engineering & Computer Science, Syracuse, NY Jan. 2020 | ASSISTANT PROFESSOR

### **EDUCATION**

Dec. 2019 Sep. 2018	Georgia Institute of Technology, School of Industrial and System Engineering, Atlanta, GA POST-DOCTORAL RESEARCHER
Dec. 2018 Sep. 2016	University of Michigan, Industrial and Operations Engineering, Ann Arbor, MI RESEARCH FELLOW
Aug. 2016	University of Udine <sup>1</sup> , Computer Science, Udine, IT Ph.D. IN COMPUTER SCIENCE (WITH MS IN 2012)
Nov. 2009	University of Parma, Computer Science & Mathematics, Parma, IT BS. IN COMPUTER SCIENCE

# SELECTED HONORS AND AWARDS

- 2022 Amazon Research Award, Amazon AWS AI (Fairness). Z Press
  - > Project name: "Toward Understanding the Unintended Disparate Impacts of Private Machine Learning Systems".

The Amazon Research Awards is a competitive global program which offers unrestricted funds and AWS Promotional Credits to support research at academic institutions and non-profit organizations in areas that align Amazon's mission to advance science.

- 2022 **NSF CAREER Award**. National Science Foundation. **Press** 
  - > The Faculty Early Career Development (CAREER) Program is a Foundation-wide activity that offers the National Science Foundation's most prestigious awards in support of early-career faculty who have the potential to serve as academic role models in research and education and to lead advances in the mission of their department or organization. Activities pursued by early-career faculty should build a firm foundation for a lifetime of leadership in integrating education and research.
- 2022 Caspar Bowden PET Award, Privacy Enhancing Technologies (PETs). 🗹 Link
  - > The Caspar Bowden PET award for Outstanding Research in Privacy Enhancing Technologies is presented annually to researchers whose work makes an outstanding contribution to the theory, design, implementation, or deployment of privacy enhancing technology. The 2022 award was selected among all qualifying papers (published in any venue in the years 2020–2021).

The award letter reads: "Your paper Decision Making with Differential Privacy under the Fairness Lens received the award especially for advancing the understanding of DP and fairness trade-offs in decision making, providing a theoretical framework and exploring a highly relevant practical problem."

- 2022 Google Research Scholar Award, Google (Privacy). 🗹 Link
  - > Project name: "Equity of Differentially Private Decision Processes".

The Research Scholar Program provides unrestricted gifts to support research at institutions around the world, and is focused on funding world-class research conducted by early-career professors.

<sup>1.</sup> Dual degree with New Mexico State University

- 2022 Early Career Spotlight, International Joint Conference on Artificial Intelligence (IJCAI). 🗹 Link
  - > The IJCAI Early Career Spotlight talks are aimed at providing an accessible introduction to the research directions of some of the most active early career researchers in AI. The talks are by invitation, based on nominations from the IJCAI program committee.
- 2022 **Best Paper Award**, IEEE Transaction of Power System. **Link** 
  - > For paper: "Differentially Private Optimal Power Flow for Distribution Grids".

    This highly selective award was assigned to eight out of all IEEE-TPS papers published in 2019–2021.
- 2021 Early Career Researcher Award, Association for Constraint Programming. Link
  - > The Early Career Research Award is assigned by the Association for Constraint Programming to early career researchers for their contributions to constrained optimization.

    In particular, this *inaugural* award was given "for contribution to constraint programming and, in particular, fundamental advances in distributed constraint satisfaction, constraint-based differential privacy, fairness in artificial intelligence, and their applications in energy, mobility, and census data."
- 2021 Mario Gerla Young Investigator Award, ISSNAF. 🗗 Press
  - > Established by the Gerla family in 2019 in memory of Dr. Mario Gerla, professor of Computer Science at UCLA, the Italian Scientists and Scholars in North America Foundation confers the *Young Investigator Awards* every year to outstanding, early-career, Italian researchers working in North America, in recognition of their significant and innovative contributions to computer science. The award is conferred in coordination with the Italian Embassy in US.
- 2021 Best Paper Award, IEEE Transaction of Power System. CLink
  - > For paper: "Privacy-Preserving Power System Obfuscation: A Bilevel Optimization Approach".

    This highly selective award was assigned to seven out of all IEEE-TPS papers published in 2018–2020.
- 2017 **Best Al Dissertation Award**, Al\*IA. **T** Press
  - > For Thesis "Exploiting the Structure of Distributed Constraint Optimization Problems with Applications in Smart Grids."
    - The "Marco Cadoli' 'Best AI dissertation is assigned by the Italian Association for Artificial Intelligence (AI\*IA) to a Ph.D. doctor who have obtained the title in an Italian University based on the quality and impact of the thesis work.
- 2017 **Most Visionary Workshop Paper Award**, International Conference of Autonomous Agents and Multiagent Systems (AAMAS). 🗗 Link
  - > For paper "A Realistic Dataset for the Smart Home Device Scheduling Problem for DCOPs".
- 2013 Best Student Paper Award, Computational Methods in System Biology (CMSB). CLink
  - > For paper "Constraint Programming in Community-based Gene Regulatory Network Inference".

### OTHER AWARDS

- 2022 **Top Reviewer Award**, Conference on Neural Information Processing Systems (NeurIPS). **Z** 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
- 2016 **Top Graduate Student Honor's Cord**, NMSU.
- 2014 Outstanding Research Assistant Award, Computer Science, NMSU. C Press
- 2014 Outstanding Teaching Assistant Nomination, NMSU.
- 2013 **Ph.D. Scholarship Award** (~\$50,000), University of Udine.
- 2013 Outstanding Teaching Assistant Award, Computer Science, NMSU. Tress
- 2013 Computer Science Scholarship (\$1500), NMSU.
- 2012 Honors Graduate Recognition for Outstanding Academic Success, NMSU.
- 2008 Erasmus Scholarship ( $\sim $14,000$ ), University of Leeds.

#### **TRAVEL GRANTS**

AAAI'20 Tutorial and Workshops (2020), AAAI'18 Tutorial Grant (2018), CP'16 Travel Support (2016), IJCAI'16 Travel Support (2016), AAMAS'16 Travel Support (2016), CP'15 Travel Support (2015), AAMAS'15 Travel Support (2015), AAAI/SIGAI Doctoral Consortium Travel Support (2015), CP'14 Travel Support (2014),

CMSB'13 Conference Funding (2013), RR'13 NFS Travel Support (2013), ASNMSU Conference Funding (2012,2013,2014,2015), NMSU Graduate Student Travel Grant (2012).

# RESEARCH GRANTS AND GIFTS

Summary: Total External: \$1,177,403 Total Internal: \$21,000 Amazon Research Awards AWS AI \$55,000 JAN. 2023-Toward Understanding the Unintended Disparate Impacts of Private Machine Learning Systems 🗹 PI: Ferdinando Fioretto NATIONAL SCIENCE FOUNDATION (CAREER, CISE - RI) \$515,403 MAR. 2022-FEB. 2027 CAREER: End-to-end Constrained Optimization Learning 🗹 PI: Ferdinando Fioretto GOOGLE RESEARCH SCHOLAR AWARD \$60,000 JUL. 2022-On the Equity of Differentially Private Decision Processes PI: Ferdinando Fioretto NATIONAL SCIENCE FOUNDATION (CISE - SATC) \$281,000 OCT. 2021-SEP. 2024 Collaborative Research : SaTC : Core : Small : Privacy and Fairness in Critical Decision Making 🗹 PI: Ferdinando Fioretto (lead) National Science Foundation (CISE - RI) \$266,000 OCT. 2020-SEP. 2023 Collaborative Research: RI: Small: Deep Constrained Learning for Power Systems 🗹 PI: Ferdinando Fioretto ARTIFICIAL INTELLIGENCE JOURNAL \$15,000 JAN. 2023-Student Support for AAMAS 2023 PI: Ana L. C. Bazzan and Ferdinando Fioretto CUSE PROGRAM \$21,000 JUN. 2021-MAY 2023 On the Potential Perils of Fairness Algorithms in Decision Making and Learning Tasks 🗹 PI: Ferdinando Fioretto, co-PI: Sucheta Soundarajan PENDING GRANTS SUBMISSIONS NATIONAL SCIENCE FOUNDATION \$20,000,000 JAN. 2023-DEC. 2028 Theme 3 : ACAD - A National Research Institute for AI for Climate-smart Agriculture in Drylands 🗹 PI: Enrico Pontelli, co-PI: Ferdinando Fioretto, Hatim Geli, Huiping Cao, Lara Prihodko National Science Foundation (CISE - RI) \ \$600,000 JUL. 2023-JUN. 2026 Learning to Schedule for Fair Pretrial Processes in the Court System PI: Ferdinando Fioretto (lead), William Yeoh, co-PI: Lauryn Gouldin NATIONAL SCIENCE FOUNDATION (ENG - EPCN) \$520,000 JUL. 2023-JUN. 2026 Collaborative Research: Physics Informed Real-time Optimal Power Flow PI: Ferdinando Fioretto (with Kyri Baker as lead PI) AMAZON RESEARCH AWARDS AWS AI \$70,000 JUL. 2023-Learning to Rank with (Certified!!) Fairness PI: Ferdinando Fioretto

### NATIONAL SCIENCE FOUNDATION \$25,000

MAY. 2023-JUNE. 2023

Travel: Travel: Doctoral Mentoring Consortium at the 22nd International Conference on Autonomous Agents and

Multiagent Systems 
PI: Ferdinando Fioretto

# NATIONAL SCIENCE FOUNDATION \$600,000

(PLANNED)-

Collaborative Research: SaTC: Small: Equity and Explainability of Differential Privacy: Revising the Social Perspective of Releasing Sensitive Data

PI: Ferdinando Fioretto, co-PI: Christine Task

# NATIONAL SCIENCE FOUNDATION (CISE - III) \$450,000

(PLANNED)-

Characterizing and Mitigating the Unintended Disparate Impacts of Constrained Machine Learning Systems 🗹

PI: Ferdinando Fioretto

# **DEPARTMENT OF ENERGY (OFFICE OF SCIENCE)** [\$750,000]

(PLANNED)-

Learning to Optimize under Physical and Operational Constraints in Real-time Systems 🗹

PI: Ferdinando Fioretto

### **PUBLICATIONS**

Summary: > 12 Journals articles > 50 Conference papers > 2 Book chapters > 3 Editorial articles

> 19 Workshop papers > 16+ Preprints

**Total citations:** 1304 **H-index**: 21 Google Scholar

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

#### **JOURNALS**

JAIR

JAIR 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.

AlJ Ferdinando Fioretto, Pascal Van Hentenryck, Keyu Zhu. "Differential Privacy of Hierarchical Census Data: An Optimization Approach". Artificial Intelligence Journal (AlJ), (296), pages 103475, 2021.

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.

**P** Best IEEE TPS paper award (given to 8 out of all TPS papers published in 2019–2021).

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.

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).

JAIR 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.

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.

**P** Best 2018 Thesis in Artificial Intelligence (AI\*IA) (Accompanying paper).

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.

Al Matters

Ferdinando Fioretto, William Yeoh. "Al Buzzwords Explained: Distributed Constraint Optimization Problems". Al Matters, 3 (4), pages 8–13, 2018.

Constraints 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.

- TOMACS 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.
  - JAIR  $(\alpha-\beta)^2$  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.

#### CONFERENCES

- NeurIPS 
  ♣ 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%.
  - IJCAI 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%.
  - IJCAI 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% (survey track).
  - IJCAI 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).
- WWW ▲ 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%.
- ▲ 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%.
- 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: Unknown.
- 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: Unknown.
- NeurIPS 
  ♣ 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%.
- NeurIPS 

  ▲ 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%.
  - LICAI

    Local Cuong Tran, Ferdinando Fioretto, Pascal Van Hentenryck, Lens 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%.

<sup>2.</sup> Author list is order alphabetically.

- **2022 Caspar Bowden PET Award** (Selected among all papers about Privacy Enhancing Technologies published in international conferences between 2020–2022.).
- ▲ 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%.
- 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%.

- ▲ 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%.
- AAMAS 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%.
  - CP 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.
- PowerTech Vladimir Dvorkin, **Ferdinando Fioretto**, Pascal Van Hentenryck, Jalal Kazempour, Pierre Pinson. "Differentially Private Optimal Power Flow for Distribution Grids". **IEEE PowerTech**, 2021. Acceptance Rate: unknown.
  - 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%.
  - IJCAI Ferdinando Fioretto, Lesia Mitridati, Pascal Van Hentenryck. "Differential Privacy Stackebelg Games". Proceedings of the International Joint Conference on Artificial Intelligence (IJCAI), 3480–3486, 2020. Acceptance Rate: 12.6%.
  - 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.
    - Tinvited to the IJCAI journal track.
  - PSCC 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: ~30%.
  - 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.
  - 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%.
  - 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%.

- 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.
  - 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%.
    - **▼** Invited to Constraint journal (selected papers declined).
- PRIMA 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%.
- 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%.
  - 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%.
- CPAIOR 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.
  - 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: Unknown.
- AAMAS 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.
- 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: 25%.
- 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: 25%.
  - CP Atena M. Tabakhi, Tiep 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%.
- AAMAS 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: 25%.

- Tiep 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: 25%.
  - 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: 26%.
    - 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%.
    - CP 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: 49%.
- 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%.
- 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.
- 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: Unknown.
  - 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: Unknown.
  - [ECAI]  $(\alpha \beta)$  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.  $\Box$ Acceptance Rate: 28%.
  - CP 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: 50%.
  - PADL  $(\alpha-\beta)$  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.  $\Box$  Acceptance Rate: 55%.
- AAMAS

  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%.

CMSB 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%.

**P** Best Student Paper Award .

 $(\alpha-\beta)$  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.  $\square$ 

Acceptance Rate: 36%.

Neuroscience

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: Unknown.

#### **BOOK CHAPTERS AND EDITORIAL ARTICLES**

Al Mag. Ferdinando Fioretto, et al.. "Reports of the Workshops Held at the 2022 AAAI Conference on Artificial Intelligence". Al Magazine, 2022.

Al Mag. Ferdinando Fioretto, et al.. "Reports of the Workshops Held at the 2021 AAAI Conference on Artificial Intelligence". Al Magazine, 2021.

Al Mag. 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". Al Magazine, 41(4) 2020.

LNCS Mulliam 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 (LCNS), LNCS, volume 10643 pages 125–142, Springer, 2017.

**Visionary Paper Award** (AAMAS workshop series).

LNBIP 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.

#### **WORKSHOPS & PRESENTATIONS**

PPAI ▲ 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

TPDP 
♣ Cuong Tran, Ferdinando Fioretto. "Decision Making with Differential Privacy under the Fairness Lens".

Theory and Practice of Differential Privacy (TPDP) – at ICML, 2021. 

Theory and Practice of Differential Privacy (TPDP) – at ICML, 2021.

OptLMAS

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.

INFORMS Ferdinando Fioretto, ♣ Cuong Tran, Pascal Van Hentenryck. "Lagrangian Duality for Constrained Deep Learning". INFORMS, 2020. ☑

Lesia Mitridati, **Ferdinando Fioretto**, Pascal Van Hentenryck. "Differential Privacy For Stackelberg Games : An Application To Gas And Electricity Markets". **INFORMS**, 2020.

OptMAS 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.

OptMAS 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.

- OptMAS 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.
- AISGSB 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.
- MPREF 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.
- TADA 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.
- AISGSB 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.
- OptMAS 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.
- OptMAS 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.
  - WCB  $(\alpha-\beta)$  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.
- ParSeachOpt  $(\alpha-\beta)$  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.  $\Box$ 
  - WCB Ferdinando Fioretto, Enrico Pontelli. "Community-based Gene Regulatory Network Inference via Constraint Programming". Workshop on Constraint Based Methods for Bioinformatics (WCB)-at CP, 2013.
  - WCB  $(\alpha-\beta)$  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.  $\Box$
  - WCB  $(\alpha-\beta)$  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 Constraints". Workshop on Constraint Based Methods for Bioinformatics (WCB)–at CP, 2011.

### PREPRINTS AND ARCHIVED ARTICLES

- ArXiv ▲ James Kotary, ♣ Vincenzo Di Vito, Ferdinando Fioretto. "End-to-End Optimization and Learning for Multiagent Ensembles". CoRR abs/2211.00251, 2022. 

  \*\*Tion To The Property of The P
- ArXiv Vladimir Dvorkin, **Ferdinando Fioretto**, Pascal Van Hentenryck, Pierre Pinson, Jalal Kazempour. "*Privacy-Preserving Convex Optimization: When Differential Privacy Meets Stochastic Programming*". **CoRR abs**/2209.14152, 2022.
- ArXiv Mostafa Mohammadian, Kyri Baker, Ferdinando Fioretto. "Gradient-Enhanced Physics-Informed Neural Networks for Power Systems Operational Support". CoRR abs/2206.10579, 2022.
- ArXiv Sawinder Kaur, Ferdinando Fioretto, Asif Salekin. "Deadwooding: Robust Global Pruning for Deep Neural Networks". CoRR abs/2202.05226, 2022.
- ArXiv My H. Dinh, Ferdinando Fioretto, Mostafa Mohammadian, Kyri Baker. "Towards Understanding the Unreasonable Effectiveness of Learning AC-OPF Solutions". CoRR abs/2111.11168, 2021.
- ArXiv 
  ♣ Cuong Tran, ♣ My H. Dinh, ♣ Kyle Beiter, Ferdinando Fioretto. "A Fairness Analysis on Private Aggregation of Teacher Ensembles". CoRR abs/2109.08630, 2021. 

  ☐
- ArXiv ♣ Anudit Nagar, ♣ Cuong Tran, Ferdinando Fioretto. "A Privacy-Preserving and Trustable Multi-agent Learning Framework". CoRR abs/2106.01242, 2021. (extended AAMAS-21 version). ☑

📤 James Kotary, Ferdinando Fioretto, Pascal Van Hentenryck, Bryan Wilder. "End-to-End Constrained Op-ArXiv timization Learning: A Survey". CoRR abs/2103.16378, 2021. (extended IJCAI-21 version). ArXiv Terrence W.K. Mak, Ferdinando Fioretto, Pascal VanHentenryck. "Load Embeddings for Scalable AC-OPF Learning". CoRR abs/2101.03973, 2021. Keyu Zhu, Pascal Van Hentenryck, Ferdinando Fioretto. "Bias and Variance of Post-processing in Differen-ArXiv tial Privacy". CoRR abs/2010.04327, 2020 (extended AAAI-21 version). Minas Chatzos, Ferdinando Fioretto, Terrence W.K. Mak, Pascal Van Hentenryck. "High-Fidelity Machine ArXiv Learning Approximations of Large-Scale Optimal Power Flow". CoRR abs/2006.16356, 2020. 🔀 Vladimir Dvorkin, Ferdinando Fioretto, Pascal Van Hentenryck, Jalal Kazempour, Pierre Pinson. "Differen-ArXiv tially Private Convex Optimization with Feasibility Guarantees". CoRR abs/2006.12338, 2020. 🗹 Ferdinando Fioretto, Terrence W.K. Mak, Pascal Van Hentenryck. "Predicting AC Optimal Power Flows: ArXiv Combining Deep Learning and Lagrangian Dual Methods". CoRR abs/1909.10461, 2019 (extended AAAI-20 version). 🗹 Ferdinando Fioretto, Terrence W. K. Mak, Pascal Van Hentenryck. "Privacy-Preserving Obfuscation of Cri-ArXiv tical Infrastructure Networks". CoRR abs/1905.09778, 2019 (extended IJCAI-19 version).

### TEACHING

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)

## MENTORING

### PhD Students

> Cuong Tran (SYRACUSE UNIVERSITY, CISE) Spring 2020 – current RESEARCH: Differential Privacy and Fairness. > James Kotary (SYRACUSE UNIVERSITY, CISE) Fall 2020 – current RESEARCH: Integration of Deep Learning and Optimization. > My Dinh (SYRACUSE UNIVERSITY CISE) Spring 2021 – current RESEARCH: Natural Language Processing and Differential Privacy. > Shayan Ehsani (SYRACUSE UNIVERSITY, CISE) Fall 2022 – current RESEARCH: Integration of Deep Learning and Optimization. > Vincenzo Di Vito (SYRACUSE UNIVERSITY CISE) Fall 2022 - current RESEARCH: Decision focused learning.

#### MS Students (including Interns/Visitor)

Fall 2022 > Yehya Farhat (SU) PROPOSED THESIS: Surrogate ML models for optimization. > Rakshit Naidu (CMU) Summer 2022 RESEARCH: Privacy and Fairness in ML. Now at: Carnegie Mellon University > Pratik Paranjape (SYRACUSE UNIVERSITY, CISE) Summer 2020 Research: Generating datasets for preference elicitation. First job after graduation: Developer at OthersideAl > Pavan Kumar Vaddineni (SYRACUSE UNIVERSITY, CISE), Spring 2020 RESEARCH: Explainable and Fair Learning. First job after graduation: Same > William Kluegel (New Mexico State University, CS) 2016 - 2018

RESEARCH: Optimization and Preferences Elicitation for Smart Home Devices. First job after graduation: Sandia National Labs

# BS and High-School Students

Adya Parida (SU, Fall 2022) [REU], Deniz Gursoy (Fayetteville High School, Summer 2022), Saswat Das (ITS, Summer 2022), Utsav Pathak (Alliance University, Bengaluru, Summer 2022), Daiwei Shen (Northwestern, Summer 2022), Sunisth Kumar (Bennett University, Summer 2022), Kyle Beiter (SU, Summer 2021) [REU], Shantanu Jhaveri (USC, Summer 2021) [REU], Dayong Gu (SU, Summer 2021), Guoliang Chen (SU, Summer 2021), Pradyumn Yadav (SU, Summer 2021), Anudit Nagar (SU, Summer 2020 – Current), Zhiyan Yao (SU, Summer 2020 – Current), Zifei Lu (SU, Summer 2020), Thomas Montfort (SU, Summer 2020), Cong Liu (SU, Summer 2020), Lyndon Shi (UMich, 2018) Jiayu Chen (UMich, 2018) Eric Frechette (NMSU, 2016).

### PhD Dissertation Committee

> 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

Τ	utorials, Selected Invited Talks and Media Interviews	
>	Invited Talk: Differential Privacy for Power Systems	
	Los Alamos National Lab's 5th Grid Science Winter School and Conference	Jan 2023
>	Tutorial: End-to-end constrained optimization learning	
	🗹 21st International Conference of the Italian Association for Artificial Intelligence (AIXIA 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
	University of Maryland, College Park	Nov 2022
>	Tutorial: Decision Focused Learning	0 / 2022
	Dagstuhl seminar on Data-Driven Combinatorial Optimisation	Oct 2022
>	Media Interview: Privacy and Fairness in Al	1.1/Can 2022
,	Syracuse Media Report MSU News Sun News  Media Interview: Google Scholar Research Award	Jul/Sep 2022
_	Syracuse Media Report	Jun 2022
>	Tutorial: Impacts of Data Privacy and Equity on Public Policy	JUII 2022
•	ACM Conference on Fairness, Accountability, and Transparency (FAccT)	Jun 2022
>	Invited Panelist: Fostering the Use of Al for Power System Transformation	04112022
	Climate Change Al	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 : Al for Climate Change	
	☑ RaiNews	Dec 2021
>	Popular Media Report : ISSNAF Young Investigator Award	M 2021
	When York Voice AISE II Mattino StartupItalia 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	1VUV 2UZI
_	The International Conference on Principle and Practice of Constraint Programming (CP 2021),	Oct 2021
	The international conference of Finishic and Fractice of Constraint Fogramming (CF 2021),	OCI 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	M 2021
	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	IVOV 2020
′	AAAI Conference on Artificial Intelligence (AAAI 2020)	Feb 2020
`	Media Cover: Multiagent Systems	1 60 2020
•	✓ NetworkDigital360	Feb 2020
>	Invited Talk: Privacy-Preserving Artificial Intelligence	7 CD 2020
•	University of Parma (CS Dept)	Jun 2019
>	<b>Tutorial</b> : Tutorial on Multiagent Optimization for IoT Applications	34112013
•	☑ International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2019)	May 2019
>	Invited Talk: Differential Privacy for Al Applications	May 2013
•	University of Southern California - Information Sciences Institute	Jan 2019
	Michigan State University	Feb 2019
>	Tutorial: Tutorial on Constrained Multi-agent Optimization	1002013
•	AAAI Conference on Artificial Intelligence (AAAI 2018)	Feb 2018
`	Plenary Keynote Talk: Distributed Constraint Optimization for Smart Energy Networks	1002010
_	Italian Conference on Artificial Intelligence (AI*IA 2017)	Nov 2017
	Invited Talk: Distributed Constraint Optimization	1100 2011
′	·	Apr 2016
	Delft University (TU Delft)	Apr 2016
	University of Udine	Apr 2016
	New Mexico State University	Mar 2016
>	Invited Talk: Large Neigboring Search for Distributed Constrained Optimization	M== 2010
	Ben-Gurion University of the Negev	Mar 2016
Sı	ERVICE	
	CONFERENCE CHAIR	
>	International Conference on Principles and Practice of Constraint Programming (CP) with Roie Zivan	2022
	Workshop Chair	
>	Fourth AAAI Workshop on Privacy Preserving Artificial Intelligence (PPAI), at AAAI	2023
	with Catuscia Palamidessi and Pascal Van Hentenryck	
>	Algorithmic Fairness through the lens of Causality and Privacy (AFCP), at NeurIPS	2022
	with Awa Dieng, Miriam Rateike, and Golnoosh Farnadi	
>	Workshop on Optimization and Learning in Multi-Agent Systems, at AAMAS	2022
	with Hau Chan and Jiaoyang Li	
>	Third AAAI Workshop on Privacy Preserving Artificial Intelligence (PPAI), at AAAI	2022
	with Aleksandra Korolova and Pascal Van Hentenryck	
>	AAAI Workshop on Machine Learning for Operational Research (ML4OR), at AAAI	2022
	with Emma Frejinger, Elias Khalil, and Pashootan Vaezipoor	
>		2021
>	Second AAAI Workshop on Privacy Preserving Artificial Intelligence (PPAI), at AAAI	2021
	Second AAAI Workshop on Privacy Preserving Artificial Intelligence (PPAI), at AAAI with Pascal Van Hentenryck and Richard W. Evans	
	Second AAAI Workshop on Privacy Preserving Artificial Intelligence (PPAI), at AAAI with Pascal Van Hentenryck and Richard W. Evans Workshop on Optimization and Learning in Multi-Agent Systems (OptLearnMAS), at AAMAS	2021 2021
>	Second AAAI Workshop on Privacy Preserving Artificial Intelligence (PPAI), at AAAI with Pascal Van Hentenryck and Richard W. Evans Workshop on Optimization and Learning in Multi-Agent Systems (OptLearnMAS), at AAMAS with Amulya Yadev, Gauthier Picard, and Bryan Wilder	2021
>	Second AAAI Workshop on Privacy Preserving Artificial Intelligence (PPAI), at AAAI with Pascal Van Hentenryck and Richard W. Evans Workshop on Optimization and Learning in Multi-Agent Systems (OptLearnMAS), at AAMAS with Amulya Yadev, Gauthier Picard, and Bryan Wilder First AAAI Workshop on Privacy Preserving Artificial Intelligence (PPAI), at AAAI	
>	Second AAAI Workshop on Privacy Preserving Artificial Intelligence (PPAI), at AAAI with Pascal Van Hentenryck and Richard W. Evans Workshop on Optimization and Learning in Multi-Agent Systems (OptLearnMAS), at AAMAS with Amulya Yadev, Gauthier Picard, and Bryan Wilder First AAAI Workshop on Privacy Preserving Artificial Intelligence (PPAI), at AAAI with Pascal Van Hentenryck and Rachel Cummings	2021 2020
>	Second AAAI Workshop on Privacy Preserving Artificial Intelligence (PPAI), at AAAI with Pascal Van Hentenryck and Richard W. Evans Workshop on Optimization and Learning in Multi-Agent Systems (OptLearnMAS), at AAMAS with Amulya Yadev, Gauthier Picard, and Bryan Wilder First AAAI Workshop on Privacy Preserving Artificial Intelligence (PPAI), at AAAI with Pascal Van Hentenryck and Rachel Cummings Workshop on Optimization and Learning in Multi-Agent Systems (OptLearnMAS), at AAMAS	2021
> >	Second AAAI Workshop on Privacy Preserving Artificial Intelligence (PPAI), at AAAI with Pascal Van Hentenryck and Richard W. Evans Workshop on Optimization and Learning in Multi-Agent Systems (OptLearnMAS), at AAMAS with Amulya Yadev, Gauthier Picard, and Bryan Wilder First AAAI Workshop on Privacy Preserving Artificial Intelligence (PPAI), at AAAI with Pascal Van Hentenryck and Rachel Cummings	2021 2020

>	Workshop on Optimization in Multi-Agent Systems (OptMAS), at FAIM18 with Archie Chapman, Long Tran-Thanh, and Roie Zivan				2018
> > > >	CONFERENCE ORGANIZING COMMITTEE  Demo Track Chair: International Joint Conference on Artificial Intelligence (IJCAI)  Scholarship Chair: International Conference on Autonomous Agents and Multiagent Systems Tutorial Chair: International Conference on Autonomous Agents and Multiagent Systems (AAI Track Chair: International Conference on Principles and Practice of Constraint Programming (Publicity Chair: International Conference on Logic Programming (ICLP) Track Chair: International Symposium on Mathematical Programming (ISMP) Guest Editor: Theory and Practice of Logic Programming (TPLP)	MAS)	1AS)	2018 -	2023 2023 2022 - 2019 2019 2018
> >	SENIOR PROGRAM COMMITTEE/AREA CHAIR  AAAI Conference on Artificial Intelligence (AAAI) International Joint Conference on Artificial Intelligence (IJCAI) International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS) International Conference on Principles and Practice of Constraint Programming (CP)		2018	2020 - 2021 - 8, 2019	- 2022 2023
>	PROGRAM COMMITTEE  Neural Information Processing Systems (NeurIPS) International Conference on Machine Learning (ICML) International Conference on Learning Representations (ICLR) Privacy Enhancing Technologies Symposium (PETS) Electric Power System Research (PSCC) International Conference on Logic Programming (ICLP) International Conference on Principles and Practice of Constraint Programming (CP) International Joint Conference on Artificial Intelligence (IJCAI) European Conference on Machine Learning (ECML) International Symposium on Combinatorial Search (SoCS) International Workshop on Optimization and Learning in Multi-Agent Systems (OptLearnMAS) AAAI Conference on Artificial Intelligence (AAAI) Italian Conference on Computational Logic (CILC) Distributed Artificial Intelligence (DAI) European Conference on Artificial Intelligence (ECAI) International Workshop on Optimization in Multi-Agent Systems (OptMAS) Italian Conference on Artificial Intelligence (AI*IA)		2016	2020 - 2021 - 2021 - 2021 - 2021 - - 2016 - 2015 - 2018 - 2017 - 2016 - 2016 -	- 2022 - 2023 - 2023 2022 2021 , 2021 - 2020 - 2020 - 2020 - 2019 - 2019 - 2019 - 2018
>	Journal Reviewer  INFORMS Journal on Computing Transactions on Machine Learning Research (TMLR) Journal of Artificial Intelligence Research (JAIR)  Artificial Intelligence Journal (AIJ) Journal of Machine Learning Research (JMLR) IEEE Transactions on Smart Grid IEEE Transactions on Power Systems IEEE Transactions on Dependable and Secure Computing IEEE Transactions on Information Forensics & Security Gates Open Research Patterns Autonomous Agents and Multi-Agent Systems (JAAMAS) Artificial Intelligence Review (AIR) Fundamenta Informaticae Journal AI Communications Algorithms for Molecular Biology (AMB)	2014	– 2017,	2016 - 2016 - 2019 - 2020 - 2019 - ,2019 - 2016 - 2016 -	- 2021 2021 - 2021 - 2021 2020 - 2020 2020 2020 - 2020 - 2017
>	DOCTORAL CONSORTIA MENTORING  AAAI Conference on Artificial Intelligence (AAAI)				2022

#### CONFERENCE/SYMPOSIUM/WORKSHOP REVIEWER

<ul> <li>&gt; European Control Conference (ECC)</li> <li>&gt; AAAI Conference on Artificial Intelligence (AAAI)</li> <li>&gt; International Conference on Autonomous Agents and Multiagent Systems (AAMAS)</li> <li>&gt; International Conference on Principles and Practice of Constraint Programming (CP)</li> <li>&gt; International Conference on Principles and Practice of Multi-Agent Systems (PRIMA)</li> <li>&gt; International Joint Conference on Artificial Intelligence (IJCAI)</li> <li>&gt; International Conference on Logic Programming (ICLP)</li> <li>&gt; International Symposium on Combinatorial Search (SoCS)</li> <li>&gt; International Workshop on Distributed Constraint Reasoning (DCR)</li> <li>&gt; EURO-Par Parallel Processing (EUROPAR)</li> <li>&gt; Principles and Practice of Declarative Programming (PPDP)</li> </ul>	2021 2014 - 2017 2014 - 2016 2016 - 2017 2016 2015 2015 2014 2014 2014 2014
PANEL REVIEWER  NSF, CISE SaTC Panel  NSF, CISE RI Panel  Israel Science Foundation (IIS) (external reviewer)  Climate Change AI (CCAI) Grant  CUSE Grant, Syracuse University  NSF, CISE RI (external reviewer)	2022 2022 2022 2022 2020 – 2021 2020
<ul> <li>SCHOOL/DEPARTMENT SERVICE (AT SU)</li> <li>&gt; Prepare and Grade Qualifier exam (Programming/Data Structure)</li> <li>&gt; Academic Integrity panelist</li> <li>&gt; Remembrance Scholars Selection Committee</li> </ul>	2022 - 2023 2021 - 2022 2022

### REFERENCES

#### Pascal Van Hentenryck

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