Carlo Taticchi is a postdoc at the Department of Mathematics and Computer Science of the University of Perugia. He received his PhD in Computer Science from the Gran Sasso Science Institute in 2021. His research activities are mainly focused on Artificial Intelligence and, in particular, on Argumentation Theory, a discipline that studies and formalises the human way of reasoning. He is a member of the CINI Cyber Security Research Lab UniPG, and the Knowledge Representation and Automated Reasoning Lab.

## Education

2017 – 2021 **Ph.D. in Computer Science**, *Gran Sasso Science Institute*, L'Aquila, Italy, Final mark: excellent

Thesis title: *"Handling Dynamic Aspects of Argumentation"*. Advisors: Prof. Stefano Bistarelli (University of Perugia), Prof. Luca Aceto (Reykjavik University, Iceland). Mid term reviewers: Prof. Rocco De Nicola (Institutions Markets Technologies, Lucca), Prof. Henry Prakken (Utrecht University and University of Groningen, the Netherlands). Final Reviewers: Prof. Anthony Hunter (University College London), Prof. Guillermo R. Simari (South National University, Bahía Blanca, Argentina).

2015 – 2017 M.Sc. in Computer Science, University of Perugia, Italy, Final mark: 110/110 (magna cum laude)

Thesis title: *"Looking for Invariant Operators in Argumentation"*. Advisor: Prof. Stefano Bistarelli (University of Perugia).

2012 – 2015 **B.Sc. in Computer Science**, *University of Perugia*, Italy, Final mark: 110/110 (magna cum laude)

Thesis title: "Design and development of a web interface for ConArg". Advisor: Prof. Stefano Bistarelli (University of Perugia).

## Employment

- 2022 Postdoctoral Researcher, University of Perugia, Italy
- present Postdoc position at the Department of Mathematics and Computer Science for the project *Supporto tecnologico e Strumenti, modelli ed algoritmi informatici per rappresentazione ed ottimizzazione processi informativi.*
- 2021 2022 **Postdoctoral Researcher**, *University of Perugia*, Italy Postdoc position at the Department of Mathematics and Computer Science for the project *Traceability and related technologies (blockchain, argumentation, security).*
- 2017 2021 **Ph.D. Student in Computer Science**, *Gran Sasso Science Institute*, Italy Scholarship-funded Ph.D. course in Computer Science.

	Teaching and Supervision
2023	<b>Lecturer</b> , <i>University "G. d'Annunzio" of Chieti-Pescara</i> , Italy Course of <i>Knowledge Representation and Argumentation</i> - SSD: INF/01, 16 hours - for students enrolled in PhD courses at the University "G. d'Annunzio" of Chieti-Pescara.
2023	<b>Co-supervisor</b> , University of Perugia, Italy Marco Coccetta, Analisi di software per la scansione di vulnerabilità - SSD: INF/01 - Bachelor degree in Computer Science.
2022 – 2023	<b>Lecturer</b> , <i>University of Perugia</i> , Italy Course of <i>Strumenti per il Web e Data Management</i> - SSD: INF/01, 42 hours - Master degree in Comunicazione Pubblica, digitale e d'impresa.
2021 – 2022	<b>Lecturer</b> , <i>University of Perugia</i> , Italy Course of <i>Strumenti per il Web e Data Management</i> - SSD: INF/01, 42 hours - Master degree in Comunicazione Pubblica, digitale e d'impresa.
2021	<b>Co-supervisor</b> , University of Perugia, Italy Alessio Mancinelli, An Argumentative Explanation of Machine Learning Outcomes - SSD: INF/01 - Master degree in Computer Science.
2020 – 2021	<b>Lecturer</b> , <i>University of Perugia</i> , Italy Course of <i>Strumenti per il Web e Data Management</i> - SSD: INF/01, 42 hours - Master degree in Comunicazione Pubblica, digitale e d'impresa.
2019 – 2020	<b>Tutor</b> , <i>University of Perugia</i> , Italy Course of <i>Strumenti per il Web e Data Management</i> - SSD: INF/01, 60 hours - Master degree in Comunicazione Pubblica, digitale e d'impresa.
2018 – 2019	<b>Tutor</b> , <i>University of Perugia</i> , Italy Course of <i>Strumenti per il Web e Data Management</i> - SSD: INF/01, 60 hours - Master degree in Comunicazione Pubblica, digitale e d'impresa.
2017 – 2018	<b>Tutor</b> , <i>University of Perugia</i> , Italy Course of <i>Strumenti per il Web e Data Management</i> - SSD: INF/01, 60 hours - Master degree in Comunicazione Pubblica, digitale e d'impresa.
2016 – 2017	<b>Tutor</b> , <i>University of Perugia</i> , Italy Course of <i>Programmazione I</i> - SSD: INF/01, 60 hours - Bachelor's degree in Computer Science.
2015 – 2016	<b>Tutor</b> , <i>University of Perugia</i> , Italy Course of <i>Strumenti per il Web e Data Management</i> - SSD: INF/01, 60 hours - Master degree in Comunicazione Pubblica, digitale e d'impresa.
2014 – 2015	<b>Tutor</b> , <i>University of Perugia</i> , Italy Course of <i>Strumenti per il Web e Data Management</i> - SSD: INF/01, 60 hours - Master degree in Comunicazione Pubblica, digitale e d'impresa.
	<b>Cultore della Materia, course of "Informatica"</b> , Department of Mathematics and Computer Science, University of Perugia, Italy SSD: INF/01
	<b>Cultore della Materia, course of "Programmazione Dichiarativa"</b> , Department of Mathematics and Computer Science, University of Perugia, Italy SSD: INF/01
	Cultore della Materia, course of "Sistemi con Vincoli e Rappresentazione della Conoscenza", Department of Mathematics and Computer Science, University of Perugia, Italy SSD: INF/01

#### 2018 - Cultore della Materia, course of "Strumenti per il Web e Data Management",

- present Department of Political Science, University of Perugia, Italy SSD: INF/01
- 2013 Member of Applab, University of Perugia, Italy
- present An internal group of the Department of Mathematics and Computer Science whose purpose is to carry out laboratory activities aimed at theses and internships. applab.dmi.unipg.it

## Research Activity

### Research Projects

- 2023 2024 Modellazione e Verifica Formale di Sistemi di Dialogo SSD: INF/01 - Funded by INdAM-GNCS, CUP\_E53C22001930001
- 2022 2023 Argumentation for Agent Interaction and Explainable AI SSD: INF/01 - Funded by INdAM-GNCS, CUP\_E55F22000270001

### Participation in Research Groups

- 2022 WP2 UniPG Progetti di Ricerca di Ateneo, Anno 2021
- present SSD: INF/01 Design and implementation of an OSINT/SIEM SYSTEM for Cybercrime.
- 2020 AlxIA Argumentation Group: National Research Group on Argumentation
- present SSD: INF/01 A working group of the Italian Association for Artificial Intelligence (AIxIA). sites.google.com/a/aixia.it/argomentazione
- 2018 Cyber Security Research Lab: Research Group on Cybersecurity of the University present of Perugia

SSD: INF/01 - The Lab is a member of the CINI National Cybersecurity Lab. cybersecuritylab.unipg.it

- 2018 Knowledge Representation and Automated Reasoning Lab (KRARLab): Research
- present Group of the Department of Mathematics Computer Science of the University of Perugia

SSD: INF/01 - The Lab is a member of the the CINI National Artificial intelligence and Intelligent Systems Lab, and of the Confederation of Laboratories for Artificial Intelligence Research in Europe (CLAIRE).

krarlab.dmi.unipg.it

#### Participation in Research Projects

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2022 – Per una giustizia giusta: Innovazione ed efficienza negli uffici giudiziari - Giustizia present AGILE
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SSD: INF/01 - Funded by Ministero della Giustizia.

2022 - Fighting Cybercrime with OSINT (FICO)

present SSD: INF/01 - Funded by UniPG (Fondo Ricerca di Ateneo 2021).

2021 – 2022 **DOPUP: Dop Olive oil for a new Presence of Umbria on the Planet** SSD: INF/01 - Funded by Regione Umbria. 2018 – 2020 Agrichain: Utilizzo di tecnologie Block-chain per il controllo della filiera di prodotti agro-alimentari e la prevenzione di frodi commerciali SSD: INF/01 - Funded by Fondazione Cassa di Risparmio di Perugia. agrichain.dmi.unipg.it

### Collaborations

- 2022 Progetto LCAPT Low Cost Advanced Products Tracking based on NFC Technology.
- 2022 Progetto CarnePRI La Pezzata Rossa in Friuli Venezia Giulia: innovazione di processo e di prodotto per sviluppare la filiera della carne di qualità.

### Visiting

2019 TU Wien, Vienna, Austria. Host: Prof. Stefan Woltran. September - December 2019.

# Publications

### Editorships

 Henry Prakken, Stefano Bistarelli, Francesco Santini, and Carlo Taticchi, eds. Computational Models of Argument - Proceedings of COMMA 2020, Perugia, Italy, September 4-11, 2020. Vol. 326. Frontiers in Artificial Intelligence and Applications. IOS Press, 2020.

### Journal Articles

- Stefano Bistarelli, Maria Chiara Meo, and Carlo Taticchi. "Timed concurrent language for argumentation with maximum parallelism". In: J. Log. Comput. 33.4 (2023), pp. 712–737.
- [2] Stefano Bistarelli and Carlo Taticchi. "A Labelling Semantics and Strong Admissibility for Weighted Argumentation Frameworks". In: *J. Log. Comput.* 32.2 (2022), pp. 281–306.
- [3] Stefano Bistarelli, Lars Kotthoff, Francesco Santini, and Carlo Taticchi. "Summary Report for the Third International Competition On Computational Models of Argumentation". In: AI Mag. 42.3 (2021), pp. 70–73.
- [4] Stefano Bistarelli and Carlo Taticchi. "Power index-based semantics for ranking arguments in abstract argumentation frameworks". In: *Intelligenza Artificiale* 13.2 (2019), pp. 137–154.

#### **Conference** Papers

- Stefano Bistarelli, Victor David, Francesco Santini, and Carlo Taticchi. "Temporal Probabilistic Argumentation Frameworks". In: CILC. Vol. 3428. CEUR Workshop Proceedings. CEUR-WS.org, 2023.
- [2] Stefano Bistarelli, Victor David, Francesco Santini, and Carlo Taticchi. "Computing Grounded Semantics of Uncontroversial Acyclic Constellation Probabilistic Argumentation in Linear Time". In: Al<sup>3</sup>@AI\*IA. Vol. 3354. CEUR Workshop Proceedings. CEUR-WS.org, 2022.
- [3] Stefano Bistarelli and Carlo Taticchi. "Deriving Dependency Graphs from Abstract Argumentation Frameworks: a Preliminary Report". In: Al<sup>3</sup>@Al\*IA. Vol. 3354. CEUR Workshop Proceedings. CEUR-WS.org, 2022.

- [4] Stefano Bistarelli and Carlo Taticchi. "A Four-State Labelling Semantics for Weighted Argumentation Frameworks". In: CILC. Vol. 3204. CEUR Workshop Proceedings. CEUR-WS.org, 2022, pp. 279–293.
- [5] Stefano Bistarelli, Alessio Mancinelli, Francesco Santini, and Carlo Taticchi. "An Argumentative Explanation of Machine Learning Outcomes". In: COMMA. Vol. 353. Frontiers in Artificial Intelligence and Applications. IOS Press, 2022, pp. 347–348.
- [6] Stefano Bistarelli, Alessio Mancinelli, Francesco Santini, and Carlo Taticchi. "Arg-XAI: a Tool for Explaining Machine Learning Results". In: ICTAI. IEEE, 2022, pp. 205–212.
- [7] Stefano Bistarelli, Francesco Faloci, Paolo Mori, and Carlo Taticchi. "Olive Oil as Case Study for the \*-Chain Platform". In: *DLT@ITASEC*. Vol. 3166. CEUR Workshop Proceedings. CEUR-WS.org, 2022, pp. 94–102.
- [8] Stefano Bistarelli, Maria Chiara Meo, and Carlo Taticchi. "Timed Concurrent Language for Argumentation: An Interleaving Approach". In: PADL. Vol. 13165. Lecture Notes in Computer Science. Springer, 2022, pp. 101–116.
- [9] Stefano Bistarelli, Maria Chiara Meo, and Carlo Taticchi. "Concurrent Argumentation with Time: an Overview". In: *Al<sup>3</sup> @AI\*IA*. Vol. 3086. CEUR Workshop Proceedings. CEUR-WS.org, 2021.
- Stefano Bistarelli, Carlo Taticchi, and Francesco Santini. "A Chatbot Extended with Argumentation".
  In: Al<sup>3</sup>@AI\*IA. Vol. 3086. CEUR Workshop Proceedings. CEUR-WS.org, 2021.
- [11] Carlo Taticchi. "A Concurrent Language for Negotiation and Debate with Argumentation". In: AAMAS. ACM, 2021, pp. 1840–1841.
- [12] Stefano Bistarelli, Maria Chiara Meo, and Carlo Taticchi. "Timed Concurrent Language for Argumentation". In: CILC. Vol. 3002. CEUR Workshop Proceedings. CEUR-WS.org, 2021, pp. 1– 15.
- [13] Carlo Taticchi and Stefano Bistarelli. "Extending Labelling Semantics to Weighted Argumentation Frameworks". In: FLAIRS. 2021.
- [14] Stefano Bistarelli and Carlo Taticchi. "A Unifying Four-State Labelling Semantics for Bridging Abstract Argumentation Frameworks and Belief Revision". In: *ICTCS*. Vol. 3072. CEUR Workshop Proceedings. CEUR-WS.org, 2021, pp. 93–106.
- [15] Stefano Bistarelli and Carlo Taticchi. "Introducing a Tool for Concurrent Argumentation". In: JELIA. Vol. 12678. Lecture Notes in Computer Science. Springer, 2021, pp. 18–24.
- [16] Stefano Bistarelli and Carlo Taticchi. "A Concurrent Language for Argumentation". In: Al<sup>3</sup>@AI\*IA. Vol. 2777. CEUR Workshop Proceedings. CEUR-WS.org, 2020, pp. 75–89.
- [17] Stefano Bistarelli, Lars Kotthoff, Francesco Santini, and Carlo Taticchi. "A First Overview of ICCMA'19". In: Aβ<sup>@</sup> @AI\*IA. Vol. 2777. CEUR Workshop Proceedings. CEUR-WS.org, 2020, pp. 90– 102.
- [18] Stefano Bistarelli and Carlo Taticchi. "Towards an Implementation of a Concurrent Language for Argumentation". In: AI\*IA. Vol. 12414. Lecture Notes in Computer Science. Springer, 2020, pp. 154–171.
- [19] Stefano Bistarelli and Carlo Taticchi. "A Concurrent Language for Argumentation: Preliminary Notes". In: Gabbrielli's Festschrift. Vol. 86. OASIcs. Schloss Dagstuhl - Leibniz-Zentrum für Informatik, 2020, 9:1–9:22.
- [20] Stefano Bistarelli and Carlo Taticchi. "A Labelling Semantics for Weighted Argumentation Frameworks". In: *CILC*. Vol. 2710. CEUR Workshop Proceedings. CEUR-WS.org, 2020, pp. 263–277.
- [21] Stefano Bistarelli, Wolfgang Dvorák, Carlo Taticchi, and Stefan Woltran. "Ranking-Based Semantics from the Perspective of Claims". In: COMMA. Vol. 326. Frontiers in Artificial Intelligence and Applications. IOS Press, 2020, pp. 111–122.

- [22] Stefano Bistarelli and Carlo Taticchi. "Preliminary Study on Reinstatement Labelling for Weighted Argumentation Frameworks". In: Aβ@AI\*IA. Vol. 2528. CEUR Workshop Proceedings. CEUR-WS.org, 2019, pp. 45–49.
- [23] Carlo Taticchi. "Power Index-Based Semantics for Ranking Arguments in Abstract Argumentation Frameworks: an Overview". In: DDC@AI\*IA. Vol. 2495. CEUR Workshop Proceedings. CEUR-WS.org, 2019, pp. 113–118.
- [24] Stefano Bistarelli, Francesco Faloci, Francesco Santini, and Carlo Taticchi. "A Tool For Ranking Arguments Through Voting-Games Power Indexes". In: CILC. Vol. 2396. CEUR Workshop Proceedings. CEUR-WS.org, 2019, pp. 193–201.
- [25] Stefano Bistarelli, Francesco Faloci, and Carlo Taticchi. "Implementing Ranking-Based Semantics in ConArg". In: *ICTAI*. IEEE, 2019, pp. 1180–1187.
- [26] Stefano Bistarelli, Theofrastos Mantadelis, Francesco Santini, and Carlo Taticchi. "Using MetaProbLog and ConArg to compute Probabilistic Argumentation Frameworks". In: Al<sup>3</sup>@Al\*IA. Vol. 2296. CEUR Workshop Proceedings. CEUR-WS.org, 2018, pp. 6–10.
- [27] Stefano Bistarelli, Paolo Giuliodori, Francesco Santini, and Carlo Taticchi. "A Cooperative-game Approach to Share Acceptability and Rank Arguments". In: Al<sup>3</sup>@AI\*IA. Vol. 2296. CEUR Workshop Proceedings. CEUR-WS.org, 2018, pp. 86–90.
- [28] Stefano Bistarelli, Francesco Santini, and Carlo Taticchi. "Local Expansion Invariant Operators in Argumentation Semantics". In: *CLAR*. Springer, 2018, pp. 45–62.
- [29] Stefano Bistarelli, Lars Kotthoff, Francesco Santini, and Carlo Taticchi. "Containerisation and Dynamic Frameworks in ICCMA'19". In: SAFA@COMMA. Vol. 2171. CEUR Workshop Proceedings. CEUR-WS.org, 2018, pp. 4–9.
- [30] Stefano Bistarelli, Francesco Faloci, Francesco Santini, and Carlo Taticchi. "Studying Dynamics in Argumentation with Rob". In: COMMA. Vol. 305. Frontiers in Artificial Intelligence and Applications. IOS Press, 2018, pp. 451–452.
- [31] Stefano Bistarelli, Alessandra Tappini, and Carlo Taticchi. "A Matrix Approach for Weighted Argumentation Frameworks". In: *FLAIRS*. AAAI Press, 2018, pp. 507–512.
- [32] Stefano Bistarelli, Francesco Santini, and Carlo Taticchi. "On Looking for Invariant Operators in Argumentation Semantics". In: *FLAIRS*. AAAI Press, 2018, pp. 537–540.
- [33] Stefano Bistarelli, Theofrastos Mantadelis, Francesco Santini, and Carlo Taticchi. "Probabilistic Argumentation Frameworks with MetaProbLog and ConArg". In: *ICTAI*. IEEE, 2018, pp. 675–679.
- [34] Carlo Taticchi. "A Study of Robustness in Abstract Argumentation Frameworks". In: DC@AI\*IA. Vol. 1769. CEUR Workshop Proceedings. CEUR-WS.org, 2016, pp. 11–16.
- [35] Stefano Bistarelli, Fabio Rossi, Francesco Santini, and Carlo Taticchi. "Towards visualising security with arguments". In: CILC. Vol. 1459. CEUR Workshop Proceedings. CEUR-WS.org, 2015, pp. 197– 201.

# **Conference Presentations**

- 2023 Arg-XAI: a Tool for Explaining Machine Learning Results. Ital-IA 2023 terzo Convegno Nazionale CINI sull'Intelligenza Artificiale. Pisa, Italy, May 29–31 2023.
- 2022 O Deriving Dependency Graphs from Abstract Argumentation Frameworks: a Preliminary Report. Al<sup>3</sup>@AlxIA 2022, 6<sup>th</sup> Workshop on Advances In Argumentation In Artificial Intelligence, Udine, Italy, 28 November 2022.
  - Arg-XAI: a Tool for Explaining Machine Learning Results. ICTAI 2022 The 34<sup>th</sup> IEEE International Conference on Tools with Artificial Intelligence. Online, October 31 – November 2 2022.
  - An Argumentative Explanation of Machine Learning Outcomes. COMMA 2022 9<sup>th</sup> International Conference on Computational Models of Argument. Cardiff, Wales, United Kingdom, September 14–16 2022.
  - A Four-State Labelling Semantics for Weighted Argumentation Frameworks. CILC 2022
     37<sup>th</sup> Italian Conference on Computational Logic. Bologna, Italy, June 29 July 1 2022.
  - Explanation of Machine Learning Outcomes through Argumentation. Ital-IA 2022 secondo Convegno Nazionale CINI sull'Intelligenza Artificiale. Torino, Italy, February 9–11 2022.
  - Timed Concurrent Language for Argumentation: an Interleaving Approach. PADL 2022, 24<sup>th</sup> International Symposium on Practical Aspects of Declarative Languages, Philadelphia, Pennsylvania, United States, 17–18 January 2022.
- 2021 A Chatbot Extended with Argumentation. Al<sup>3</sup>@AlxIA 2021, 5<sup>th</sup> Workshop on Advances In Argumentation In Artificial Intelligence, Online, 29 November 2021.
  - Concurrent Argumentation with Time: an Overview. Al<sup>3</sup>@AlxIA 2021, 5<sup>th</sup> Workshop on Advances In Argumentation In Artificial Intelligence, Online, 29 November 2021.
  - A Unifying Four-State Labelling Semantics for Bridging Abstract Argumentation Frameworks and Belief Revision. ICTCS 2021, 22<sup>nd</sup> Italian Conference on Theoretical Computer Science, Bologna (Italy), 13 – 15 September 2021.
  - Timed Concurrent Language for Argumentation. CILC 2021, 36<sup>th</sup> Edition of the Italian Conference on Computational Logic. Parma (Italy), 7 – 9 September 2021.
  - Introducing a Tool for Concurrent Argumentation. JELIA 2021, 17<sup>th</sup> Edition of the European Conference on Logics in Artificial Intelligence. Online, hosted by University of Klagenfurt (Austria), 17 – 20 May 2021.
  - Extending Labelling Semantics to Weighted Argumentation Frameworks. FLAIRS-34, the 34<sup>st</sup> International Florida Artificial Intelligence Research Society Conference. North Miami Beach, Florida (USA), 17 – 19 May 2021.
  - A Concurrent Language for Negotiation and Debate with Argumentation. AAMAS 2021, the 20<sup>th</sup> International Conference on Autonomous Agents and Multiagent Systems. Online, 3 7 May 2021.
- 2020 O A Concurrent Language for Argumentation. AlxIA 2020, The 19<sup>th</sup> International Conference of the Italian Association for Artificial Intelligence, Online, 25 27 November 2020.
  - A Labelling Semantics for Weighted Argumentation Frameworks. CILC 2020, 35<sup>th</sup> Edition of the Italian Conference on Computational Logic. Rende (Italy), 13 15 October 2020.

- Ranking-Based Semantics from the Perspective of Claims. COMMA 2020, 8<sup>th</sup> International Conference on Computational Models of Argument. Perugia (Italy), 8 – 11 September 2020.
- 2019 O Preliminary Study on Reinstatement Labelling for Weighted Argumentation Frameworks. AlxIA 2019, 18<sup>th</sup> International Conference of the Italian Association for Artificial Intelligence, Rende (Italy). 19 – 22 November 2019.
  - Power Index-Based Semantics for Ranking Arguments in Abstract Argumentation Frameworks: an Overview. AlxIA 2019 Doctoral Consortium, 18<sup>th</sup> International Conference of the Italian Association for Artificial Intelligence, Rende (Italy). 22 November 2019.
  - Implementing Ranking-Based Semantics in ConArg. ICTAI 2019, 31<sup>st</sup> International Conference on Tools with Artificial Intelligence, Portland, Oregon (USA). November 4 – 6, 2019.
  - A Tool for Ranking Arguments Through Voting-Games Power Indexes. CILC 2019 34<sup>th</sup> Italian Conference on Computational Logic, Trieste (Italy). 19-21 June 2019.
  - A cooperative-game approach to share acceptability and rank arguments. 2<sup>nd</sup> Workshop on New Trends in Formal Argumentation, TU Wien (Austria). 30 April 2019.
- 2018 O A cooperative-game approach to share acceptability and rank arguments. Al<sup>3</sup>@AlxIA 2018, 2<sup>nd</sup> Workshop on Advances In Argumentation In Artificial Intelligence, Trento (Italy). November 2018.
  - Ph.D. Thesis Proposal: a Concurrent Argumentation Language for Negotiation and Debating. SSA 2018, 3<sup>rd</sup> Summer School on Argumentation: Computational and Linguistic Perspectives, Warsaw (Poland), September 6 – 10 2018.
  - Looking for Invariant Operators in Argumentation. FLAIRS-31, the 31<sup>st</sup> International Florida Artificial Intelligence Research Society Conference, Melbourne, Florida (USA). May 2018.
  - A Matrix Based Approach for Weighted Argumentation Frameworks. FLAIRS-31, the 31<sup>st</sup> International Florida Artificial Intelligence Research Society Conference, Melbourne, Florida (USA). May 2018.
- 2016 A Study of Robustness in Abstract Argumentation Frameworks. AlxIA 2016 Doctoral Consortium, 15<sup>th</sup> International Conference of the Italian Association for Artificial Intelligence
  Genova (Italy), 28 November 1 December 2016.

# **Conference** Participations

- 2023 O Ital-IA 2023 terzo Convegno Nazionale CINI sull'Intelligenza Artificiale. Pisa, Italy, May 29–31 2023.
- 2022 AlxIA 2022 21<sup>st</sup> International Conference of the Italian Association for Artificial Intelligence, Udine, Italy, 28 November 2 December 2022.
  - ICTAI 2022 The 34<sup>th</sup> IEEE International Conference on Tools with Artificial Intelligence.
    Online, October 31 November 2 2022.

- COMMA 2022 9<sup>th</sup> International Conference on Computational Models of Argument. Cardiff, Wales, United Kingdom, September 14–16 2022.
- CILC 2022 37<sup>th</sup> Italian Conference on Computational Logic. Bologna, Italy, June 29 July 1 2022.
- Ital-IA 2022 secondo Convegno Nazionale CINI sull'Intelligenza Artificiale. Torino, Italy, February 9–11 2022.
- PADL 2022 The 24<sup>th</sup> International Symposium on Practical Aspects of Declarative Languages. Philadelphia, Pennsylvania, United States, 17–18 January 2022.
- 2021 AlxIA 2021 20<sup>th</sup> International Conference of the Italian Association for Artificial Intelligence. Online. December 1–3, 2021.
  - COST Action WG3 meeting: Argument technologies and public debate: the design perspective. Rome (Italy), 29 September – 1 October 2021.
  - ICTCS 2021, 22<sup>nd</sup> Italian Conference on Theoretical Computer Science. Bologna (Italy), 13–15 September 2021.
  - CILC 2021, 36<sup>th</sup> Edition of the Italian Conference on Computational Logic. Parma (Italy), 7 9 September 2021.
  - JELIA 2021, 17<sup>th</sup> Edition of the European Conference on Logics in Artificial Intelligence.
    Online, hosted by University of Klagenfurt (Austria), 17 20 May 2021.
  - FLAIRS-34, the 34<sup>st</sup> International Florida Artificial Intelligence Research Society Conference, North Miami Beach, Florida (USA), 17 19 May 2021.
  - AAMAS 2021, the 20<sup>th</sup> International Conference on Autonomous Agents and Multiagent Systems. Online, 3 – 7 May 2021.
  - SAC 2021, the 36<sup>th</sup> ACM/SIGAPP Symposium On Applied Computing, Virtual Conference, 22 26 March 2021.
- 2020 AIxIA 2020, the 19<sup>th</sup> International Conference of the Italian Association for Artificial Intelligence, Anywhere, 25 27 November 2020.
  - CILC 2020, 35<sup>th</sup> Edition of the Italian Conference on Computational Logic. Rende (CS), Italy, 13 – 15 October 2020.
  - COMMA 2020, 8<sup>th</sup> International Conference on Computational Models of Argument. Perugia (PG), Italy, 8 – 11 September 2020.
- 2019 AlxIA 2019, 18<sup>th</sup> International Conference of the Italian Association for Artificial Intelligence, Rende (CS), Italy. 19 – 22 November 2019.
  - ICTAI 2019, 31<sup>st</sup> International Conference on Tools with Artificial Intelligence, Portland, Oregon. November 4 – 6, 2019.
  - o AIAlliance 2019 first European AI Alliance Assembly, Brussels, Belgium. 26 June 2019.
  - CILC 2019 34<sup>th</sup> Italian Conference on Computational Logic, Trieste, Italy. 19-21 June 2019.
  - NTFA'19 2<sup>nd</sup> Workshop on New Trends in Formal Argumentation, Vienna, Austria. April 2019.
  - Ital-IA 2019 primo Convegno Nazionale CINI sull'Intelligenza Artificiale, Roma, Italy. March 2019.
  - DLT 2019 2<sup>nd</sup> Distributed Ledger Technology Workshop, Pisa, Italy. February 2019.

- 2018 AlxIA 2018, Congress of the Italian Association for Artificial Intelligence, Trento, Italy. November 2018.
  - $\odot$  SSA 2018, 3<sup>rd</sup> Summer School on Argumentation: Computational and Linguistic Perspectives Warsaw, September 6 10 2018.
  - FLAIRS-31, the 31<sup>st</sup> International Florida Artificial Intelligence Research Society Conference, Melbourne, Florida, USA. May 2018.
- 2016 AlxIA 2016, 15<sup>th</sup> International Conference of the Italian Association for Artificial Intelligence - Genoa, 28 November – 1 December 2016.
- 2015 O CILC 2015, 30° Convegno Italiano di Logica Computazionale Genova, July 1 3 2015.
- 2014 AlxIA 2014, Artificial Intelligence for Society and Economy Pisa, 10 12 December 2014.
  - Todi Appy Days Todi, September 28 2014.
- 2013 OCSS3 & HTML5, Developing cross device applications Pisa, 31 May 2013.

# Grants and Scholarships

- CINI (Consorzio Interuniversitario Nazionale per l'Informatica) four months scholarship and research grant for activities related to the Node of the National Cybersecurity Laboratory of the UniPG research unit (knowledge representation and cybersecurity) for the Cyberchallenge.IT2021 project. Rif. CINI: CYCH21\_02/2021\_LNCS\_UNIPG
- AAMAS 2021 scholarship for the participation of students in the 20<sup>th</sup> International Conference on Autonomous Agents and Multiagent Systems. Presented paper: "A Concurrent Language for Negotiation and Debate with Argumentation".
- Italian Association for Artificial Intelligence (AIxIA) grant for the participation of students in the 18<sup>th</sup> Conference of the Italian Association for Artificial Intelligence (AIxIA 2019). Presented papers: "Preliminary Study on Reinstatement Labelling for Weighted Argumentation Frameworks" and "Power Index-Based Semantics for Ranking Arguments in Abstract Argumentation Frameworks: an Overview".
- Italian Association for Artificial Intelligence (AIxIA) grant for the participation of students in the 17<sup>th</sup> Conference of the Italian Association for Artificial Intelligence (AIxIA 2018). Presented papers: "A Cooperative-game Approach to Share Acceptability and Rank Arguments" and "Using MetaProbLog and ConArg to compute Probabilistic Argumentation Frameworks".
- Italian Association for Artificial Intelligence (AIxIA) grant for the participation of students in the 15<sup>th</sup> Conference of the Italian Association for Artificial Intelligence (AIxIA 2016).
   Presented paper: "A Study of Robustness in Abstract Argumentation Frameworks".

# Organisation Committees

- 2023 O Track Chair, KRR@SAC2024 Track on Knowledge Representation and Reasoning (part of the 39<sup>th</sup> ACM/SIGAPP Symposium On Applied Computing).
- 2022 O Track Chair, KRR@SAC2023 Track on Knowledge Representation and Reasoning (part of the 38<sup>th</sup> ACM/SIGAPP Symposium On Applied Computing).
- 2021 O Track Chair, KRR@SAC2022 Track on Knowledge Representation and Reasoning (part of the 37<sup>th</sup> ACM/SIGAPP Symposium On Applied Computing).
- 2020 O Track Chair, KRR@SAC2021 Track on Knowledge Representation and Reasoning (part of the 36<sup>th</sup> ACM/SIGAPP Symposium On Applied Computing).
  - Publicity Chair, COMMA 2020 8<sup>th</sup> International Conference on Computational Models of Argument.
  - Publicity Chair, SSA 2020 4<sup>th</sup> Summer School on Argumentation.
- 2019 Organiser, ICCMA 2019 The Third International Competition on Computational Models of Argumentation.
- 2018 O **Organiser**, DLT 2018 1<sup>st</sup> Distributed Ledger Technology Workshop.

## Recent Reviewer Activity

#### Journals

- Int. J. Parallel Emergent Distrib. Syst.
- Int. J. Approx. Reason.
- Intell. Syst. Appl.
- o Intell. Artif.

### Conferences

O ICTAI 2023	O CILC 2022
O CLAR 2023	o KRR@SAC 2022
o xAI 2023	o FLAIRS 2022
o KR 2023	O ICAART 2022
ITASEC 2023	o AAAI 2022
o FLAIRS 2023	o AlxIA 2021
SAC 2023	O ICTAI 2021
o AlxIA 2022	o Al4l 2021
O PRIMA 2022	O CLAR 2021
O ICTAI 2022	O CILC 2021
SAFA 2022	O ICTAI 2021
o Al4l 2022	O ICTCS 2021
O COMMA 2022	ITASEC 2021
SI-CLAR 2021	O AAAI 2021

• AlxIA 2020 O CILC 2020 o Al4I 2020 ICTAI 2020 SAFA@COMMA 2020
 AI3@AIxIA 2018 O COMMA 2020 ○ GraMSec 2020 ○ IJCAI 2020 O AAMAS 2020 AI3@AIxIA 2019 O PRIMA 2019 o Al4I 2019

- ICTAI 2019
- AlxIA 2019

- post-CLAR 2018
- Euro-Par 2019 IJCAI 2019
- o AAMAS 2019
- O CILC 2018
- ICTAI 2018
- O GECON 2018
- O COMMA 2018
- O IJCAI 2018
- M-PREF 2018

# **Research Tools**

- Arg-Xai: Argumentative Explanations for Machine Learning Outcomes, a tool for explaining the results of ML-based classification techniques; ref. publications [5]. Online at: arg-xai.dmi.unipg.it.
- **Concurrent Language for Argumentation** (CLA), a web tool for writing and running programs using a concurrent language based on argumentation; ref. publications [8, 9, 11, 15, 16, 18]. Online at: conarg.dmi.unipg.it/cla.
- ConArg Rob, a tool for visualizing the Argumentation Frameworks obtained by combinations of attacks between a fixed number of arguments, along with the relative extensions for all the supported semantics; ref. publications [30, 34]. Online at: conarg.dmi.unipg.it/rob.html.
- ConArg web interface, an interface for a Constraint Programming tool, able to solve various problems related to the Abstract Argumentation Frameworks; ref. publications [4, 24, 25, 33]. Online at: conarg.dmi.unipg.it.