

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:

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:

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

## Employment

2023 – 2024 **Postdoctoral Researcher**, *University of Perugia*, Italy

Postdoc position at the Department of Mathematics and Computer Science for the Miur PRIN project *Empowering Public Interest Communication with Argumentation (EPICA)*.

2022 – 2023 **Postdoctoral Researcher**, *University of Perugia*, Italy

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 – 2024 **Lecturer**, *University of Perugia, Italy*  
Course of *Strumenti per il Web e Data Management* - SSD: INF/01, 42 hours - Master degree in Comunicazione Pubblica, digitale e d'impresa.
- 2023 **Lecturer**, *University "G. d'Annunzio" of Chieti-Pescara, Italy*  
Course of *Knowledge Representation and Argumentation* - SSD: INF/01, 16 hours - for students enrolled in PhD courses at the University "G. d'Annunzio" of Chieti-Pescara.
- 2023 **Co-supervisor**, *University of Perugia, Italy*  
Alessandro Lorenzini, *Progettazione e sviluppo di un chatbot argomentativo* - SSD: INF/01 - Bachelor degree in Computer Science.
- 2023 **Co-supervisor**, *University of Perugia, Italy*  
Marco Cocchetta, *Analisi di software per la scansione di vulnerabilità* - SSD: INF/01 - Bachelor degree in Computer Science.
- 2022 – 2023 **Lecturer**, *University of Perugia, Italy*  
Course of *Strumenti per il Web e Data Management* - SSD: INF/01, 42 hours - Master degree in Comunicazione Pubblica, digitale e d'impresa.
- 2021 – 2022 **Lecturer**, *University of Perugia, Italy*  
Course of *Strumenti per il Web e Data Management* - SSD: INF/01, 42 hours - Master degree in Comunicazione Pubblica, digitale e d'impresa.
- 2021 **Co-supervisor**, *University of Perugia, Italy*  
Alessio Mancinelli, *An Argumentative Explanation of Machine Learning Outcomes* - SSD: INF/01 - Master degree in Computer Science.
- 2020 – 2021 **Lecturer**, *University of Perugia, Italy*  
Course of *Strumenti per il Web e Data Management* - SSD: INF/01, 42 hours - Master degree in Comunicazione Pubblica, digitale e d'impresa.
- 2019 – 2020 **Tutor**, *University of Perugia, Italy*  
Course of *Strumenti per il Web e Data Management* - SSD: INF/01, 60 hours - Master degree in Comunicazione Pubblica, digitale e d'impresa.
- 2018 – 2019 **Tutor**, *University of Perugia, Italy*  
Course of *Strumenti per il Web e Data Management* - SSD: INF/01, 60 hours - Master degree in Comunicazione Pubblica, digitale e d'impresa.
- 2017 – 2018 **Tutor**, *University of Perugia, Italy*  
Course of *Strumenti per il Web e Data Management* - SSD: INF/01, 60 hours - Master degree in Comunicazione Pubblica, digitale e d'impresa.
- 2016 – 2017 **Tutor**, *University of Perugia, Italy*  
Course of *Programmazione I* - SSD: INF/01, 60 hours - Bachelor's degree in Computer Science.
- 2015 – 2016 **Tutor**, *University of Perugia, Italy*  
Course of *Strumenti per il Web e Data Management* - SSD: INF/01, 60 hours - Master degree in Comunicazione Pubblica, digitale e d'impresa.
- 2014 – 2015 **Tutor**, *University of Perugia, Italy*  
Course of *Strumenti per il Web e Data Management* - SSD: INF/01, 60 hours - Master degree in Comunicazione Pubblica, digitale e d'impresa.

## 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 (AlxIA).  
[sites.google.com/a/aixia.it/argomentazione](https://sites.google.com/a/aixia.it/argomentazione)
- 2018 – **Cyber Security Research Lab: Research Group on Cybersecurity of the University of Perugia**  
present SSD: INF/01 - The Lab is a member of the CINI National Cybersecurity Lab.  
[cybersecuritylab.unipg.it](https://cybersecuritylab.unipg.it)
- 2018 – **Knowledge Representation and Automated Reasoning Lab (KRARLab): Research Group of the Department of Mathematics Computer Science of the University of Perugia**  
present 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](https://krarlab.dmi.unipg.it)

### Participation in Research Projects

- 2022 – **Empowering Public Interest Communication with Argumentation (EPICA)**  
present SSD: INF/01 - finanziato dall'Unione Europea.  
[epica.dmi.unipg.it/](https://epica.dmi.unipg.it/)
- 2022 – **Tecnologie Blockchain avanzate per una supply chain alimentare di cibi sani e affidabili - BLOCKCHAIN4FOODCHAIN**  
present SSD: INF/01 - funded by Ricerca di Base 2020, University of Perugia.  
[blockchain4foodchain.dmi.unipg.it](https://blockchain4foodchain.dmi.unipg.it)
- 2022 – **Fighting Cybercrime with OSINT (FICO)**  
present SSD: INF/01 - Funded by UniPG (Fondo Ricerca di Ateneo 2021).
- 2022 – 2023 **Per una giustizia giusta: Innovazione ed efficienza negli uffici giudiziari - Giustizia AGILE**  
SSD: INF/01 - Funded by Ministero della Giustizia.
- 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](https://agrichain.dmi.unipg.it)

### Collaborations

- 2022 – 2024 Progetto AIDMIX - Artificial Intelligence for Decision making: Methods for Interpretability and eXplainability. Fondi di Ricerca di Ateneo, edizione 2021.
- 2022 – 2024 Progetto Teca digitale dell'Accademia di Belle Arti "Pietro Vannucci" di Perugia.
- 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.

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## Publications

### Editorships

- [1] 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

- [1] Stefano Bistarelli and Carlo Taticchi. "A concurrent language for modelling agents arguing on a shared argumentation space". In: *Argument Comput.* 15.1 (2024), pp. 21–48.
- [2] 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.
- [3] Stefano Bistarelli and Carlo Taticchi. "On the study of acceptability in weighted argumentation frameworks through four-state labelling semantics". In: *J. Log. Comput.* 33.8 (2023), pp. 1872–1897.
- [4] Stefano Bistarelli, Carlo Taticchi, and Maria Chiara Meo. "An Interleaving Semantics of the Timed Concurrent Language for Argumentation to Model Debates and Dialogue Games". In: *Theory Pract. Log. Program.* 23.6 (2023), pp. 1307–1333.
- [5] 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.
- [6] 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.
- [7] 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

- [1] Stefano Bistarelli, Maria Chiara Meo, and Carlo Taticchi. "On the Role of Local Arguments in the (Timed) Concurrent Language for Argumentation". In: *A<sup>β</sup>@AI\*IA*. Vol. 3546. CEUR Workshop Proceedings. CEUR-WS.org, 2023.
- [2] Stefano Bistarelli and Carlo Taticchi. "Deriving Dependency Graphs from Abstract Argumentation Frameworks". In: *AI\*IA*. Vol. 14318. Lecture Notes in Computer Science. Springer, 2023, pp. 17–29.
- [3] Stefano Bistarelli, Victor David, Francesco Santini, and Carlo Taticchi. "Temporal Probabilistic Argumentation Frameworks". In: *CILC*. Vol. 3428. CEUR Workshop Proceedings. CEUR-WS.org, 2023.
- [4] Stefano Bistarelli, Francesco Faloci, Paolo Mori, Carlo Taticchi, and Marino Miculan. "Modeling Carne PRI supply chain with the \*-Chain Platform". In: *DLT*. Vol. 3460. CEUR Workshop Proceedings. CEUR-WS.org, 2023.
- [5] Stefano Bistarelli, Victor David, Francesco Santini, and Carlo Taticchi. "Towards a Temporal Probabilistic Argumentation Framework". In: *FLAIRS*. AAAI Press, 2023.
- [6] Stefano Bistarelli, Victor David, Francesco Santini, and Carlo Taticchi. "Computing Grounded Semantics of Uncontroversial Acyclic Constellation Probabilistic Argumentation in Linear Time". In: *A<sup>β</sup>@AI\*IA*. Vol. 3354. CEUR Workshop Proceedings. CEUR-WS.org, 2022.
- [7] Stefano Bistarelli and Carlo Taticchi. "Deriving Dependency Graphs from Abstract Argumentation Frameworks: a Preliminary Report". In: *A<sup>β</sup>@AI\*IA*. Vol. 3354. CEUR Workshop Proceedings. CEUR-WS.org, 2022.
- [8] 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.
- [9] 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.
- [10] 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.
- [11] 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.
- [12] 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.
- [13] Stefano Bistarelli, Maria Chiara Meo, and Carlo Taticchi. "Concurrent Argumentation with Time: an Overview". In: *A<sup>β</sup>@AI\*IA*. Vol. 3086. CEUR Workshop Proceedings. CEUR-WS.org, 2021.
- [14] Stefano Bistarelli, Carlo Taticchi, and Francesco Santini. "A Chatbot Extended with Argumentation". In: *A<sup>β</sup>@AI\*IA*. Vol. 3086. CEUR Workshop Proceedings. CEUR-WS.org, 2021.
- [15] Carlo Taticchi. "A Concurrent Language for Negotiation and Debate with Argumentation". In: *AAMAS*. ACM, 2021, pp. 1840–1841.
- [16] 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.
- [17] Carlo Taticchi and Stefano Bistarelli. "Extending Labelling Semantics to Weighted Argumentation Frameworks". In: *FLAIRS*. 2021.

- [18] 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.
- [19] 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.
- [20] Stefano Bistarelli and Carlo Taticchi. "A Concurrent Language for Argumentation". In: *A<sup>β</sup>@AI\*IA*. Vol. 2777. CEUR Workshop Proceedings. CEUR-WS.org, 2020, pp. 75–89.
- [21] Stefano Bistarelli, Lars Kotthoff, Francesco Santini, and Carlo Taticchi. "A First Overview of ICCMA'19". In: *A<sup>β</sup>@AI\*IA*. Vol. 2777. CEUR Workshop Proceedings. CEUR-WS.org, 2020, pp. 90–102.
- [22] 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.
- [23] Stefano Bistarelli and Carlo Taticchi. "A Concurrent Language for Argumentation: Preliminary Notes". In: *Gabbrielli's Festschrift*. Vol. 86. OASlcs. Schloss Dagstuhl - Leibniz-Zentrum für Informatik, 2020, 9:1–9:22.
- [24] 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.
- [25] 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.
- [26] Stefano Bistarelli and Carlo Taticchi. "Preliminary Study on Reinstatement Labelling for Weighted Argumentation Frameworks". In: *A<sup>β</sup>@AI\*IA*. Vol. 2528. CEUR Workshop Proceedings. CEUR-WS.org, 2019, pp. 45–49.
- [27] 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.
- [28] 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.
- [29] Stefano Bistarelli, Francesco Faloci, and Carlo Taticchi. "Implementing Ranking-Based Semantics in ConArg". In: *ICTAI*. IEEE, 2019, pp. 1180–1187.
- [30] Stefano Bistarelli, Theofrastos Mantadelis, Francesco Santini, and Carlo Taticchi. "Using MetaProbLog and ConArg to compute Probabilistic Argumentation Frameworks". In: *A<sup>β</sup>@AI\*IA*. Vol. 2296. CEUR Workshop Proceedings. CEUR-WS.org, 2018, pp. 6–10.
- [31] Stefano Bistarelli, Paolo Giuliadori, Francesco Santini, and Carlo Taticchi. "A Cooperative-game Approach to Share Acceptability and Rank Arguments". In: *A<sup>β</sup>@AI\*IA*. Vol. 2296. CEUR Workshop Proceedings. CEUR-WS.org, 2018, pp. 86–90.
- [32] Stefano Bistarelli, Francesco Santini, and Carlo Taticchi. "Local Expansion Invariant Operators in Argumentation Semantics". In: *CLAR*. Springer, 2018, pp. 45–62.
- [33] 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.

- [34] 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.
- [35] Stefano Bistarelli, Alessandra Tappini, and Carlo Taticchi. "A Matrix Approach for Weighted Argumentation Frameworks". In: *FLAIRS*. AAAI Press, 2018, pp. 507–512.
- [36] Stefano Bistarelli, Francesco Santini, and Carlo Taticchi. "On Looking for Invariant Operators in Argumentation Semantics". In: *FLAIRS*. AAAI Press, 2018, pp. 537–540.
- [37] Stefano Bistarelli, Theofrastos Mantadelis, Francesco Santini, and Carlo Taticchi. "Probabilistic Argumentation Frameworks with MetaProbLog and ConArg". In: *ICTAI*. IEEE, 2018, pp. 675–679.
- [38] 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.
- [39] 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
  - On the Role of Local Arguments in the (Timed) Concurrent Language for Argumentation. *AI<sup>3</sup>@AIxIA 2023*, 7<sup>th</sup> Workshop on Advances in Argumentation in Artificial Intelligence. Roma, November 9 2023.
  - Deriving Dependency Graphs from Abstract Argumentation Frameworks. *AIxIA 2023 - 22<sup>nd</sup> International Conference of the Italian Association for Artificial Intelligence*. Roma, November 6–9 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
  - Deriving Dependency Graphs from Abstract Argumentation Frameworks: a Preliminary Report. *AI<sup>3</sup>@AIxIA 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. *AI<sup>3</sup>@AIxIA 2021*, 5<sup>th</sup> Workshop on Advances In Argumentation In Artificial Intelligence, Online, 29 November 2021.

- Concurrent Argumentation with Time: an Overview. AI<sup>3</sup>@AIxIA 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
- A Concurrent Language for Argumentation. AIxIA 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
- Preliminary Study on Reinstatement Labelling for Weighted Argumentation Frameworks. AIxIA 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. AIxIA 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
- A cooperative-game approach to share acceptability and rank arguments. AI<sup>3</sup>@AIxIA 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. AIxIA 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 ○ AIxIA 2023 - 22<sup>st</sup> International Conference of the Italian Association for Artificial Intelligence, Roma, Italy, November 6–9 2023.
- Ital-IA 2023 - terzo Convegno Nazionale CINI sull'Intelligenza Artificiale. Pisa, Italy, May 29–31 2023.
- 2022 ○ AIxIA 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 ○ AIxIA 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 ○ AIxIA 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.
- 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 ○ AIxIA 2018, Congress of the Italian Association for Artificial Intelligence, Trento, Italy. November 2018.
- 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 ○ AIxIA 2016, 15<sup>th</sup> International Conference of the Italian Association for Artificial Intelligence - Genoa, 28 November – 1 December 2016.
  
- 2015 ○ CILC 2015, 30<sup>o</sup> Convegno Italiano di Logica Computazionale - Genova, July 1 – 3 2015.
  
- 2014 ○ AIxIA 2014, Artificial Intelligence for Society and Economy - Pisa, 10 – 12 December 2014.
- Todi Appy Days - Todi, September 28 2014.
  
- 2013 ○ CSS3 & HTML5, Developing cross device applications - Pisa, 31 May 2013.

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## 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".

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## Organisation Committees

- 2024 ○ **Track Chair**, KRR@SAC2025 - Track on Knowledge Representation and Reasoning (part of the 40<sup>th</sup> ACM/SIGAPP Symposium On Applied Computing).
- **Organiser**, Workshop su Modellazione e Verifica Formale di Sistemi di Dialogo, Rimini, Italy, January 16–17 2024.
- 2023 ○ **Track Chair**, KRR@SAC2024 - Track on Knowledge Representation and Reasoning (part of the 39<sup>th</sup> ACM/SIGAPP Symposium On Applied Computing).
- 2022 ○ **Track Chair**, KRR@SAC2023 - Track on Knowledge Representation and Reasoning (part of the 38<sup>th</sup> ACM/SIGAPP Symposium On Applied Computing).
- 2021 ○ **Track Chair**, KRR@SAC2022 - Track on Knowledge Representation and Reasoning (part of the 37<sup>th</sup> ACM/SIGAPP Symposium On Applied Computing).
- 2020 ○ **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 ○ **Organiser**, DLT 2018 - 1<sup>st</sup> Distributed Ledger Technology Workshop.

## Recent Reviewer Activity

### Journals

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

### Conferences

- |               |                |                |                 |
|---------------|----------------|----------------|-----------------|
| ○ COMMA 2024  | ○ ICTAI 2022   | ○ CILC 2021    | ○ AI4I 2019     |
| ○ FLAIRS 2024 | ○ SAFA 2022    | ○ ICTAI 2021   | ○ ICTAI 2019    |
| ○ SAC 2024    | ○ AI4I 2022    | ○ ICTCS 2021   | ○ AIxIA 2019    |
| ○ RCRA 2023   | ○ COMMA 2022   | ○ ITASEC 2021  | ○ CLAR 2018     |
| ○ AIxIA 2023  | ○ SI-CLAR 2021 | ○ AAAI 2021    | ○ Euro-Par 2019 |
| ○ ICTAI 2023  | ○ CILC 2022    | ○ AIxIA 2020   | ○ IJCAI 2019    |
| ○ CLAR 2023   | ○ SAC 2022     | ○ CILC 2020    | ○ AAMAS 2019    |
| ○ xAI 2023    | ○ FLAIRS 2022  | ○ AI4I 2020    | ○ AIxIA 2018    |
| ○ KR 2023     | ○ ICAART 2022  | ○ ICTAI 2020   | ○ CILC 2018     |
| ○ ITASEC 2023 | ○ AAAI 2022    | ○ COMMA 2020   | ○ ICTAI 2018    |
| ○ FLAIRS 2023 | ○ AIxIA 2021   | ○ GraMSec 2020 | ○ GECON 2018    |
| ○ SAC 2023    | ○ ICTAI 2021   | ○ IJCAI 2020   | ○ COMMA 2018    |
| ○ AIxIA 2022  | ○ AI4I 2021    | ○ AAMAS 2020   | ○ IJCAI 2018    |
| ○ PRIMA 2022  | ○ CLAR 2021    | ○ PRIMA 2019   | ○ 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 [9]. Online at: [arg-xai.dmi.unipg.it](http://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 [12, 13, 15, 19, 20, 22]. Online at: [conarg.dmi.unipg.it/cla](http://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 [34, 38]. Online at: [conarg.dmi.unipg.it/rob.html](http://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 [7, 28, 29, 37]. Online at: [conarg.dmi.unipg.it](http://conarg.dmi.unipg.it).