

## Giuseppe Pisano

### CURRENT POSITION

**2024 –** Research fellow at ALMA-AI - University of Bologna, Italy

### EDUCATION

**2020 – 2024** University of Bologna / University of Luxembourg  
PhD course in “Law, Science and Technology”  
Thesis: *Argumentation for Legal Reasoning: Meta-models, Technology and Beyond*

**2017 – 2020** University of Bologna, Italy  
Master’s degree in “Computer Science and Engineering” (110/110 *cum Laude*)  
Thesis: *AI simbolica e sub-simbolica per XAI: stato dell'arte ed esperimenti con reti neurali e vincoli logici*

**2014 – 2017** University of Bologna, Italy  
Bachelor’s degree in “Computer Science and Engineering” (110/110 *cum Laude*)  
Thesis: *Progettazione e Sviluppo di un Sistema di Modellazione 3D in Realtà Aumentata*

**2009 – 2014** High-school diploma at Liceo Scientifico “G. Marconi”, San Gavino Monreale (94/100)

### RESEARCH EXPERIENCE

**5 - 10 2020** Research fellow at ALMA-AI - University of Bologna, Italy  
Project title: *Modelli computabili del diritto e rappresentazioni formali della giurisprudenza*

## OTHER EXPERIENCES

- 2024 - 2025** IT Consultant - European University Institute  
LLMs in the Competition Law domain.
- 10 – 12 2023** IT Consultant - PRO.DI.GI.T project (Consiglio di Presidenza della Giustizia Tributaria)  
Predictive justice in the Tax Law domain.
- 2017 – 2020** Software Engineer at Mydev s.r.l.  
Development of cloud solutions (AWS, Azure) for industrial monitoring.

## PUBLICATIONS

- Marco Billi, Roberta Calegari, Giuseppe Contissa, Francesca Lagioia, Giuseppe Pisano, Galileo Sartor, and Giovanni Sartor. **Argumentation and defeasible reasoning in the law.** J, 4(4):897–914, December 2021. Special Issue The Impact of Artificial Intelligence on Law.
- Marco Billi, Roberta Calegari, Giuseppe Contissa, Giuseppe Pisano, Galileo Sartor, and Giovanni Sartor. **Explainability through argumentation in logic programming.** In Emily LeBlanc, Joost Vennekens, Tran Cao Son, Pedro Cabalar, Jorge Fandin˜o, Marcello Balduccini, and Yuliya Lierler, editors, Workshop on Causal Reasoning and Explanation in Logic Programming (CAUSAL 2021), volume 2970 of CEUR Workshop Proceedings. Sun SITE Central Europe, RWTH Aachen University, September 2021.
- Roberta Calegari, Giuseppe Contissa, Giuseppe Pisano, Galileo Sartor, and Giovanni Sartor. **Arg-tuProlog: a modular logic argumentation tool for PIL.** In Serena Villata, Jakub Harařta, and Petr Křremen, editors, Legal Knowledge and Information Systems. JURIX 2020: The Thirty-third Annual Conference, volume 334 of Frontiers in Artificial Intelligence and Applications, pages 265–268, 9-11 December 2020.
- Roberta Calegari, Giuseppe Contissa, Giuseppe Pisano, Galileo Sartor, and Giovanni Sartor. **Modular logic argumentation in arg-tuprolog.** In Stefania Bandini, Francesca Gasparini, Viviana Mascardi, Matteo Palmonari, and Giuseppe Vizzari, editors, AIXIA 2021 – Advances in Artificial Intelligence, volume 13196 of Lecture Notes in Computer Science, pages 91–103, Cham, July 2022. Springer International Publishing.
- Roberta Calegari, Giuseppe Pisano, Andrea Omicini, and Giovanni Sartor. **Arg2P: An argumentation framework for explainable intelligent systems.** Journal of Logic and Computation, 32(2):369–401, March 2022. Special Issue from the 35th Italian Conference on Computational Logic (CILC 2020).
- Matteo Francia, Joseph Giovanelli, and Giuseppe Pisano. **Hamlet: a framework for human-centered automl via structured argumentation.** Future Generation Computer Systems.
- Joseph Giovanelli and Giuseppe Pisano. **Towards human-centric automl via logic and**

- argumentation.** In Maya Ramanath and Themis Palpanas, editors, Proceedings of the Workshops of the EDBT/ICDT 2022 Joint Conference, Edinburgh, UK, March 29, 2022, volume 3135 of CEUR Workshop Proceedings. CEUR-WS.org, 2022.
- Giuseppe Pisano, Giovanni Ciatto, Roberta Calegari and Andrea Omicini. **Neuro-symbolic computation for XAI: Towards a unified model.** In Roberta Calegari, Giovanni Ciatto, Enrico Denti, Andrea Omicini, and Giovanni Sartor, editors, WOA 2020 – 21th Workshop “From Objects to Agents”, volume 2706 of CEUR Workshop Proceedings, pages 101–117, Aachen, Germany, October 2020. Sun SITE Central Europe, RWTH Aachen University. 21st Workshop “From Objects to Agents” (WOA 2020), Bologna, Italy, 14– 16 September 2020. Proceedings.
  - Giuseppe Pisano, Roberta Calegari, and Andrea Omicini. **Towards cooperative argumentation for MAS: An actor-based approach.** In Roberta Calegari, Giovanni Ciatto, Enrico Denti, Andrea Omicini, and Giovanni Sartor, editors, WOA 2021 – 22nd Workshop “From Objects to Agents”, volume 2963 of CEUR Workshop Proceedings, pages 162–177. Sun SITE Central Europe, RWTH Aachen University, October 2021. 22nd Workshop “From Objects to Agents” (WOA 2021), Bologna, Italy, 1–3 September 2021. Proceedings.
  - Giuseppe Pisano, Roberta Calegari, and Andrea Omicini. **Multi-agent cooperative argumentation in Arg2P.** In Agostino Dovier, Angelo Montanari, and Andrea Orlandini, editors, AIXIA 2022 – Advances in Artificial Intelligence, volume 13796 of Lecture Notes in Computer Science, chapter 10, pages 140–153. Springer, Cham, Switzerland, March 2023. XXI International Conference of the Italian Association for Artificial Intelligence, AIXIA 2022, Udine, Italy, November 28 – December 2, 2022, Proceedings.
  - Giuseppe Pisano, Roberta Calegari, Andrea Omicini, and Giovanni Sartor. **Arg-tuProlog: A tuProlog-based argumentation framework.** In Francesco Calimeri, Simona Perri, and Ester Zumpano, editors, CILC 2020 – Italian Conference on Computational Logic. Proceedings of the 35th Italian Conference on Computational Logic, volume 2710 of CEUR Workshop Proceedings, pages 51–66, Aachen, Germany, 13-15 October 2020. Sun SITE Central Europe, RWTH Aachen University, CEUR-WS.
  - Giuseppe Pisano, Roberta Calegari, Andrea Omicini, and Giovanni Sartor. **Burden of persuasion in argumentation: A meta-argumentation approach.** In Marcello D’Agostino, Fabio Aurelio D’Asaro, and Costanza Larese, editors, Advances in Argumentation in Artificial Intelligence 2021, volume 3086 of CEUR Workshop Proceedings, pages 5:1–5:19. Sun SITE Central Europe, RWTH Aachen University, November 2021. Proceedings of the Workshop on Advances in Argumentation in Artificial Intelligence (AI3 2021), co-located with the 19th International Conference of the Italian Association for Artificial Intelligence (AIXIA 2021), Milan, November 29, 2021.
  - Giuseppe Pisano, Roberta Calegari, Andrea Omicini, and Giovanni Sartor. **A mechanism for reasoning over defeasible preferences in Arg2P.** In Stefania Monica and Federico Bergenti, editors, CILC 2021 – Italian Conference on Computational Logic. Proceedings of the 36th Italian Conference on Computational Logic, volume 3002 of CEUR Workshop Proceedings, pages 16–30, Parma, Italy, 7-9 September 2021. CEUR-WS.
  - Giuseppe Pisano, Roberta Calegari, Andrea Omicini, and Giovanni Sartor. **Burden of persuasion in meta-argumentation.** In Stefania Bandini, Francesca Gasparini, Viviana Mascardi, Matteo Palmonari, and Giuseppe Vizzari, editors, AIXIA 2021 – Advances in Artificial Intelligence, volume 13196 of Lecture Notes in Computer Science, pages 104–119. Springer International Publishing, Cham, July 2022.

- Giuseppe Pisano, Roberta Calegari, Andrea Omicini, and Giovanni Sartor. ***Burden of persuasion: A meta-argumentation approach***. Journal of Applied Logics, 10(3):393–420, May 2023. Special Issue: Advances in Argumentation in AI.
- Giuseppe Pisano, Roberta Calegari, Henry Prakken, and Giovanni Sartor. ***Arguing about the existence of conflicts***. 353:284–295, COMMA 2022.
- Livio Robaldo, Sotiris Batsakis, Roberta Calegari, Francesco Calimeri, Megumi Fujita, Guido Governatori, Maria Concetta Morelli, Giuseppe Pisano, Ken Satoh, and Ilias Tachmazidis. ***Taking stock of available technologies for compliance checking on first-order knowledge***. In Roberta Calegari, Giovanni Ciatto, and Andrea Omicini, editors, Proceedings of the 37th Italian Conference on Computational Logic, Bologna, Italy, June 29 - July 1, 2022, volume 3204 of CEUR Workshop Proceedings, pages 1–16. CEUR-WS.org, 2022.
- Livio Robaldo, Sotirios Batsakis, Roberta Calegari, Francesco Calimeri, Megumi Fujita, Guido Governatori, Maria Concetta Morelli, Francesco Pacenza, Giuseppe Pisano, Ken Satoh, Ilias Tachmazidis, and Jessica Zangar. ***Compliance checking on first-order knowledge with conflicting and compensatory norms: a comparison among currently available technologies***. Artificial Intelligence and Law, June 2023.
- Galileo Sartor, Jacinto Davila, Marco Billi, Giuseppe Contissa, Giuseppe Pisano, and Robert Kowalski. ***Integration of logical english and s(casp)***. In Joaquín Arias, Roberta Calegari, Luke Dickens, Wolfgang Faber, Jorge Fandinno, Gopal Gupta, Markus Hecher, Daniela Inclezan, Emily LeBlanc, Michael Morak, Elmer Salazar, and Jessica Zangari, editors, Proceedings of the International Conference on Logic Programming 2022 Workshops co-located with the 38th International Conference on Logic Programming (ICLP 2022), Haifa, Israel, July 31st - August 1st, 2022, volume 3193 of CEUR Workshop Proceedings. CEUR-WS.org, 2022.
- Galileo Sartor, Jacinto Davila, Alessia Fidelangeli, and Giuseppe Pisano. ***(Re)integration of logical english and s(casp)***. In Proceedings of the International Conference on Logic Programming 2023 Workshops co-located with the 39th International Conference on Logic Programming (ICLP 2023), volume 3437 of CEUR Workshop Proceedings. CEUR-WS.org, 2023.

## RESEARCH PROJECTS

- H2020 ERC Project “CompuLaw” (G.A. 833647)

## LANGUAGE

Italian Native

English C1