

Research experience

- 2023- **Postdoc**, National Institute of Advanced Industrial Science and Technology (Tokyo, Japan)
Part of the Kakenhi project “Robust AI by Integration of Knowledge Representation and Machine Learning”.
- 2021-2023 **Postdoc**, CNRS, CRIL (Lens, France)
Two year postdoc. Part of the ANR project BE4musIA.
- 2018-2021 **Ph.D: Lightweight approaches to reasoning about knowledge and belief**, *Advisors: Andreas Herzig and Emiliano Lorini*, IRIT (Toulouse, France)
Ph.D awarded October 11th, 2021.
- 2018 **Internship**, *Supervisor: Natasha Alechina*, University of Nottingham (Nottingham, United Kingdom)
Three months internship. Published paper at LORI 2019 (see below).
- 2017-2018 **Internship**, *Supervisor: Sonja Smets*, University of Amsterdam (Amsterdam, the Netherlands)
Five months internship. Published paper in the Logic Journal of the IGPL (see below).
- 2017 **Internship: Proof theory for classical and intuitionistic bimodal logics**, *Supervisor: Katsuhiko Sano*, Hokkaido University (Sapporo, Japan)
Three months internship.
- 2015-2016 **Research project: Chord sequence recognition by Combinatorial Categorical Grammar**, *Supervisor: Satoshi Tojo*, JAIST(Nomi, Japan)
Research project over the year in parallel with university courses.
- 2015 **Internship: Simulation and control of animated painting**, *Supervisor: David Vanderhaeghe*, IRIT (Toulouse, France)
Six weeks internship.

Higher education

- 2016-2017 **Master 2, Mathematical Logic and Foundations of Computer Science (LMFI)**, *Paris VII University (now Paris University)*, Paris, France
- 2015-2016 **Master 1, Computer Science**, *ENS Lyon*
Exchange year at the Japan Advanced Institute of Science and Technology (JAIST, Nomi, Japan).
- 2014-2015 **Bachelor of Science, Mathematics**, *Claude Bernard Lyon 1 University*, Lyon, France
- 2014-2015 **Bachelor of Science, Fundamental Computer Science**, *Ecole Normale Supérieure de Lyon*, Lyon, France
- 2011-2014 **CPGE MPSI-MP**, *Lycée Pierre de Fermat*, Toulouse, France
Two- or three-year preparatory classes to prepare for the national competitive exams leading to the French “grandes écoles”, specializing in mathematics and physics. Entered the Ecole Normale Supérieure de Lyon as a student with Trainee Civil Servant status.

Distinctions

- 2022 AFIA prize for best doctoral dissertation in AI, *2nd place*.
- 2024 Outstanding PC member award, ECAI 2024

Publications

- Ph.D thesis Perrotin, E. (2021). *Lightweight approaches to reasoning about knowledge and belief*. Doctoral dissertation, Université Paul Sabatier-Toulouse III.
- Journals Cooper, M. C., Herzig, A., Maffre, F., Maris, F., Perrotin, E., & Régnier, P. (2020). A lightweight epistemic logic and its application to planning. *Artificial Intelligence* (p.103437).
- Herzig, A., & Perrotin, E. (2021). True Belief and Mere Belief About a Proposition and the Classification of Epistemic-Doxastic Situations. *Filosofiska Notiser, Årgång 8, Nr 1* (pp. 103–117).
- Perrotin, E., & Velázquez-Quesada, F. R. (2020). A Semantic Approach to Non-prioritized Belief Revision. *Logic Journal of the IGPL* (pp.644-671).
- Books Herzig, A., Lorini, E., & Perrotin, E. (2024). Logic of Action from the Perspective of Knowledge Representation. In: Malinowski, J., Palczewski, R. (eds) *Janusz Czelakowski on Logical Consequence* (Outstanding Contributions to Logic, vol. 27). Springer, Cham.
- Herzig, A. & Perrotin, E. (2024). Efficient reasoning about knowledge and common knowledge. In: Coniglio, M.E., Kubyshkina, E., Zaitsev, D. (eds) *Many-Valued and Modal Logics (Essays in honour of Yu. V. Ivlev)* (Synthese Library, vol. 485). Springer, Cham.
- Conferences Perrotin, E. (2025). A Logical Analysis of Hanabi. *Proceedings of the Thirty-Ninth AAAI Conference on Artificial Intelligence (AAAI 2025)* (accepted).
- de Lima, T., Lorini, E., Perrotin, E. & Schwarzentruher, F. (2025). A Computationally Grounded Framework for Cognitive Attitudes. *Proceedings of the Thirty-Ninth AAAI Conference on Artificial Intelligence (AAAI 2025)* (accepted).
- Perrotin, E. & Schwind, N. (2024). Relative Change-Reluctance in Iterated Revision. *Pacific Rim International Conference on Artificial Intelligence (PRICAI 2024)* (pp. 264-276).
- Konieczny, S., Perrotin, E., & Pino Pérez, R. (2024). Belief Reconfiguration without Oracle. *International Conference on Principles and Practice of Multi-Agent Systems (PRIMA 2024)* (pp. 172-188).
- Engesser, T., Herzig, A. & Perrotin, E. (2024). Towards Epistemic-Doxastic Planning with Observation and Revision. *Proceedings of the Thirty-Eighth AAAI Conference on Artificial Intelligence (AAAI 2024)* (Vol. 38, No. 9, pp. 10501-10508).
- Konieczny, S., Perrotin, E., & Pino Pérez, R. (2023). Belief Reconfiguration. *European Conference on Logics in Artificial Intelligence (JELIA 2023)* (Vol. 14281, pp. 446-461).
- Herzig, A., Lorini, E., & Perrotin, E. (2022). A Computationally Grounded Logic of ‘Seeing-to-it-that’. *Proceedings of the Thirty-First International Joint Conference on Artificial Intelligence (IJCAI 2022)* (pp. 2648-2654).
- Lorini, E., Perrotin, E., & Schwarzentruher, F. (2022). Epistemic Actions: Comparing Multi-agent Belief Bases with Action Models. *Proceedings of the International Conference on Principles of Knowledge Representation and Reasoning (KR 2022)* (Vol. 19, No. 1, pp. 236-246).
- Herzig, A., Maris, F., & Perrotin, E. (2021). A dynamic epistemic logic with finite iteration and parallel composition. *Proceedings of the International Conference on Principles of Knowledge Representation and Reasoning (KR 2021)* (Vol. 18, No. 1, pp. 676-680).
- Herzig, A., & Perrotin, E. (2020). On the axiomatisation of common knowledge. *Advances in Modal Logic*, 13 (pp. 24-28). Cited in the Stanford Encyclopedia of Philosophy.
- Cooper, M., Herzig, A., Maris, F., Perrotin, E., & Vianey, J. (2020). Lightweight Parallel Multi-Agent Epistemic Planning. *Proceedings of the International Conference on Principles of Knowledge Representation and Reasoning (KR 2020)* (Vol. 17, No. 1, pp. 274-283).

Herzig, A., Lorini, E., Perrotin, E., Romero, F., & Schwarzentruher, F. (2020). A Logic of Explicit and Implicit Distributed Belief. *24th European Conference on Artificial Intelligence (ECAI 2020)* (pp. 753-760).

Cooper, M., Herzig, A., Maffre, F., Maris, F., Perrotin, E., & Régnier, P. (2019). When 'knowing whether' is better than 'knowing that'. *Proc. of JIAF 2019* (p.73).

Perrotin, E., Galimullin, R., Canu, Q., & Alechina, N. (2019). Public Group Announcements and Trust in Doxastic Logic. *International Workshop on Logic, Rationality and Interaction (LORI 2019)* (pp. 199-213).

Invited Talks

- 11/02/2021 Logic and Interactive Rationality (LIRa) Seminar, ILLC, Amsterdam (online)
- 01/08/2022 Invited talk at the Journées d'Intelligence Artificielle Fondamentale (JIAF, affiliated with PFIA 2022)
- 28/02/2023 RATIO team seminar, LaBRI, Bordeaux, France
- 26/09/2023 CID team seminar, Heudiasyc, Compiègne, France
- 09/10/2023 MAD team seminar, GREYC, Caen, France

Reviews

- Journals *Artificial Intelligence, Journal of Applied Logics, Journal of Applied Non-Classical Logics, AI Communications, Review of Analytic Philosophy*
- Conferences AAMAS 2021, AAAI 2023 & 2024, IJCAI 2023 & 2024, KR 2023 & 2024, TARK 2023, ECAI 2024
- Workshops AWPL (Asian Workshop on Philosophical Logic) 2024

Participation in PhD defense committees

- 2021 Jorge Luis Fernandez Davila, *Logic-based cognitive planning: from theory to implementation*, Université Toulouse III - Paul Sabatier

Seasonal school participation

- 2023 5th International Summer School on Proof Theory and its Applications (Barcelone, Espagne)
- 2022 4th International Autumn School on Proof Theory (Utrecht, Netherlands)
- 2019 31st European Summer School in Logic, Language and Information (Riga, Latvia)
- 2018 Institut d'Automne en Intelligence Artificielle (Toulouse, France)

Participation in event organization

- Conferences TARK 2019, PFIA (French national AI conference) 2019
- Seasonal schools Institut d'Automne de l'Intelligence Artificielle 2018

Teaching

- Programming Python (BSc 1st year, 28h), C (BSc 2nd year, 50h), Algorithmics (MSc 1st year, 14h)
- Logic Semantics of propositional and predicate logic (BSc 1st year, 56h), Proof theory in propositional and predicate logic (BSc 2nd year, 30h)
- Other Introduction to computability and complexity (BSc 1st year, 4h), Computational complexity (BSc 2nd year, 6h)

Summer camp Recherche-MIDI summer camp 2019 (week-long summer camp introducing high school students to various research themes in artificial intelligence; I participated as a TA during the entire week)

Mediation

2022, 2023 Participation in the stand of the Artois University for Numérik'elles, a one-day event which aims to encourage girls in middle and high school to consider turning towards digital and technological careers.

Languages

French Mother tongue
English Fluent

Japanese Conversational
German Intermediate