europass Curriculum vitae

PERSONAL INFORMATION

Angelo Ferrando

Via Fado 78A, Mele, Italy

angelo.ferrando@unimore.it

https://angeloferrando.github.io/website/

https://github.com/AngeloFerrando

https://www.linkedin.com/in/angelo-ferrando-1aaa0a60

WORK EXPERIENCE

February 2024 – Present — Assistant Professor

University of Modena and Reggio Emilia
Modena, Emilia-Romagna, Italy

Formal verification of robotic applications and autonomous systems.

March 2021 – January 2024 — Research Fellow

University of Genova
Genova, Liguria, Italy

Formal verification of robotic applications and autonomous systems.

July 2020 – February 2021 — Postdoctoral Research Associate (PDRA)

University of Manchester
Manchester, Greater Manchester, United Kingdom

Formal verification of robotics and autonomous systems.

December 2018 – June 2020 — Postdoctoral Research Associate (PDRA)

University of Liverpool
Liverpool, Merseyside, United Kingdom

Formal verification of robotics and autonomous systems.

October 2012 – May 2014 — Software Developer

Simulation Team
Savona, Liguria, Italy

Development of an optimizer integrated in a simulation tool for the Early-Phase evaluation of new vessels.

EDUCATION AND TRAINING

November 2015 – March 2019 — PhD - Thesis Title: “An Unexpected Journey: Towards Runtime Verification of Multiagent Systems and Beyond”

University of Genova, Italy

September 2013 – October 2015 — Master in Computer Science with honors

University of Genova, Italy

September 2010 – July 2013 — Bachelor in Computer Science with honors

University of Genova, Italy

PERSONAL SKILLS

Mother tongue: Italian

Other languages

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
English C1	C1	C1	C1	C1
First Certificate				

Levels: A1 and A2: Basic user – B1 and B2: Independent user – C1 and C2: Proficient user
Common European Framework of Reference for Languages

Communication skills

- good communication skills gained through my experience as a postdoctoral research associate in UK and as a speaker at many international conferences and workshops
- team work: I have worked in various types of teams both in academia and industry (especially in UK).
- intercultural skills: I am experienced at working in a multicultural workplace.

Organisational / managerial skills

- Organiser (with R. C. Cardoso) of the 1st, 2nd, and 3rd Workshop on Agents and Robots for reliable Engineered Autonomy (AREA).
- Organiser of the 23rd Workshop "From Objects to Agents" (WOA 22)

PROJECTS

May 2023 - Present

Member of Workpackage 3 in the research project T-LADIES

Funded by the Ministry of University and Research

July 2022 - Present

Principal Investigator of the INSERTION research project

Funded by the Department of Informatics, Bioengineering, Robotics and Systems Engineering of University of Genova in the context of the SEED research grant.

October 2022 - Present

Member of WP4 (Verification and Monitoring) of the CONVINCE research project

Funded by the European Union Horizon Europe Programme.

January 2023 - Present

Member of the UniGe node in the Next Generation UPP (`https://giurisprudenza.unige.it/Pon_next_gen_upp`) research project

PNRR

TEACHING

Bachelor Courses

- Lecturer for the course “Concurrent Programming and Distributed Algorithm” (2020–2023)
- Lecturer for the course “Algorithms and Data Structures” (2021/2022)

Master Courses

- Lecturer for the course “Multi-Agent Systems (MAS)” (2021–2023)
- Lecturer for the course “Natural Language Processing (NLP)” (2021–2023)
- Lecturer for the course “Introduction to Computer Science” (2021/2022)

PhD Courses

- Lecturer for the course “Introduction to formal verification: an appetiser” (2021–2023)

CONFERENCE SPEAKER

- Journal-First track invited talk. Bridging the gap between Single- and Multi-Model Predictive Runtime Verification. The 25th International Symposium on Formal Methods (FM 2023), Lübeck, 7-9 March, 2023.
- Give Me a Hand: How to Use Model Checking for Multi-Agent Systems to Help Runtime Verification and Vice Versa. The 1st Workshop on Strategies, Prediction, Interaction, and Reasoning (SPIRIT 2022), Udine, 29 November, 2022.
- Runtime Verification of Autonomous Systems with Imperfect Information. The 20th International Conference on Software Engineering and Formal Methods (SEFM 2022), Berlin, 26-30 September, 2022.
- Extending Attack-Fault Trees with Runtime Verification. The 4th Workshop on Formal Methods for Autonomous Systems (FMAS 2022), Berlin, 26-27 September, 2022.
- Invited Tutorial. Exploiting Logic Programming for Runtime Verification. The 16th International Conference on Logic Programming and Non-monotonic Reasoning (LPNMR 2022), Genova, 5-9 September, 2022.
- Towards the Combination of Model Checking and Runtime Verification on Multi-Agent Systems. The 20th International Conference on Practical Applications of Agents and Multi-Agent Systems (PAAMS 2022), L'Aquila, 13-15 July, 2022.
- Summarising a Holistic Approach to the Verification and Validation of Autonomous Cognitive Systems. The 18th International Conference on Principles of Knowledge Representation and Reasoning (KR 2021), Virtual, 10 Novembre, 2021
- Tutorial su invito. Enhancing Robot Reliability through Runtime Verification (Tool Demonstration). The 32nd International Symposium on Software Reliability Engineering (ISSRE 2021), Virtual, 27 October, 2021
- Towards Partial Monitoring: It is Always too Soon to Give Up. Third Workshop on Formal Methods for Autonomous Systems (FM AS 21), Virtual, 21 October, 2021.
- The IoT Posteggio Smart Parking Project. Italian Conference on ICT for Smart Cities and Communities (I-Cities 2021), Virtual, 22 September, 2021
- Combine Model Checking and Runtime Verification in Multi-Agent Systems. Italian Conference on Theoretical Computer Science (ICTCS 2021), Virtual, 13 September, 2021
- Incrementally Predictive Runtime Verification. Italian Conference on Computational Logic (CILC 2021), Virtual, 8 September, 2021
- RVPLAN: A General Purpose Framework for Replanning using Runtime Verification. Verification and mOnitoring at RunTime EXecution (VORTEX 2021), Virtual, 12 July, 2021
- Invited speaker. The IEEE TC on the Verification of Autonomous Systems, 6 May, 2021
- Invited speaker. Italian Association for Artificial Intelligence (AixIA 2020) Doctoral Consortium
- StreamB: a declarative language forautomatically synthesising abstractenvironments in agent platforms International Workshop on Engineering Multi-Agent Systems (EMAS 2021), London, 3-4 May, 2021
- Runtime Verification of the ARIAC competition: Can a robot be Agile and Safe at the same time? Italian Research Group on Artificial Intelligence and Robotics Workshop (AIRO 2020), Torino, 26 November, 2020
- ROSMonitoring: a Runtime Verification Framework for ROS. Towards Autonomous Robotic Systems Conference (TAROS 2020), Nottingham, 16 September, 2020
- On Enactability of Agent Interaction Protocols: Towards a Unified Approach. International Workshop on Engineering Multi-Agent Systems (EMAS 2019), Montreal, 13-14 May, 2019
- Verifying and Validating Autonomous Systems: Towards an Integrated Approach. International Conference on Runtime Verification (RV 2018), Limassol (Cyprus), 10-13 November, 2018
- Decentralizing MAS Monitoring with DecaMon. International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2017), San Paolo, 8-12 May, 2017
- Automatic Partitions Extraction to Distribute the Runtime Verification of a Global Specification. International Conference of the Italian Association for the Artificial Intelligence Doctoral Consortium (AI*IA 2016), Genova, 28 November - 1 December, 2016
- Monitoring Patients with Hypoglycemia Using Self-adaptive Protocol-Driven Agents: A Case Study. International Workshop on Engineering Multi-Agent Systems (EMAS 2016), Singapore, 9-10 May, 2016

PC MEMBER

- PC Member in the 38th AAAI Conference on Artificial Intelligence (AAAI 2024)
- PC Member in the 2nd Workshop on Strategies, Prediction, Interaction, and Reasoning (SPIRIT 2023)
- PC Member in the 23rd Workshop "From Objects to Agents" (WOA 2023)
- PC Member in the 26th European Conference on Artificial Intelligence (ECAI 2023)
- PC Member in the 5th Workshop on Formal Methods for Autonomous Systems (FM AS 2023)
- PC Member in the 6th Workshop on Verification and Monitoring at Runtime Execution (VORTEX 2023)
- PC Member in the 20th European Conference on Multi-Agent Systems (EUMAS 2023)
- PC Member in the 11th International Workshop on Engineering Multi-Agent Systems (EMAS 2023)
- PC Member in the 22nd International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2023)
- PC Member in the 37th AAAI Conference on Artificial Intelligence (AAAI 2023)
- PC Member in the 5th International Workshop on Verification of Objects at Runtime Execution (VORTEX 2022)
- PC Member in the 4th Workshop on Formal Methods for Autonomous Systems (FM AS 2022)
- PC Member in the 24th International Conference on Principles and Practice of Multi-Agent Systems (PRIMA 2022)
- PC Member in the 10th International Workshop on Engineering Multi-Agent Systems (EMAS 2022)
- PC Member in the PhD Symposium (PhD-iFM) at the International Conference on integrated Formal Methods (iFM 2022)
- PC Member in the 36th AAAI Conference on Artificial Intelligence (AAAI 2022)
- PC Member in the 21st International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2022) PC Board of the 31st, 32nd and 33rd International Joint Conference on Artificial Intelligence (IJCAI 2022,2023,2024)
- PC Member in the 3rd International Workshop on Governing Adaptive and Unplanned Systems of Systems (GAUSS 2021)
- PC Member in the 22nd Workshop "From Objects to Agents" (WOA 2021)
- PC Member in the 22nd Towards Autonomous Robotic Systems Conference (TAROS 2021)
- PC Member in the 30th IEEE International Conference on Enabling Technologies: Infrastructure for Collaborative Enterprises (WETICE 2021)
- PC Member in the 4th International Workshop on Verification of Objects at Runtime Execution (VORTEX 2021)
- PC Member in the 3rd Workshop on Formal Methods for Autonomous Systems (FM AS 2021)
- PC Member in the 9th International Workshop on Engineering Multi-Agent Systems (EMAS 2021)
- PC Member in the 30th International Joint Conference on Artificial Intelligence (IJCAI-21)
- PC Member in the 20th International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2021) Reviewer in the 32nd International Conference on Database and Expert Systems Applications (DEXA 2021) Reviewer in the 5th APWeb-WAIM International Joint Conference on Web and Big Data (APWeb-WAIM 2021) Reviewer in the 21st Towards Autonomous Robotic Systems Conference (TAROS 2020)
- PC Member in the 23rd International Conference on Principles and Practice of Multi-Agent Systems (PRIMA 2020)
- PC Member in the 2nd Workshop on Formal Methods for Autonomous Systems (FM AS 2020)
- PC Member in the 2nd International Workshop on Governing Adaptive and Unplanned Systems of Systems (GAUSS 2020)
- PC Member in the 8th International Workshop on Engineering Multi-Agent Systems (EMAS 2020)
- PC Member in the 29th International Joint Conference on Artificial Intelligence and the 17th Pacific Rim International Conference on Artificial Intelligence (IJCAI-PRICAI 2020) PC Member the 29th IEEE International Conference on Enabling Technologies: Infrastructure for Collaborative Enterprises (WETICE 2020)
- PC Member in the 22nd International Conference on Principles and Practice of Multi-Agent Systems (PRIMA 2019)
- PC Member in the 19th International Conference on Runtime Verification (RV 2019)
- PC Member in the 7th International Workshop on Engineering Multi-Agent Systems (EMAS 2019).

THESIS ADVISOR

- Onto2Conv: An application for boosting cognitive conversational agents. Tesi Magistrale di Zeinab Namakizadeh Esfahani (2022/2023).
- Towards Incremental Process Mining with PM4Py. Tesi Magistrale di Riccardo Grimaldi (2022/2023).
- Assessing Neural Network Transferability through Learned Features. Tesi Magistrale di Andrea Canepa (2022/2023).
- 'Among Us' game implementation and simulation in Jason with BDI and RL approaches. Tesi Magistrale di Manuel Parmiggiani (2022/2023).
- Hyper Runtime Verification. Tesi Triennale di Claudio Stana (2021/2022)
- Design and Implementation of a Semantic Search Engine for the AGRICORE project. Tesi Magistrale di Jyoti Dhiman (2021/2022)
- To be or not to Be... an Agent in the Theater? Tesi Magistrale di Andrea Gatti (2021/2022)
- Exploiting JADE as a Multi-Agent simulator of the Immune System. Tesi Magistrale di Sanchayan Bhunia (2021/2022)
- P2P Architecture: Analysis and Implementation of a Smart Parking. Tesi Triennale di Alex Di Stefano (2020/2021)
- Analysis and Development of Control Dashboard in Angular for Smart Parking Server. Tesi triennale di Christian Stingone (2020/2021)
- Runtime Verification of Autonomous Driving Systems in CARLA. Tesi Triennale di Rodolfo Centanaro (2020/2021)

AWARDS

- Paper "Bridging the gap between single- and multi-model predictive runtime verification" selected for the journal-first track at the 25th International Symposium on Formal Methods (FM 2023)
- 1st and 2nd place in the Multi-Agent Programming Contest, 2019–2020
- Best Paper Award at the 7th International Workshop on Engineering Multi-Agent Systems (EMAS 2019)
- Special mention for the Master's thesis: "Trace expressions for runtime verification and protocol-driven behaviour"

EDITOR

- Special Issue of the 23rd Workshop "From Objects to Agents" (WOA22), on Intelligenza Artificiale.
- The 23rd Workshop "From Objects to Agents" (WOA22) proceedings, on CEUR AIxIA Series.
- The Special Issue of the 2nd Workshop on Agents and Robots for reliable Engineered Autonomy (AREA 2022), on Robotics.
- The 2nd Workshop on Agents and Robots for reliable Engineered Autonomy (AREA 2022) proceedings, on EPTCS.
- The Special Issue of the 1st Workshop on Agents and Robots for reliable Engineered Autonomy (AREA 2020), on the Journal of Sensor and Actuator Networks (JSAN).
- The 1st Workshop on Agents and Robots for reliable Engineered Autonomy (AREA 2020) proceedings, on EPTCS.

PATENTS

- Patent on the development of a web app to support insurance adjusters via video interface. CODE: 102019000008553.

Digital competences

SELF-ASSESSMENT				
Information Processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Proficient user	Proficient user	Proficient user

Digital competences - Self-assessment grid

Computer skills

- Programming and markup languages: C, C++, Java, C#, MySQL, PHP, LATEX, Prolog, HTML, CSS, JavaScript, Python, Haskell, Typescript
- Frameworks: Jason, JaCaMo, JADE, Spark Java, NetLogo, ROS, Matlab, R, DialogFlow
- Everything that concerns the formal verification of software systems (especially AI systems) is of my interest, such as: Runtime Verification, Model Checking, and so on.

Driving licence A, B

PUBLICATIONS

[1] Francesco Belardinelli, Angelo Ferrando, and Vadim Malvone. “An abstraction-refinement framework for verifying strategic properties in multi-agent systems with imperfect information”. In: *Artif. Intell.* 316 (2023), p. 103847. URL: https://doi.org/10.1016/j.artint.2022.103847.

[2] Angelo Ferrando and Viviana Mascardi. “Special issue for the 23rd workshop "from objects to agents" (WOA 2022)”. In: *Intelligenza Artificiale* 17.1 (2023), pp. 3–5. URL: https://doi.org/10.3233/IA-230015.

[3] Angelo Ferrando and Giorgio Delzanno. “Incrementally predictive runtime verification”. In: *J. Log. Comput.* 33.4 (2023), pp. 796–817. URL: https://doi.org/10.1093/logcom/exad012.

[4] Débora C. Engelmann, Angelo Ferrando, Alison R. Panisson, Davide Ancona, Rafael H. Bordini, and Viviana Mascardi. “RV4JaCa - Towards Runtime Verification of Multi-Agent Systems and Robotic Applications”. In: *Robotics* 12.2 (2023), p. 49. URL: https://doi.org/10.3390/robotics12020049.

[5] Angelo Ferrando and Vadim Malvone. “Towards the Verification of Strategic Properties in Multi-Agent Systems with Imperfect Information”. In: *Proceedings of the 2023 International Conference on Autonomous Agents and Multiagent Systems, AAMAS 2023, London, United Kingdom, 29 May 2023 - 2 June 2023*. Ed. by Noa Agmon, Bo An, Alessandro Ricci, and William Yeoh. ACM, 2023, pp. 793–801. URL: https://dl.acm.org/doi/10.5555/3545946.3598713.

[6] Davide Ancona, Angelo Ferrando, and Viviana Mascardi. “Runtime Verification of Hash Code in Mutable Classes”. In: *Proceedings of the 25th ACM International Workshop on Formal Techniques for Java-like Programs, FTfJP 2023, Seattle, WA, USA, 18 July 2023*. Ed. by Aaron Tomb. ACM, 2023, pp. 25–31. URL: https://doi.org/10.1145/3605156.3606452.

[7] Angelo Ferrando and Vadim Malvone. “How to Find Good Coalitions to Achieve Strategic Objectives”. In: *Proceedings of the 15th International Conference on Agents and Artificial Intelligence, ICAART 2023, Volume 1, Lisbon, Portugal, February 22-24, 2023*. Ed. by Ana Paula Rocha, Luc Steels, and H. Jaap van den Herik. SCITEPRESS, 2023, pp. 105–113. URL: https://doi.org/10.5220/0011778700003393.

[8] Francesco Belardinelli, Angelo Ferrando, Wojciech Jamroga, Vadim Malvone, and Aniello Murano. “Scalable Verification of Strategy Logic through Three-Valued Abstraction”. In: *Proceedings of the Thirty-Second International Joint Conference on Artificial Intelligence, IJCAI 2023, 19th-25th August 2023, Macao, SAR, China*. ijcai.org, 2023, pp. 46–54. URL: https://doi.org/10.24963/ijcai.2023/6.

[9] Angelo Ferrando, Andrea Gatti, and Viviana Mascardi. “RV4Rasa: A Formalism-Agnostic Runtime Verification Framework for Verifying ChatBots in Rasa”. In: *Proceedings of the 6th International Workshop on Verification and Monitoring at Runtime Execution, VORTEX 2023, Seattle, WA, USA, 18 July 2023*. Ed. by Davide Ancona and Giorgio Audrito. ACM, 2023, pp. 1–8. URL: https://doi.org/10.1145/3605159.3605855.

[10] Davide Ancona, Angelo Ferrando, and Viviana Mascardi. “Exploiting Logic Programming for Runtime Verification: Current and Future Perspectives”. In: *Prolog: The Next 50 Years*. Ed. by David Scott Warren, Verónica Dahl, Thomas Eiter, Manuel V. Hermenegildo, Robert A. Kowalski, and Francesca Rossi. Vol. 13900. Lecture Notes in Computer Science. Springer, 2023, pp. 300–317. URL: https://doi.org/10.1007/978-3-031-35254-6%5C_25.

[11] Gianvito Losapio, Federico Minutoli, Viviana Mascardi, and Angelo Ferrando. “Smart balancing of E-scooter sharing systems via deep reinforcement learning: a preliminary study”. In: *Intelligenza Artificiale* 16.1 (2022), pp. 49–67. URL: https://doi.org/10.3233/IA-210126.

[12] Angelo Ferrando and Vadim Malvone. “Give Me a Hand: How to Use Model Checking for Multi-Agent Systems to Help Runtime Verification and Vice Versa (Short Paper)”. In: *Proceedings of the 10th Italian workshop on Planning and Scheduling (IPS 2022), RCRA Incontri E Confronti (RiCeRcA 2022), and the workshop on Strategies, Prediction, Interaction, and Reasoning in Italy (SPIRIT 2022) co-located with 21st International Conference of the Italian Association for Artificial Intelligence (AIxIA 2022), November 28 - December 2, 2022, University of Udine, Udine, Italy*. Ed. by Riccardo De Benedictis, Nicola Gatti, Marco Maratea, Andrea Micheli, Aniello Murano, Enrico Scala, Luciano Serafini, Ivan Serina, Alessandro Umbrico, and Mauro Vallati. Vol. 3345. CEUR Workshop Proceedings. CEUR-WS.org, 2022. URL: https://ceur-ws.org/Vol-3345/paper16%5C_Spirit5.pdf.

[13] Angelo Ferrando and Rafael C. Cardoso. “Safety Shields, an Automated Failure Handling Mechanism for BDI Agents”. In: *21st International Conference on Autonomous Agents and Multiagent Systems, AAMAS 2022, Auckland, New Zealand, May 9-13, 2022*. Ed. by Piotr Faliszewski, Viviana Mascardi, Catherine Pelachaud, and Matthew E. Taylor. International Foundation for Autonomous Agents and Multiagent Systems (IFAAMAS), 2022, pp. 1589–1591. URL: https://www.ifaamas.org/Proceedings/aamas2022/pdfs/p1589.pdf.

[14] Davide Ancona, Angelo Ferrando, and Viviana Mascardi. “Exploiting Probabilistic Trace Expressions for Decentralized Runtime Verification with Gaps”. In: *Proceedings of the 37th Italian Conference on Computational Logic, Bologna, Italy, June 29 - July 1, 2022*. Ed. by Roberta Calegari, Giovanni Ciatto, and Andrea Omicini. Vol. 3204. CEUR Workshop Proceedings. CEUR-WS.org, 2022, pp. 154–170. URL: https://ceur-ws.org/Vol-3204/paper%5C_17.pdf.

[15] Davide Ancona, Angelo Ferrando, and Viviana Mascardi. “Mind the Gap! Runtime Verification of Partially Observable MASs with Probabilistic Trace Expressions”. In: *Multi-Agent Systems - 19th European Conference, EUMAS 2022, Düsseldorf, Germany, September 14-16, 2022, Proceedings*. Ed. by Dorothea Baumeister and Jörg Rothe. Vol. 13442. Lecture Notes in Computer Science. Springer, 2022, pp. 22–40. URL: https://doi.org/10.1007/978-3-031-20614-6%5C_2.

[16] Giorgio Delzanno, Angelo Ferrando, Giovanna Guerrini, Matteo Pusceddu, and Giovanni Zanone. “Coding Maps: A Distance Laboratory on Computational Thinking Inspired by Modal Logic”. In: *Higher Education Learning Methodologies and Technologies Online - 4th International Conference, HELMeTO 2022, Palermo, Italy, September 21-23, 2022, Revised Selected Papers*. Ed. by Giovanni Fulantelli, Daniel Burgos, Gabriella Casalino, Marta Cimitile, Giosuè Lo Bosco, and Davide Taibi. Vol. 1779. Communications in Computer and Information Science. Springer, 2022, pp. 497–508. URL: https://doi.org/10.1007/978-3-031-29800-4%5C_38.

[17] Angelo Ferrando and Rafael C. Cardoso. “RVPLAN: Runtime Verification of Assumptions in Automated Planning”. In: *Proceedings of the 14th International Conference on Agents and Artificial Intelligence, ICAART 2022, Volume 2, Online Streaming, February 3-5, 2022*. Ed. by Ana Paula Rocha, Luc Steels, and H. Jaap van den Herik. SCITEPRESS, 2022, pp. 67–77. URL: https://doi.org/10.5220/0010776500003116.

[18] Marie Farrell, Nikos Mavrakis, Angelo Ferrando, Clare Dixon, and Yang Gao. “Journal-First: Formal Modelling and Runtime Verification of Autonomous Grasping for Active Debris Removal”. In: *Integrated Formal Methods - 17th International Conference, IFM 2022, Lugano, Switzerland, June 7-10, 2022, Proceedings*. Ed. by Maurice H. ter Beek and Rosemary Monahan. Vol. 13274. Lecture Notes in Computer Science. Springer, 2022, pp. 39–44. URL: https://doi.org/10.1007/978-3-031-07727-2%5C_3.

[19] Angelo Ferrando and Vadim Malvone. “Towards the Combination of Model Checking and Runtime Verification on Multi-agent Systems”. In: *Advances in Practical Applications of Agents, Multi-Agent Systems, and Complex Systems Simulation. The PAAMS Collection - 20th International Conference, PAAMS 2022, L’Aquila, Italy, July 13-15, 2022, Proceedings*. Ed. by Frank Dignum, Philippe Mathieu, Juan Manuel Corchado, and Fernando de la Prieta. Vol. 13616. Lecture Notes in Computer Science. Springer, 2022, pp. 140–152. URL: https://doi.org/10.1007/978-3-031-18192-4%5C_12.

[20] Angelo Ferrando and Vadim Malvone. “Runtime Verification with Imperfect Information Through Indistinguishability Relations”. In: *Software Engineering and Formal Methods - 20th International Conference, SEFM 2022, Berlin, Germany, September 26-30, 2022, Proceedings*. Ed. by Bernd-Holger Schlingloff and Ming Chai. Vol. 13550. Lecture Notes in Computer Science. Springer, 2022, pp. 335–351. URL: https://doi.org/10.1007/978-3-031-17108-6%5C_21.

[21] Débora C. Engelmann, Angelo Ferrando, Alison R. Panisson, Davide Ancona, Rafael H. Bordini, and Viviana Mascardi. “RV4JaCa - Runtime Verification for Multi-Agent Systems”. In: *Proceedings of the Second Workshop on Agents and Robots for reliable Engineered Autonomy, AREA@IJCAI-ECAI 2022, Vienna, Austria, 24th July 2022*. Ed. by Rafael C. Cardoso, Angelo Ferrando, Fabio Papacchini, Mehrnoosh Askarpour, and Louise A. Dennis. Vol. 362. EPTCS. 2022, pp. 23–36. URL: https://doi.org/10.4204/EPTCS.362.5.

[22] Rafael C. Cardoso, Angelo Ferrando, and Michael Fisher. “Extending Attack-Fault Trees with Runtime Verification”. In: *Proceedings Fourth International Workshop on Formal Methods for Autonomous Systems (FMAS) and Fourth International Workshop on Automated and verifiable Software sYstem DEvelopment (ASYDE), FMAS/ASYDE@SEFM 2022, and Fourth International Workshop on Automated and verifiable Software sYstem DEvelopment (ASYDE)Berlin, Germany, 26th and 27th of September 2022*. Ed. by Matt Luckcuck and Marie Farrell. Vol. 371. EPTCS. 2022, pp. 193–207. URL: https://doi.org/10.4204/EPTCS.371.14.

[23] Angelo Ferrando and Viviana Mascardi, eds. *Proceedings of the 23rd Workshop "From Objects to Agents", Genova, Italy, September 1-3, 2022*. Vol. 3261. CEUR Workshop Proceedings. CEUR-WS.org, 2022. URL: https://ceur-ws.org/Vol-3261.

[24] Rafael C. Cardoso, Angelo Ferrando, Fabio Papacchini, Mehrnoosh Askarpour, and Louise A. Dennis, eds. *Proceedings of the Second Workshop on Agents and Robots for reliable Engineered Autonomy, AREA@IJCAI-ECAI 2022, Vienna, Austria, 24th July 2022*. Vol. 362. EPTCS. 2022. URL: https://doi.org/10.4204/EPTCS.362.

[25] Angelo Ferrando and Vadim Malvone. “Towards the Combination of Model Checking and Runtime Verification on Multi-Agent Systems”. In: *CoRR* abs/2202.09344 (2022). arXiv: 2202.09344. URL: https://arxiv.org/abs/2202.09344.

[26] Matt Luckcuck, Marie Farrell, Angelo Ferrando, Rafael C. Cardoso, Louise A. Dennis, and Michael Fisher. “A Compositional Approach to Verifying Modular Robotic Systems”. In: *CoRR* abs/2208.05507 (2022). arXiv: 2208.05507. URL: https://doi.org/10.48550/arXiv.2208.05507.

[27] Luca Ciccone, Francesco Dagnino, and Angelo Ferrando. “Ain’t No Stopping Us Monitoring Now”. In: *CoRR* abs/2211.11544 (2022). arXiv: 2211.11544. URL: https://doi.org/10.48550/arXiv.2211.11544.

[28] Rafael C. Cardoso and Angelo Ferrando. “A Review of Agent-Based Programming for Multi-Agent Systems”. In: *Comput.* 10.2 (2021), p. 16. URL: https://doi.org/10.3390/computers10020016.

[29] Marie Farrell, Nikos Mavrakis, Angelo Ferrando, Clare Dixon, and Yang Gao. “Formal Modelling and Runtime Verification of Autonomous Grasping for Active Debris Removal”. In: *Frontiers Robotics AI* 8 (2021), p. 639282. URL: https://doi.org/10.3389/frobt.2021.639282.

[30] Angelo Ferrando, Rafael C. Cardoso, Marie Farrell, Matt Luckcuck, Fabio Papacchini, Michael Fisher, and Viviana Mascardi. “Bridging the gap between single- and multi-model predictive runtime verification”. In: *Formal Methods Syst. Des.* 59.1 (2021), pp. 44–76. URL: https://doi.org/10.1007/s10703-022-00395-7.

[31] Sylvain Conchon, Giorgio Delzanno, and Angelo Ferrando. “Declarative Parameterized Verification of Distributed Protocols via the Cubicle Model Checker”. In: *Fundam. Informaticae* 178.4 (2021), pp. 347–378. URL: https://doi.org/10.3233/FI-2021-2010.

[32] Rafael C. Cardoso, Angelo Ferrando, Daniela Briola, Claudio Menghi, and Tobias Ahlbrecht. “Agents and Robots for Reliable Engineered Autonomy: A Perspective from the Organisers of AREA 2020”. In: *J. Sens. Actuator Networks* 10.2 (2021), p. 33. URL: https://doi.org/10.3390/jsan10020033.

[33] Rafael C. Cardoso, Angelo Ferrando, Daniela Briola, Claudio Menghi, and Tobias Ahlbrecht. “Special Issue: Agents and Robots for Reliable Engineered Autonomy”. In: *J. Sens. Actuator Networks* 10.3 (2021), p. 47. URL: https://doi.org/10.3390/jsan10030047.

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