

Welcome to EMAS 2020!

8th International Workshop on
Engineering Multi-Agent Systems
8-9 May 2020, Auckland, New Zealand



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A challenging novel format

- An asynchronous¹ workshop: attendees interpret the schedule in their own time zone
 - ⇒ commit to spending most of the two days “attending” EMAS (but have left some time in the schedule to do other things)
 - ⇒ synchronisation within regions
- Videorecorded talks plus support for asynchronous questions and answers
- Authors expected to regularly monitor and respond to questions and comments on their presented papers

¹Except for keynote, which will be presented live on Zoom, but also recorded and made available immediately after it is completed.

Kinds of papers submitted to EMAS:

- regular papers
- short papers
- doctoral papers
- demo papers

Also invited authors of relevant AAMAS Extended Abstracts and of recent IJAOSSE papers to present.

- 14 submissions
- 3 reviews per paper
- 12 accepted
 - 7 full, 3 short, 1 doctoral, 1 demo
- also 9 invitations:
 - 2 IJAOS
 - 4 AAMAS Extended Abstract
 - 2 competitions
 - 1 invited talk

Invited Talk, Saturday May 9th, 9:00-10:30

joint with EXTRAAMAS

Tim Miller — School of Computing and Information Systems at the University of Melbourne, Australia

Explainable artificial intelligence: beware the inmates running the asylum
or How I learnt to stop worrying and love the social and behavioural
sciences

Important: this will be delivered live on Zoom at 9am (CEST), which is 5pm in Australia, and 7pm in New Zealand. It will also be recorded.

<https://www.timeanddate.com/worldclock/meetingdetails.html?year=2020&month=5&day=9&hour=7&min=0&sec=0&p1=264&p2=152&p3=37&p4=179&p5=137>

Please check the EMAS website for any late changes!

- **Friday 8th May**

- 9:00-9:10 Opening video
- *Session 1: Agent Programming*
 - 9:10-9:30 Encapsulating Reactive Behaviour in Goal-based Plans for Programming BDI Agents [EA]
 - 9:30-9:50 Tactical Agents for Testing Computer Games [full]
 - 9:50-10:10 Model Transformations from the SARL Agent-Oriented Programming Language to an Object-Oriented Programming Language [IJAOSE]
 - 10:10-10:30 Coffee break and visit the social channel
 - 10:30-10:50 Delivering Multi-Agent MicroServices using CArTAgO [full]
 - 10:50-11:10 Exploiting Simulation for MAS Programming and Engineering—The JaCaMo-sim Platform [full]
 - 11:10-11:30 Short break - social channel

- *Session 2: Multi-Agent Issues*
 - 11:30-11:50 Decentralized Programming for the Internet of Things [full]
 - 11:50-12:10 Goal-driven Adaptation of MOISE Organizations for Workflow Enactment [full]
 - 12:10-12:30 Computationally Grounded Quantitative Trust with Time [EA]
 - 12:30-13:40 Lunch and visit the social channel
- *Session 3: Traffic*
 - 13:40-14:00 Adaptive and collaborative agent-based traffic regulation Using Behavior Trees [EA]
 - 14:00-14:20 Coordinated Control of Autonomous Vehicle Traffic on Roads of the Future [EA]
 - 14:20-14:35 Simulating Vehicular IoT Applications by Combining a Multi-agent System and Big Data [Short]
 - 14:35-15:00 Coffee break and visit the social channel

- *Session 4: Competitions*
 - 15:00-15:20 Agent programming competition presentation
 - 15:20-15:35 Intention progression competition presentation
 - 15:35-15:45 Closing summary for the day, and catch up on online
- **Saturday 9th May**
 - *Session 5: Invited talk (joint with EXTRAAMAS)*
 - 9:00-10:30 Tim Miller: Explainable artificial intelligence: beware the inmates running the asylum (or How I learnt to stop worrying and love the social and behavioural sciences)
 - 10:30-11:00 Coffee break (provide your own) - and visit the social channel
 - *Session 6: Fault-tolerance and robustness*
 - 11:00-11:15 Fragility and Robustness in Multi-Agent Systems [Short]
 - 11:15-11:30 Fault Tolerance in Multiagent Systems [Short]
 - 11:30-11:45 A Verification Framework for GOAL Agents [Doctoral]
 - 11:45-12:00 Short break - physical activity and social channel

- *Session 7: Applications*

- 12:00-12:20 Multi-Agent Control of Industrial Robot Vacuum Cleaners [full]
- 12:20-12:40 iLQGames.jl: Rapidly Designing and Solving Differential Games in Julia [demo]
- 12:40-13:40 Lunch (self provided) - and visit the social channel
- 13:40-14:00 A user-centred social commitment model for location sharing applications in the family life domain [IJAOSE]
- 14:20-14:40 Orthos: A Trustworthy AI Framework For Data Acquisition [full]
- 14:40-15:00 Closing summary for the day, catch up on online, and workshop closing

- Matteo Baldoni, Dip. di Informatica, University di Torino
- Luciano Baresi, Politecnico di Milano
- Olivier Boissier, Mines Saint-Etienne, Institut Henri Fayol, Lab. Hubert Curien UMR CNRS 5516
- Rafael H. Bordini, PUCRS
- Daniela Briola, University of Milan Bicocca
- Rafael C. Cardoso, University of Liverpool
- Moharram Challenger, University of Antwerp
- Amit Chopra, Lancaster University
- Andrei Ciortea, University of St. Gallen
- Stefania Costantini, Dip. di Ingegneria e Scienze dell'Informazione e Matematica, Univ. dell'Aquila

- Mehdi Dastani, Utrecht University
- Maiquel de Brito, Federal University of Santa Catarina
- Lavindra de Silva, University of Cambridge
- Louise Dennis, University of Liverpool
- Juergen Dix, Clausthal University of Technology
- Amal El Fallah Seghrouchni, LIP6 - University of Pierre and Marie Curie
- Angelo Ferrando, University of Liverpool
- Lars-Ake Fredlund, Universidad Politécnica de Madrid
- Jorge Gomez-Sanz, Universidad Complutense de Madrid
- Zahia Guessoum, LIP6, Universit de Paris 6 and CReSTIC, Université de Reims Champagne Ardenne
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- Koen Hindriks, Vrije Universiteit Amsterdam
- Tom Holvoet, Katholieke Universiteit Leuven
- Nadin Kokciyan, University of Edinburgh
- Yves Lespérance, York University
- Brian Logan, University of Nottingham
- Viviana Mascardi, DIBRIS (Dep. of Informatics, Bioengineering, Robotics and System Engineering), University of Genova
- Philippe Mathieu, University of Lille 1
- John-Jules Meyer, Utrecht University
- Frederic Migeon, IRIT
- Jörg P. Müller, Clausthal University of Technology
- Ingrid Nunes, Universidade Federal do Rio Grande do Sul (UFRGS)
- Alessandro Ricci, University of Bologna

- Valeria Seidita, Dipartimento dell' Innovazione Industriale e Digitale
- University of Palermo
- Jaime Sichman, University of São Paulo
- Guillermo R. Simari, Universidad del Sur in Bahia Blanca
- Wamberto Vasconcelos, Department of Computing Science,
University of Aberdeen
- Jørgen Villadsen, Technical University of Denmark
- Gerhard Weiss, Maastricht University
- Rym Wenkstern, The University of Texas at Dallas
- Danny Weyns, Katholieke Universiteit Leuven & Linnaeus University
- Pinar Yolum, Utrecht University

Steering Committee

- Matteo Baldoni (DALT; Italy)
- Rafael Bordini (ProMAS; Brazil)
- Mehdi Dastani (ProMAS; Netherlands)
- Jürgen Dix (ProMAS; Germany)
- Amal El Fallah Seghrouchni (ProMAS; France)
- Brian Logan (UK)
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- Ingrid Nunes (Brazil)
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- M. Birna Van Riemsdijk (DALT; Netherlands)
- Danny Weyns (AOSE; Sweden)
- Michael Winikoff (DALT & AOSE; New Zealand)
- Rym Zalila-Wenkstern (USA)

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- Presenters
- Tim Miller
- EMAS Steering Committee
- AAMAS workshops chair (Jaime & Mehdi)

Enjoy!