Preface

The Second International Workshop on Hypermedia Multi-Agent Systems (HyperAgents 2025)¹ is the fourth event in a series of biannual events following the Dagstuhl Seminar 23081 (Feb. 2023)², Dagstuhl Seminar 21702 (Feb. 2021)³, and HyperAgents 2019 (in conjunction with The Web Conference, San Francisco, Feb. 2019)⁴. This second workshop edition is co-located with the 28th European Conference on Artificial Intelligence (ECAI-2025) in Bologna, Italy, and is organized in conjunction with a hybrid meeting of the W3C WebAgents Community Group to maximize exchanges with relevant communities.

The primary objective of this workshop is to establish a common forum for both the AI and Web communities, with a focus on autonomous agents on the Web-and to create social, conceptual, and technological bridges across these fields. We invite researchers and practitioners to imagine, design, build, evaluate, and share their thoughts and visions on the future of the Web for both people and autonomous agents. HyperAgents 2025 welcomes contributions addressing all aspects of enabling and governing systems of autonomous agents in open hypermedia environments—that is, systems of agents able to *perceive*, *decide*, and *act* through the Web to achieve their goals. We refer to such systems as *Hypermedia Multi-Agent Systems*. The 2025 edition highlights recent developments in large language models (LLMs), continuing the workshop's broader effort to integrate perspectives across the diverse landscape of research on Web-based agents and multi-agent systems.

The workshop is organized as a full-day event. We received 15 submissions, of which 12 papers were accepted for this volume after a single-blind reviewing process (1 as a regular paper and 11 as short papers). In addition to these 12 contributions, the workshop programme features an opening keynote by Terry R. Payne (University of Liverpool) on "Autonomy, the Web and Knowledge-based Services". In the second half of the day, the keynote speaker is joined by Stephen Cranefield (University of Otago), Alessandro Ricci (University of Bologna), and Ganesh Ramanathan (Siemens AG) for a panel discussion on "Agents, LLMs, and the Web: A Brave New World?". The programme concludes with an open community discussion on the road ahead for agents and multi-agent systems on the Web.

We would like to thank: the authors for their valuable contributions to the workshop programme; our keynote speaker Terry Payne and invited panelists Stephen Cranefield, Alessandro Ricci, and Ganesh Ramanathan for creating a vibrant discussion at the workshop; the members of the Program Committee for their work in ensuring a hiqh-quality reviewing process; and the ECAI-2025 Local Organizing Committee and especially Federico Chesani for their support in organizing the joint meeting with the W3C WebAgents Community Group.

We hope the ideas and discussions emerging from HyperAgents 2025 will continue to inspire and shape future research on Web-based agents and multi-agent systems.

October 2025

Andrei Ciortea Rem Collier Fabien Gandon Andreas Harth Antoine Zimmermann

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https://ecai2025.hyperagents.org/, accessed: 22.10.2025.

²https://dagstuhl.de/23081, accessed: 22.10.2025.

³https://dagstuhl.de/21072, accessed: 22.10.2025.

⁴https://www2019.hyperagents.org/, accessed: 22.10.2025.

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Workshop Organizers

Andrei Ciortea University of St.Gallen, Switzerland Rem Collier University College Dublin, Ireland

Fabien Gandon Inria, Université Côte d'Azur, CNRS, I3S, France

Andreas Harth Friedrich-Alexander-Universität Erlangen-Nürnberg and Fraunhofer IIS,

Germany

Antoine Zimmermann MINES Saint-Étienne, France

Program Committee

Olivier Boissier MINES Saint-Étienne, France
Daniela Briola University of Milano Bicocca, Italy
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Jean-Paul Calbimonte HES-SO, Switzerland

Riccardo Cantini University of Calabria, Italy

Pierre-Antoine Champin W3C, France

Victor Charpenay MINES Saint-Étienne, France

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Jérôme Euzenat Inria, France

Catherine Faron Inria, Université Côte d'Azur, CNRS, I3S, France Fabien Gandon Inria, Université Côte d'Azur, CNRS, I3S, France

Andreas Harth Friedrich-Alexander-Universität Erlangen-Nürnberg and Fraunhofer IIS,

Germany

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Viviana Mascardi University of Genova, Italy

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Mahda Noura Siemens, Germany

Julian Padget University of Bath, United Kingdom
Terry Payne University of Liverpool, United Kingdom

Ganesh Ramanathan Siemens AG, Switzerland Alessandro Ricci University of Bologna, Italy

Alexandru Sorici National Technical University Politehnica of Bucharest, Romania

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Valentina Tamma University of Liverpool, United Kingdom
Danai Vachtsevanou University of St.Gallen, Switzerland
Ruben Verborgh Ghent University – imec, Belgium

Michael Winikoff Victoria University of Wellington, New Zealand

Antoine Zimmermann MINES Saint-Étienne, France