

Preface

The 34th edition of the Italian Convention of Computational Logic (CILC 2019), the annual meeting of GULP (*Gruppo ricercatori e Utenti Logic Programming*), was hosted by the University of Trieste from June 19th to June 21st, 2019.

CILC was originally meant to be a forum for exchanging ideas and experiences between Italian researchers in the field of computational logic, however, in recent years, it has broadened its topics of interest also to a wide set of related areas spacing from verification of formal systems to knowledge representation.

The technical program of CILC 2019 features 37 presentations of as many high-quality papers; 27 of them are included in these proceedings and the remaining ones appeared or were submitted to other conferences, workshops or journals. Each of the submitted papers was evaluated by three reviewers and, according to their judgments, was either accepted or rejected for the presentation and publication in the proceedings.

The contributions address different topics related to computational logic, including verification and validation, temporal reasoning, description logics, formal methods in AI, knowledge representation, and constraint logic programming.

The program was also enriched by an ambassador talk “DigForASP: A European Cooperation Network for Logic-based AI in Digital Forensics” by Stefania Costantini, Francesca Alessandra Lisi, and Raffaele Olivieri and 3 tutorials:

- The SATisfiability problem and its impact
Agostino Dovier, Università degli Studi di Udine
- Multiagent Epistemic Planning
Enrico Pontelli, New Mexico State University
- Model checking: The interval way
Angelo Montanari, Università degli Studi di Udine

The following work were presented at CILC 2019, but are not included in this proceedings:

- Epistemic Answer Set Programming: a new perspective
Ezgi Iraz Su
- Extending ALC with the power-set construct
Laura Giordano and Alberto Policriti
- Accountable Protocols in Abductive Logic Programming
Marco Gavanelli, Marco Alberti, and Evelina Lamma
- Model Completeness, Covers and Superposition (Abridged Version)
Diego Calvanese, Silvio Ghilardi, Alessandro Gianola, Marco Montali, and Andrey Rivkin
- Proving Properties of Sorting Programs: A Case Study in Horn Clause Verification
Emanuele De Angelis, Fabio Fioravanti, Alberto Pettorossi, and Maurizio Proietti
- An Ontology to Improve the First Aid Service Quality
Lorenzo De Lauretis and Stefania Costantini

- An ASP-based Approach for Optimizing DLV Evaluation
Carlo Allocca, Francesco Calimeri, Roberta Costabile, Alessio Fiorentino, Nicola Leone, Marco Manna, Simona Perri, and Jessica Zangari
- Large Scale DLV: Preliminary Results
Nicola Leone, Carlo Allocca, Mario Alviano, Francesco Calimeri, Cristina Civili, Roberta Costabile, Bernardo Cuteri, Alessio Fiorentino, Davide Fuscà, Stefano Germano, Giovanni Labocchetta, Marco Manna, Simona Perri, Kristian Reale, Francesco Ricca, Pierfrancesco Veltri, and Jessica Zangari
- A Process Algebra for (Delimited) Persistent Stochastic Non-Interference
Andrea Marin, Carla Piazza, and Sabina Rossi
- Accountability, Responsibility, and Robustness in Agent Organizations
Matteo Baldoni, Cristina Baroglio, and Roberto Micalizio

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