MALLOW 2009

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Multi-Agent Logics, Languages, and Organisations

Second International Federated Workshops, MALLOW'009, Workshops proceedings

Turin, Italy, September 7-10, 2009

Preface

The Multi-Agent Logics, Languages, and Organisations Federated Workshops (MALLOW for short), in its *second edition* this year after the success of MAL-LOW'007 held in Durham (UK), is a forum for researchers interested in sharing their experiences in agents and multi-agent systems. MALLOW'009 was held at the Educatorio della Provvidenza, in Torino (Italy), from September 7th, 2009 through September 10th, 2009.

In particular, this edition includes the workshops:

- Agents, Web Services and Ontologies, Integrated Methodologies (MALLOW-AWESOME'009);
- Coordination, Organization, Institutions and Norms in Agent Systems & On-line Communities (COIN@MALLOW'009);
- Formal Approaches to Multi-Agent Systems (FAMAS'09);
- LAnguages, methodologies and Development tools for multi-agent systemS (LADS'009);
- Multi-Agent Systems and Simulation (MAS&S'09).

MALLOW-AWESOME'009 wants to stimulate discussion among researchers working on Agents, Web Services, and Ontologies, in order to help the identification and the definition of Methodologies for integrating them. The realisation of distributed, open, dynamic, and heterogeneous software systems is, in fact, a challenge that involves many facets, from formal theories to software engineering and practical applications. Scientists in various research areas, such as Semantic Web, Web Services, Agents, Ontologies, are attacking this problem from different perspectives. MALLOW-AWESOME'009 attempts to provide a discussion forum for collecting and comparing such diverse experiences with the aim of fostering cross fertilization.

COIN@MALLOW'009 belongs to the COIN workshop series, which brings together the topics of coordination, organization, institutions and norms in the context of multi-agent systems. This edition of COIN focusses on these issues in the context of on-line communities, where we seek contributions that explore the dimensions of social, legal, economic and technological norms as they affect agent-agent, agent-human, human-human interactions.

FAMAS'09, the fourth edition of the FAMAS workshop series, after FAMA-S'03 affiliated to ETAPS'03 in Warsaw, FAMAS'06 affiliated with ECAI'06 in Riva del Garda, and FAMAS'007 affiliated with MALLOW'007 in Durham, aims at bringing together researchers from the fields of logic, theoretical computer science and multiagent systems in order to discuss formal techniques for specifying and verifying multi-agent systems.

LADS'009 aims to offer a rich forum for leading researchers, from both academia and industry, interested in sharing their experiences about the theory

and practice of formal approaches, programming languages, tools and techniques that support the development and deployment of multi-agent systems. These are gaining increasing attention in important application areas such as electronic institutions, semantic web, web services, security, grid computing, ambient intelligence, pervasive computing, electronic contracting, among others.

MAS&S'09 aims at providing a forum for discussing recent advances on the integration of Simulation and Agent Oriented Software Engineering (AOSE) methodologies and techniques for the analysis, design, validation and implementation of Multi-Agent Systems.

MALLOW'009 has hosted also a special event, the COST AT Argumentation Day, organized by Guido Boella and Leendert van der Torre. The event discussed new directions in argumentation, such as temporal dynamics, fibring of argumentation frameworks, modal logics of argumentation, modal provability foundations for argumentation, etc. The day was opened by one of the four MALLOW'009 invited speakers, *Dov Gabbay*.

Besides Dov Gabbay, the organizers were very honored to have also *Fabio Bellifemine*, *Alexis Tsoukias*, and *Franco Zambonelli* as invited speakers.

Following the tradition of the previous edition, MALLOW'009 was part of Agents'009 that includes also EASSS'09, the eleventh edition of the *European Agent Systems Summer School*.

This volume contains the proceedings of the five workshops, for a total of forty-seven high quality papers, which were selected by the programme committees of the workshops for presentation. The volume is organized as follows. Besides this overall presentation, each workshop has an introductory essay, authored by the organizers, which presents the workshop, lists the programme committee members and additional reviewers, the accepted papers with their authors, and the workshop sponsors. It is followed by the workshop papers. The table of contents of this volume reports, for each workshop, the page number of its introductory essay and the first page of the workshop papers.

We would like to thank all authors for their contributions, the members of the Steering Committee for the precious suggestions and support, and the members of the Programme Committees and the additional reviewers for the excellent work during the reviewing phase, the sponsors, the head of the Educatorio della Provvidenza, and all the persons who helped the organization of this event.

August 22th, 2009

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Table of Contents