

Preface

This volume contains the papers presented at AT 2012: Agreement Technologies 2012, held on October 15-16, 2012, in Dubrovnik, Croatia. Agreement Technologies refer to computer systems in which autonomous software agents negotiate with one another, typically on behalf of humans, in order to come to mutually acceptable agreements. An agent may choose whether to fulfill an agreement or not, and it should fulfill it when there is an obligation to do so derived from the standing agreements. Autonomy, interaction, mobility and openness are key concepts studied within the AT approach. Semantic alignment, negotiation, argumentation, virtual organisations, learning, real time, and several other technologies are part of the sandbox to define, specify and verify such systems.

The first International Conference on Agreement Technologies, AT 2012, is an interdisciplinary forum that brings together researchers and practitioners working on the various topics comprising this emergent and vibrant field. It provides an avenue to discuss and exchange new ideas and techniques for the design, implementation and verification of next generation open distributed systems centered on the notion of agreement among computational agents. The AT 2012 conference focuses on the following topics: Argumentation, negotiation, Trust and reputation, Coordination and distributed decision making, Computational Social Choice, Semantic alignment, Inter-theory Relations, Decision and game theoretic foundations for agreement, Agent Commitments, Semantic Service Coordination, Normative Systems, Individual reasoning about norm adoption, Collective deliberation about norm adoption, Autonomic Electronic Institutions, Group planning agreements, Deliberative Agreement: social choice and collective judgment, Evolution of organisational structures, Social intelligence, Logics for Agreements, Realtime agreements, Agreement patterns, Agreement technologies architectures, environments and methodologies, Applications of agreement technologies (e.g. web service composition, contract automation, supply chain automation, sensor networks, etc.)

There were 71 submissions. Each submission was reviewed by at least 2 program committee members or reviewers. The committee decided to accept 27 full papers reporting on original and previously unpublished work that is currently not under review in any conference or journal and 25 position papers that represent either a summary of original work that has already been published in a conference or journal, or a summary of original results obtained as a product of STSMs funded by the Agreement Technologies Cost Action, or ongoing research that can lead to important contributions to or of Agreement Technologies. The program also includes one invited talk and a panel, sponsored by The European Network for Social Intelligence (SINTELNET) .

The conference is supported by COST Action IC0801 on Agreement Technologies, the European Science Foundation (ESF), The European Network for Social Intelligence (SINTELNET), CETINIA, the Ministry of Science, Education and Sports of the Republic of Croatia, the Faculty of Electrical Engineering and Computing of the University of Zagreb and the Spanish Project on Agreement Technologies. We wish to extend our warm thanks to the AT 2012 Organizing

Committee, the Program Committee members, the reviewers and all authors of submitted papers for making this conference so rewarding.

October 15-16, 2012

Sascha Ossowski (Conference
chair)

Francesca Toni (Programme
co-chair)

George Vouros (Programme
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