

PREFACE

This publication presents the proceedings of the 2016 workshop on Trust in Agent Societies, held at the Autonomous Agents and Multiagent Systems International Conference (AAMAS) on May 10, 2016 in Singapore. The call for papers included below clarifies the intended scope of the workshop.

Trust is important in many kinds of interactions, including direct or computer-mediated human interaction, human-computer interaction and among social agents; it characterizes those elements that are essential in social reliability. It also informs the selection of partners for successful multiagent coordination (for example, in robotics applications). Trust is more than communication that is robust against repudiation or interference. The reliability of information about the status of a trade partner, for example, is only partly dependent on secure communication.

With the growing prevalence of social interaction through electronic means, trust, reputation, privacy and identity become more and more important. Trust is not just a simple, monolithic concept; it is multi-faceted, operating at many levels of interaction, and playing many roles. Another growing trend is the use of reputation mechanisms, and in particular the interesting link between trust and reputation. Many computational and theoretical models and approaches to reputation have been developed in recent years (for ecommerce, social networks, blogs, etc.). Further, identity and associated trustworthiness must be ascertained for reliable interactions and transactions. Trust is foundational for the notion of agency and for its defining relation of acting "on behalf of". It is also critical for modeling and supporting groups and teams, for both organization and coordination, with the related trade-off between individual utility and collective interest. The electronic medium seems to weaken the usual bonds of social control and the disposition to cheat grows stronger: this is yet another context where trust modeling is critical.

The aim of the workshop is to bring together researchers (ideally from different disciplines) who can contribute to a better understanding of trust and reputation in agent societies. We welcome submissions of high-quality research addressing issues that are clearly relevant to trust, deception, privacy, reputation, security and control in agent-based systems, from theoretical, applied and interdisciplinary perspectives. Submitted contributions should be original and not submitted elsewhere. Papers accepted for presentation must be relevant to the workshop, and to demonstrate clear exposition, offering new ideas in suitable depth and detail.

The scope of the workshop includes (but is not limited to):

- *Trust and risk-aware decision making*
- *Game-theoretic models of trust*
- *Deception and fraud, and its detection and prevention*
- *Intrusion resilience in trusted computing*
- *Reputation mechanisms*

- *Trust in the socio-technical system*
- *Trust in partners and in authorities*
- *Trust during coordination and negotiation of agents*
- *Privacy and access control in multi-agent systems*
- *Trust and information provenance*
- *Detecting and preventing collusion*
- *Trust in human-agent interaction*
- *Trust and identity*
- *Trust within organizations*
- *Trust, security and privacy in social networks*
- *Trustworthy infrastructures and services*
- *Trust modeling for real-world applications*

We received 10 submissions and accepted 8 papers, as listed in the Table of Contents. All papers received thorough review from at least 3 members of our Program Committee, who were generally impressed with the quality of the submissions. The Program Committee is listed on the next section of this publication. Authors of papers were from institutions widely distributed around the globe, including USA, Spain, Poland, Italy, Brazil and Singapore. The papers covered a broad range of subtopics in the study of trust in multiagent systems.

The workshop included as well an invited talk by leading expert Audun Josang of the University of Oslo in Norway (one of the founding members of the trust modeling subfield of multiagent systems) on the topic of Computational Trust with Subjective Logic, along with a final panel reflecting on the current state and the future directions for trust modeling research and the dissemination of its results.

Trust 2016 Workshop Co-Chairs

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Murat Sensoy - Ozyegin University, Turkey

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