Workshop on Emergent Semantics and cooperaTion in opEn systEMs (ESTEEM'08)

Preface

The ESTEEM'08 workshop - held in conjunction with DEBS 2008 International Conference on Distributed Event-Based Systems - originates from the ESTEEM research project and aims to bring together researchers and practitioners from different communities on the theme of emergent semantics and cooperation in open networked systems to share their ideas, views, and progresses on new solutions, systems, and techniques.

Effective sharing of digital resources in the current evolving web of millions of autonomous peers requires to go beyond conventional information integration architectures. Data and services have indeed to be exchangeable in open and dynamic environments, where interacting peers do not necessarily share a common understanding of the world at hand and do not have a complete picture of the context where the interaction occurs. Conversely, peers dynamically produce new information or knowledge, create new semantic communities, and establish new forms of semantic interoperability, based on dynamic, trustful agreements on common interpretations within the context of a given task, referred to as "emergent semantics".

The keynote presents the challenging requirements of emergent semantics and cooperation in open systems, and shows the achievements of the ESTEEM research project for data and service discovery in P2P systems, with advanced solutions for trust and quality-based data management, P2P infrastructure definition, query processing and dynamic service discovery in a context-aware scenario.

The first paper session is devoted to present techniques and mechanisms for the network layer of the peer-to-peer collaboration infrastructure, with solutions for building reliable overlay networks and for semantic event processing for knowledge coordination.

The second session presents methods and tools for semantic collaboration at the application layer, with an approach for enforcing record linkage for data coordination and with a tool environment for automated semantic web service composition.

A special thank the members of the international program committee for providing their technical expertise in reviewing the submitted papers, to the keynote speaker for her interesting keynote talk, and to the organizers of the DEBS conference for their support in the ESTEEM workshop organization. We also thank the authors of the accepted papers and the ESTEEM project members for sharing their work and experiences in this workshop.

July 2008

Silvana Castano
Stefano Montanelli
(Editors)