Nicoletta Fornara, George Vouros (eds.)

11th International Workshop on

Coordination, Organization, Institutions and Norms in Agent Systems

Lyon, France,
30th August - 2nd September 2010

Workshop Notes

COIN@MALLOW 2010 web site
http://ai-lab-webserver.aegean.gr/coin@mallow2010/

Preface

The development of complex distributed AI systems with heterogeneous and diverse knowledge is a challenge. System components must interact, coordinate and collaborate to manage scale and complexity of task environments targeting persistency and maybe, evolution of systems. Managing scale and complexity requires organized intelligence; in particular intelligence manifested in organizations of agents, by individual strategies or collective behaviour. System architects have to consider: the inter-operation of heterogeneously designed, developed or discovered components (agents, objects/artefacts, services provided in an open environment); inter-connection which cross legal, temporal, or organizational boundaries; the absence of global objects or centralised controllers; the possibility that components will not comply with the given specifications; and embedding in an environment which is likely to change, with possible impact on individual and collective objectives.

The convergence of the requirement for intelligence with these operational constraints demands: coordination, the collective ability of heterogeneous and autonomous components to arrange or synchronise the performance of specified actions in sequential or temporal order; rational and open organization, a formal structure supporting or producing intentional forms of coordination, capable of managing changes in the environment in which it operates; institution, an organization where the performance of designated actions by empowered agents produces conventional outcomes; and norms, standards or patterns of behaviour in an institution established by decree, agreement, emergence, and so on.

The automation and distribution of intelligence is the subject of study in autonomous agents and multi-agent systems; the automation and distribution of intelligence for coordination, organization, institutions and norms is the interest of this workshop on Coordination, Organization, Institutions and Norms in Agent Systems (COIN), in its eleventh edition. The COIN@MALLOW 2010 workshop is part of the COIN series of workshops http://www.pcs.usp.br/ coin/.

This edition of COIN received fourteen high quality submissions, describing works by researchers coming from nine different countries, eight of which have been selected by the Programme Committee as regular papers and two of which have been selected by the Programme Committee as position papers. Each paper received at least three reviews in order to supply the authors with helpful feedback that could stimulate the research as well as foster discussion. COIN@AAMAS2010 and COIN@MALLOW2010 post-proceedings will be published soon in a single Springer LNCS volume.

We would like to thank all authors for their contributions, the members of the Steering Committee for the valuable suggestions and support, and the members of the Programme Committee for their excellent work during the reviewing phase.

August 4^{th}, 2010

Nicoletta Fornara, George Vouros

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