Stephen Cranefield Insu Song (Eds.)

# Agent Based Simulation for a Sustainable Society and Multi-agent Smart Computing

International Workshops, PRIMA 2011 Wollongong, Australia, November 2011 Revised Selected Papers



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#### Preface

This volume contains selected and revised versions of papers that were presented at two of the workshops held at the 14th International Conference on Principles and Practice of Multi-Agent Systems (PRIMA 2011) on November 14, 2011, in Wollongong, Australia. PRIMA is one of the oldest active agent computing forums, beginning in 1998 as a regional agent workshop (the Pacific Rim International Workshop on Multi-Agents).

Alongside the main conference, PRIMA includes workshops that are intended to facilitate active exchange, interaction and comparison of approaches, methods and various ideas in specific areas related to intelligent agent systems and multiagent systems. In alignment with the conference theme for PRIMA 2011 of "Agents for Sustainability," the 2011 workshop program sought to encourage thought leadership in the agent community as to how agent computing can be applied to enhance sustainable practices in our world, from agriculture and personal resource usage to the design and operation of more sustainable cities. The call for workshops invited proposals for workshops addressing this theme, as well as workshops that continued to explore the "Agents and Services" theme of PRIMA 2010, which addressed connections to service science and service-oriented computing.

The two workshops covered by this volume are the Workshop on Agent-Based Simulation for a Sustainable Society (ABSSS 2011) and the International Workshop on Multi-Agent Smart Computing (MASmart 2011). A third workshop was also held at PRIMA 2011: the Second International Workshop on Services and Agents (ServAgents 2011).

Papers submitted to these workshops were reviewed by at least two reviewers, and the accepted papers were included in the informal workshop proceedings and presented at the workshops. Selected papers were then invited to be revised and submitted for consideration for inclusion in this volume after further review by the workshop Program Chairs.

The PRIMA 2011 workshops were held at the University of Wollongong, Australia, which provided generous support. Particular mention goes to the conference General Chairs, Aditya Ghose and Guido Governatori, the Local Organizing Chairs, Minjie Zhang and Hoa Dam, the ServAgent 2011 Organising Committee (Hoa Khanh Dam and Aditya Ghose), the ABSSS 2011 Organising Committee (Frank Dignum, Virginia Dignum, Liz Sonenberg, Yoshi Kashima and Sarah Hickmott), and the MASmart 2011 Organizing Committee (Takayuki Ito and Gokiso Showa-ku). Finally, we thank the members of the workshop Program Committees who produced timely reviews under time constraints.

July 2012

Stephen Cranefield Insu Song

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