Lecture Notes in Artificial Intelligence 5180

Edited by R. Goebel, J. Siekmann, and W. Wahlster

Subseries of Lecture Notes in Computer Science

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Cooperative Information Agents XII

12th International Workshop, CIA 2008
Prague, Czech Republic, September 10-12, 2008
Proceedings

Springer

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Library of Congress Control Number: 2008934044

CR Subject Classification (1998): I.2.11, I.2, H.4, H.2.8, H.3.3, C.2.4

LNCS Sublibrary: SL 7 – Artificial Intelligence

ISSN 0302-9743
ISBN-10 3-540-85833-4 Springer Berlin Heidelberg New York
ISBN-13 978-3-540-85833-1 Springer Berlin Heidelberg New York

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Printed in Germany

Typesetting: Camera-ready by author, data conversion by Scientific Publishing Services, Chennai, India
Printed on acid-free paper SPIN: 12512379 06/3180 5 4 3 2 1 0

Preface

These are the proceedings of the 12th international workshop on cooperative information agents (CIA 2008), held at the Czech Technical University in Prague, Czech Republic, on September 10–12, 2008.

In today's world of ubiquitously connected heterogeneous information systems, business services and computing devices, the intelligent coordination and provision of relevant added-value information or services to the user at any time, anywhere is of key importance to a variety of applications. This challenge is envisioned to be coped with by means of appropriate intelligent and cooperative information agents.

An intelligent information agent is a computational software entity that is capable of accessing one or multiple, potentially heterogeneous and distributed information sources, proactively acquiring, mediating, and maintaining relevant information or services on behalf of its human users, or other agents, preferably just in time and anywhere. One key challenge of developing intelligent and cooperative information systems is to balance the autonomy of networked data, information, and knowledge sources with the potential payoff of leveraging them by the appropriate use of such agents.

Research on intelligent information agents and systems is inherently cross disciplinary covering themes from domains such as AI, Multiagent Systems, HCI, Semantic Web Technologies, Web Services, Information Systems, Knowledge Discovery, Information Retrieval, and P2P Computing.

The objective of the international workshop series on cooperative information agents (CIA), since its establishment in 1997, has been to provide a distinguished, interdisciplinary forum for researchers, programmers, and managers to get informed about, present, and discuss the latest high-quality results in the research and development of agent-based intelligent and cooperative information systems, and applications for the Internet, Web and Semantic Web. Each event in the series offers regular and invited talks of excellence, given by renowned experts in the field, a selected set of system demonstrations, and honors innovative research and development of information agents by means of a best paper award and a system innovation award, respectively. The proceedings of the series are regularly published as volumes of Springer's Lecture Notes in Artificial Intelligence (LNAI) series.

In keeping with its tradition, this year's workshop featured a number of excellent regular and invited talks given by leading researchers covering a broad area of interest. In particular, CIA 2008 featured 5 invited and 19 regular papers selected from 38 submissions. The papers selected during the peer-review evaluation process are all included in this volume, which contains interesting, inspiring, and advanced work on the research and development of intelligent information agents worldwide. All workshop proceedings have been published by

Springer-Verlag as Lecture Notes in Artificial Intelligence volumes: 1202 (1997), 1435 (1998), 1652 (1999), 1860 (2000), 2182 (2001), 2446 (2002), 2782 (2003), 3191 (2004), 3550 (2005), 4149 (2006), 4676 (2007).

The CIA 2008 workshop issued a best paper award and a system innovation award to acknowledge and honor highly-innovative research and development, respectively, in the area of intelligent and cooperative information agents for the Internet and the Web. The system award was sponsored by Whitestein Technologies, the best paper award was sponsored by the workshop series. There has also been some financial support available to a limited number of students as (co-)authors of accepted papers to present their work at the CIA 2008 workshop; these grants were sponsored by IEEE FIPA standard committee, and the workshop series.

The CIA 2008 workshop was organized in cooperation with the Association for Computing Machinery (ACM), in particular the ACM special interest groups on Artificial Intelligence (SIGART), on Hypertext, Hypermedia and Web (SIGWEB), and on Knowledge Discovery in Data (SIGKDD). We are very grateful and indebted to our sponsors for the financial support that made this event possible. The sponsors of CIA 2008 were:

- Czech Technical University in Prague, Czech Republic
- IEEE Computer Society Standards Organisation Committee on Intelligent and Physical Agents (FIPA)
- Air Force Research Laboratory (AFRL), USA
- Whitestein Technologies, Switzerland
- Rockwell Automation, Czech Republic
- Digital Enterprise Research Institute (DERI) at the National University of Ireland, Galway
- Certicon, Czech Republic

We are also very grateful to the authors, the invited speakers, and attendees for contributing and discussing the latest results in relevant areas of this workshop, as well as to all members of the program committee, and the external reviewers for their critical reviews of submissions. Finally, a particularly cordial thanks goes to the local organization team from the Czech Technical University for providing an excellent venue and facilities and a very nice social program in the beautiful city of Prague.

We hope you enjoyed CIA 2008 and were inspired for your own work!

September 2008

Matthias Klusch
Michal Pechoucek
Axel Polleres

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