Lecture Notes in Artificial Intelligence 1435

Subseries of Lecture Notes in Computer Science
Edited by J. G. Carbonell and J. Siekmann

Lecture Notes in Computer Science
Edited by G. Goos, J. Hartmanis and J. van Leeuwen

Matthias Klusch Gerhard Weiß (Eds.)

Cooperative Information Agents II

Learning, Mobility and Electronic Commerce for Information Discovery on the Internet

Second International Workshop, CIA'98
Paris, France, July 4-7, 1998
Proceedings

Springer

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Cataloging-in-Publication Data applied for

Die Deutsche Bibliothek - CIP-Einheitsaufnahme

Cooperative information agents II : learning, mobility and electronic commerce for information discovery on the internet ; second international workshop ; proceedings / CIA '98, Paris, France, July 4 - 7, 1998. Matthias Klusch ; Gerhard Weiß (ed.). - Berlin ; Heidelberg ; New York ; Barcelona ; Budapest ; Hong Kong ; London ; Milan ; Paris ; Santa Clara ; Singapore ; Tokyo : Springer, 1998
(Lecture notes in computer science ; 1435 : Lecture notes in artificial intelligence)
ISBN 3-540-64676-0

CR Subject Classification (1991): H.2, I.2, H.3.3, H.4.4, C.2.4

ISBN 3-540-64676-0 Springer-Verlag Berlin Heidelberg New York

Typesetting: Camera ready by author
SPIN 10637697 06/3142 – 5 4 3 2 1 0 Printed on acid-free paper

Foreword

These are the proceedings of the Second International Workshop on Cooperative Information Agents, held in Paris, July 4–7, 1998.

The research and application area of cooperative information agents is of rapidly increasing importance. Information agents are computational software systems that have access to multiple, heterogeneous and geographically distributed information sources. These agents have to face up to the increasing complexity of modern information environments ranging from relatively simple in-house information systems, through large-scale multidatabase systems, to the visionary Infosphere in the Internet. Cooperative information agents work together in order to achieve private or global goals. One of their main tasks is an active search for relevant information in non-local domains on behalf of their users or other agents. This includes retrieving, analyzing, manipulating, and integrating information available from different information sources. The development of cooperative information agents requires expertise from several different research areas, especially AI, DAI, databases, and CSCW. It is particularly important to investigate to what extent AI methods can be applied for information discovery by groups or teams of cooperative information agents in the Internet. This concerns, e.g., the use of efficient techniques from machine learning, evolutionary computing, and symbolic or numerical approaches for uncertain reasoning. Moreover, commercial aspects of information gathering in the Internet are becoming more and more relevant, e.g., agents are paid and have to pay for services. Thus, methods for rational, utility-based cooperation among the agents are needed. In addition, mobile information agents seems to be attractive for flexible and efficient information discovery in constrained environments.

The interdisciplinary CIA workshop series covers the whole thematic range of cooperative information agents. In addition, each workshop in this series focuses on a few selected themes of particular relevance and actuality. The CIA-98 workshop, building on the success of CIA-97 ('DAI meets Databases', LNAI Series Vol. 1202), mainly concentrates on the themes learning, mobility, and electronic commerce in the context of cooperative information discovery. CIA-98 features 10 invited research and industrial lectures, and 14 contributed regular papers selected from 54 submissions.

Acknowledgements. First of all, we gratefully acknowledge the financial support from our Co-Sponsors

DAIMLER-BENZ AG, Stuttgart (Germany) and
GEORGE MASON UNIVERSITY, Fairfax VA (USA).

The workshop was organized in cooperation with the special interest groups on

Distributed Artificial Intelligence,
Database Systems, and
Information Retrieval

of the German Society for Computer Science (GI), and the

Institute for Integrated Publication and Information Systems

of the German National Research Center for Information Technology (GMD). We are especially grateful to the authors and invited speakers for contributing to this workshop. Last but not least, we thank the members of the program committee and the external referees for very carefully reviewing the submitted papers.

Paris, July 1998 Matthias Klusch & Gerhard Weiß

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