

## Preface

These are the proceedings of the 7th International Workshop on Cooperative Information Agents (CIA 2003), held at the Sonera Conference Center in Helsinki, Finland, August 27–29, 2003. It was co-located with the 4th Agentcities Information Days.

One key challenge of developing advanced agent-based information systems is to balance the autonomy of networked data and knowledge sources with the potential payoff of leveraging them by the appropriate use of intelligent information agents on the Internet. An information agent is a computational software entity that has access to one or multiple, heterogeneous, and distributed data and information sources; proactively searches for and maintains relevant information on behalf of its human users or other agents, preferably just-in-time. In other words, it is managing and overcoming the difficulties associated with information overload in the open and exponentially growing Internet and Web. Depending on the application and tasks at hand information agents may collaborate in open, networked data and information environments to provide added value to a variety of applications in different domains. Thus, research and development of information agents is inherently interdisciplinary: It requires expertise in information retrieval, artificial intelligence, database systems, human-computer interaction, and Internet and Web technology.

Initiated in 1997, the purpose of the annual international workshop series on cooperative information agents (CIA) is to provide an interdisciplinary forum for researchers, software developers, and managers to get informed about, present, and discuss the latest high-quality results in advancements of theory and practice in information agent technology for the Internet and Web. Each event of this renowned series attempts to capture the intrinsic interdisciplinary nature of this research area by calling for contributions from different research communities, and by promoting open and informative discussions on all related topics. Since 2001, the series also issues a Best Paper Award, and a System Innovation Award, to acknowledge highly innovative research and development, respectively, in the domain of intelligent information agents.

In keeping with its tradition, this year's workshop featured a sequence of regular and invited talks of excellence given by leading experts in the field. These talks covered a broad area of topics of interest, such as pervasive information service provision; information agents and peer-to-peer computing; and information gathering and integration. Other topics were methods for negotiation and interaction; collaborative search and filtering; as well as issues of trust and engineering of information agent systems.

This year the *CIA System Innovation Award* and the *CIA Best Paper Award* were sponsored by Whitestein Technologies AG, Switzerland, and Elsevier Science, The Netherlands, respectively. The Spanish Association for Artificial Intelligence (AEPIA) provided limited financial support to its members who were co-authors of accepted papers so that they could give their presentations at CIA 2003.

CIA 2003 featured 2 invited, 17 regular (long), and 6 short papers selected from 60 submissions. The result of the peer-review of all contributions is included in this volume, rich in interesting, inspiring, and advanced work on 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), and 2446 (2002).

The CIA 2003 workshop was organized in cooperation with the Association for Computing Machinery (ACM). In addition, we are very much indebted to our sponsors, whose financial support made this event possible and contributed to its success. The sponsors of CIA 2003 were:

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We are also grateful to the authors and invited speakers for contributing to this workshop, as well as to all the members of the program committee and the external reviewers for their very careful, critical, and thoughtful reviews of all submissions. Finally, a deep thanks goes to each of the brave members of the local organization team at TeliaSonera in Helsinki for their hard work in providing CIA 2003 with a modern, comfortable location, and an exclusive social program.

We hope you enjoyed CIA 2003, and were inspired!

August 2003

Matthias Klusch, Andrea Omicini,  
Sascha Ossowski, Heimo Laamanen

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