## **Call for Papers**



## **ECAI 2004 Workshop**

# Agent-Mediated Knowledge Management (AMKM-04)

August 22-27, 2004, Universidad Politécnica de Valencia (Spain)

#### **Deadlines & Submission Format**

Submission of papers	01. April 2004
Author notification	01. May 2004
Camera ready papers	01. June 2004

We invite the electronic submission of technical papers adhering to the ECAI main conference layout instructions which can be found here: <a href="http://www.dsic.upv.es/ecai2004/cfp/style/style.html">http://www.dsic.upv.es/ecai2004/cfp/style/style.html</a>

**Full papers** should have a length of up to 10 pages and should be sent in PDF format by e-mail to **elst@dfki.de**.

Those interested in participating without a full paper should send a two-page **extended abstract or statement of interest** describing their AMKM-related work and areas of interest. Statements of interest may discuss work in any stage of development, from concepts and future directions up to finished work. Please use the full paper template also for preparing extended abstracts.

We explicitly invite **system demonstrations** which might be announced / accompanied by either a full paper or an extended abstract.

#### **Motivation**

**Knowledge Management (KM)** is a predominant trend in business in the recent years. It is not only an important *field of application* for AI and Semantic Web technologies, such as CBR for Intelligent Lessons-Learned Systems, or Text Classification for Information Push services; it also provides *new challenges* to the AI community, like context-aware knowledge delivery. Scaling-up research prototypes to real-world solutions usually requires an application-driven integration of several basic technologies, e.g., ontologies for knowledge sharing and reuse plus collaboration support like CSCW systems, and personalized information services. Typical characteristics of such an integration are:

- manifold logically and physically dispersed actors and knowledge sources,
- different degrees of formalization of knowledge,
- different kinds of (web-based) services and (legacy) systems,
- conflicts between local (individual) and global (group or organizational) goals.

**Agent technology** has already been successfully employed for many partial solutions within the overall picture: Agent-based workflow, cooperative information gathering, intelligent information integration, or personal information agents, are established techniques in this area. In order to cope with the inherent complexity of a more comprehensive solution, the concept of **Agent-mediated Knowledge Management (AMKM)** deals with collective aspects in an attempt to cope with the conflict between desired order and actual behavior in dynamic environments. AMKM introduces a social layer, which structures the society of agents by defining specific roles and possible interactions between them.

In this workshop we invite contributions which illustrate methodological, technical and application aspects of Agent-mediated Knowledge Management. **Topics of interest** include:

#### Methodology for AMKM

- o Analysis and Design Methods for AMKM Systems
- o Relationship between AMKM and Agent-oriented Software Engineering
- Relationship between AMKM and Business Engineering Methods

#### Functionalities in AMKM Systems

- Distributed Organizational Memories
- o Ontology Negotiation and Ontology Lifecycle Management
- Agents for Group Formation and Awareness
- Agents for Supporting Social Processes (Trust, Reputation)
- Agent-based Workflow in the KM Context
- o Collaborative Information Retrieval
- Emergent Semantics and Pervasive Semantics

#### • Implementation of AMKM Systems

- o Architectures and Platforms for Socially Enabled Agents
- Distributed KR&R for Socially Enabled Agents
- Semantic Web methods for AMKM
- User Modeling for Agent Mediated Social Processes
- Human-Computer Interaction in AMKM (Ontology Visualization, Web Design Guidelines for Knowledge Navigation, User Interfaces for KM)
- Practical application examples for (aspects of) AMKM systems

#### Basic Research Questions for AMKM

- $\circ$  Benefits and reasons for the application of the agent paradigm to KM
- Organizational implications of agent use in KM (e.g., with respect to risks and responsibilities)
- o Formal models for AMKM
- Relationships to other research paradigms like P2P or Grid computing, Semantic Web and Semantic Web Services, or mobile computing and mobile KM
- Evaluation of KM and AMKM systems

#### **Predecessor Event**

The first AMKM workshop (<u>AMKM-2003</u>) was organized as a AAAI Spring Symposium at Stanford University. Revised and additional papers (including an introduction/overview on AMKM) are available as <u>Volume 2926 of the Springer LNAI Series</u>.

## **Workshop Organizers**

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### (preliminary) Program Committee

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