

Call for Papers
VIII Workshop on Agents Applied in Health Care
(held within the 14th Conference on Artificial Intelligence in Medicine)
Murcia, Spain, June 1st 2013

<http://deim.urv.cat/~itaka/workshops/aime2013/>
<http://www.aimecine.info/aime13/>

Intelligent agent-based systems constitute one of the most exciting research areas in Artificial Intelligence. Due to the growing interest in the application of agent-based systems in health care, a number of applications addressing clinical problems are already based in agent technology. Thus, it may now be a good time for the specialists in the field to meet and report on the results achieved in this area, to discuss the benefits (and drawbacks) that agent-based systems may bring to medical domains, and also to provide a list of the research topics that should be tackled in the near future.

Current topics of research include personalized health systems for remote and autonomous tele-assistance, communication and co-operation between distributed intelligent agents to manage patient care, information agents that retrieve medical information from distributed repositories, intelligent and distributed data mining, and multi-agent systems that assist the doctors in the tasks of monitoring and diagnosis. Several methodological and technical problems have been discovered by the researchers that attempt to deploy agent-based systems in the medical area; just to name a few, the growing number of huge databases that need to be integrated (*e.g.* genetic data from next generation sequencing), the difficulty to integrate new agent-based systems with legacy software, the need to apply changing national and international laws and regulations concerning the privacy of medical data and the security of the transaction of patient information between agents.

Submitted papers should address at least one of the following issues:

- Co-operation between intelligent agents to improve patient management (*e.g.* distributed patient scheduling).
- Agents that provide autonomous and remote care delivery.
- Agents that provide information about medical services.
- Multi-agent systems for patient monitoring and diagnosis.
- Successful applications of agents and multi-agent systems in health care.
- MAS that improve medical training or education (*e.g.* tutoring systems).
- Medical agent-based decision support systems.
- Information agents that gather, compile and organise medical data and knowledge available on Internet.
- Solutions to the basic methodological and technological problems associated to the real deployment of health-care agent-based systems:
- Legal and ethical issues related to the use of agents in health care.
- Surveys providing an up to date view of the state of the art in the area of agents in health care.

Important Dates

Submission of papers: March 10th, 2013
Acceptance/Rejection of papers: April 15th, 2013
Final revised version of papers: April 30th, 2013
Workshop: June 1st, 2013

Workshop Organizers

Dr. Antonio Moreno (contact person, antonio.moreno@urv.cat) - Univ. Rovira i Virgili, Tarragona, Spain
Dr. Ulises Cortés - Technical Univ. of Catalonia, Barcelona, Spain
Mr. Magí Lluch-Ariet - Barcelona Digital, Barcelona, Spain
Dr. Helena Lindgren - Univ. of Umea, Umea, Sweden
Dr. Michael Schumacher - University of Applied Sciences Western Switzerland, Sierre, Switzerland
Dr. David Isern - Univ. Rovira i Virgili, Tarragona, Spain

Submission process

The papers must present original results. They must be formatted using the AIME format (Springer LNCS). The maximum length is 10 pages. At least one different author of each accepted paper should attend the workshop to present the work. The submission must be made using EasyChair, through the following link:

<https://www.easychair.org/conferences/?conf=aahcaime2013>

Review process

All the submitted papers will be revised by at least three members of the Program Committee. The main aspects to be reviewed will be originality, technical accuracy and relevance to the workshop.

Publication and post-proceedings

The workshop papers will not appear in the LNAI volume associated to the regular AIME conference papers, and their authors will not be invited to send extended versions for the AI in Medicine special issue associated to the main conference. However, if the quantity and quality of the papers accepted in the workshop is appropriate, the workshop organizers will actively try to publish revised and extended versions of the accepted papers in a special issue of a journal or in a specific book. Most of the previous editions of the workshop had a post-publication of this type (4 special issues and 2 books).