

6th EUROSIM Congress on Modelling and Simulation
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Ljubljana, Slovenia

<http://www.eurosim2007.org>



Announcement of a special session:

Domain Modelling through Autonomous Discovery

Session organizer:

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Description

This special session will be concerned with methods for automated modelling of agent's environment through agent's autonomous discovery. An example is a robot exploring its environment, whereby taking measurements and automatically constructing a model of the environment by learning from measured data. This may involve the planning and execution of new critical experiments. The result of such autonomous discovery is a model, or new knowledge about the agent's domain that enables the agent making predictions, planning and reasoning in the domain.

Topics of Interest

- Machine learning methods for autonomous discovery
- Learning in robot systems
- Theory formation and theory revision
- Identification of critical experiments
- Planning of experiments
- Planning with incomplete knowledge
- Qualitative models of robot worlds
- Principles of "gaining insights"
- Role of robot curiosity in autonomous discovery
- Hardware and software tools and platforms for autonomous discovery

Deadlines:

Announcement of a contribution to the session organiser (to facilitate session organization):

As soon as possible

Submission of 2 page extended abstract or draft paper:

15 May 2007 (by E-mail to the session organizer)

Acceptance notification after paper review:

30 May 2007

Full paper (camera ready) due to:

30 June 2007 (to the conference server with copy to the session organizer)

See also instructions: <http://www.eurosim2007.org/Instructions.html>

Ivan Bratko