

Workshop Description



Session Title:

EURON Good Experimental Methodology and Benchmarking SIG: past, ongoing and future activities Which role for competitions?

Organiser(s):

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Motivation and objective:

As the complexity of current robotic and embodied intelligent systems grows, it is more and more necessary to define proper experimental approaches and benchmarking procedures. On the one hand, reliable benchmarks are called for in order to allow the comparison of the many research results in robotics research, so that their industrial application is eventually possible. On the other hand, if robotics aims to be regarded as serious science, replication of experiments deserves conscientious attention; it is necessary to be able to verify if and by which measure new procedures and algorithms proposed in research papers constitute a real advancement and can be used in new applications. New more successful implementations of concepts already presented in the literature, but not implemented with exhaustive experimental methodology, risk to be ignored, if appropriate benchmarking procedures are not in place, allowing to compare the actual practical results with reference to standard accepted procedures. Both replication and benchmarking are needed to foster a cumulative advancement of our knowledge of intelligent physical agents and even to correctly appreciate disruptive innovation in the science and technology of robots. Should we take inspiration from experimental practice in disciplines such as biology or medicine? Which role for competitions? How to define a 'challenge'?

After years of activities 'something' is now possible!

Approach:

The workshop will consist of the presentation of past, ongoing and future activities on the topic. This will be followed by a free discussion with a couple of short talks and a round table session focusing on challenges, gem and benchmarking in cognition and robotics.

Agenda of the workshop:

- 14:15 – 14:45 Presentation of activities:
- 14:45 – 15:45 Round table short presentations by participants interleaved by discussion
- 15:45 – 16:00 Wrap-up

Speaker(s):

to be announced after ongoing cfp, all attending people will be entitled to voice their opinion (with time limitations) on a fifo base.

How can participants contribute to, and prepare for, the workshop?

By checking the resources listed here below

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Further information:

<http://www.heronrobots.com/EuronGEMSig/>, <http://www.robot.uji.es/EURON/en/index.htm>,
<http://www.nist.gov/el/isd/permis2012.cfm>

Planned follow-up:

After the workshop, the information collected will be organized in a short report which will be made available on the EuronGEMSig and Europ Website and used for planning further activities on the topic.