

RobotCub Open Call evaluation

Procedure

The RobotCub Open Call was launched on September 2007 with deadline for applicants on December 1st, 2007. The deadline was extended once by one week. The effective deadline of the call was December 7th, 5pm Brussels (Genoa) time.

31 proposals were received from UK, France, Germany, Spain, Italy, Sweden, Finland, Chile, Turkey, Romania, and USA. There were 7 non-EU proposals. We decided to award 6 robots since the increased cost of the iCub (around 200000 Euros) didn't allow full support of the initially planned 8 awards.

The announcement of the results was made on February 2nd, 2008 by email. Each principal investigator was contacted.

Ranking

The 10 best proposals are listed below. Ranking (numerical) was decided only for the first 10 best.

1. Embodied cognition using internal simulation and a global workspace, Murray Shanahan, Imperial College London.
2. Motor, affective and cognitive scaffolding for iCub, Olivier Sigaud, UPMC Paris.
3. Development of shared intentions and cooperation in a humanoid robot via situated simulation models, Peter Ford Dominey, CNRS, Univ. Lumiere Lyon 2.
4. iCub development of kids' manipulation skills, Michael Beetz, TUM, Munich.
5. An integrated anthropomorphic neuromorphic cognitive architecture for the iCub, Paul Verschure, UPF Barcelona.
6. Emergence of communication in iCub through sensorimotor and social interaction, Erol Sahin, METU, Ankara.
7. The role of sensorimotor function, associative memory and reinforcement learning in automatic acquisition of spoken language by an autonomous robot, Stephen Levinson, Univ. of Illinois at Urbana-Champaign.
8. iDriver: the iCub as a humanoid robotic driver, Raul Rojas, Freie Universitaet, Berlin.
9. Learning container/contents relations through observation and manipulation, Carme Torras, CSIC-UPC Barcelona.
10. Embodied models of perceptual and social development and learning, Jochen Triesch, JW Goethe University, Frankfurt.

Evaluation procedure

An evaluation committee of 6 members was appointed by the RobotCub directorate. The composition of the committee included: members of RobotCub, of the EU Commission and of the research community.

The evaluation procedure happened in two stages:

1. Each evaluator received the 31 proposals, guidelines and evaluation forms with specific criteria to guide marking.
2. A meeting was arranged in January 2008 to finalize decision and harmonize the scores of the evaluators.

It was decided that the evaluation would happen by dividing the proposals in three classes: 1. Clear award, 2. Further evaluation required, 3. Clear reject. After the first round there were 4 clear award and 10 clear reject. Several rounds were required to reach the final decision. For the first 10 best proposals ranking was decided based on the evaluation.

Each proposal received at least four evaluations.

Additional procedures

The first 6 proposals will be invited into a negotiation phase:

1. They will have to negotiate with the RobotCub Consortium and reinstate their intentions of:
 - a. Distribute their contribution as Open Source Software
 - b. Help in the assembly of their copy of the iCub

If possible, more iCubs might be awarded. The ranking will be used to determine the next best proposals.

In case a winner gives up for any reason, the ranking will be used to determine another winner.

It was also decided that each participant would receive a short evaluation report including scores and the evaluator comments.

Annex I – Open Call text
(attached as PDF)

Annex II – evaluation form

(attached as PDF)