CALL FOR PAPERS

Special Issue on
Replicable and Measurable Robotics Research

There are a number of issues in robotics, related to performance measurement, methods for the objective comparison of different algorithms and systems, the possibility itself to replicate published results.

We are now at a point where it is possible to give concrete directions for experiment planning, execution, and reporting, allowing objective performance comparisons and potentially affecting the content of obtained results, not only their 'production process'.

The key point to allow replication and comparison of results is having adequate data support: all the data necessary to repeat a given experiment.

This will be the very first well-structured example of a publication in robotics, which will list a series of replicable and objectively measurable results.

Contributed papers reporting about experiments, benchmarking methods, challenges and competitions are solicited. They need to include results on real robots and be described in such a way to allow their replication. In particular challenges and competitions might be needed to compare intelligent or system level behaviors and capabilities. We seek papers on challenges and competitions describing real world events with real robots and designed as robotics 'replicable experiments'. Any application area of Robotics and Automation can be considered, such as: Aerial Robotics, Rehabilitation and Assistive Robotics, Medical Robotics, Industrial robotics, Prosthetics and Exoskeletons, Wearable Robotics, Marine Robotics, and more

Timeline:

Call for papers	June 2014
Deadline for paper submission	10 November 2014
First review	6 February 2015
Final review	20 May 2015
Publication	September 2015

Guest Editors:

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Complete details at
http://www.ieee-ras.org/publications/ram/ram-special-issues