

Application Form / Workshop Description



Session Title:

Cognitive Vision in Object Manipulation and Grasping

Organiser(s):

- Norbert Kruger and Henrik Gordon Petersen, SDU - norbert@mmmi.sdu.dk
- Ruediger Dillmann and Tamim Asfour, University of Karlsruhe
- Danica Kragic, KTH Stockholm
- Markus Vincze and Michael Zillich, Technical University Vienna

Motivation and objective:

Vision based manipulation is an active research area with still many challenges connected to issues such as uncertainty of the visual information, active vision, dexterous manipulation, motion and action sequence planning. Moreover, the problems to be faced are so complex such that it is unlikely that a full modelling of the problem is possible and, as a consequence, learning will take a major role.

In this workshop, we discuss the state of the art in the field of vision based manipulation and present current research in the field. We in particular encourage contributions addressing the overall complexity of vision based manipulation systems. Topics to be addressed are

- Object recognition and pose estimation*
- Dexterous handling*
- Haptics in manipulation*
- Action sequence Planning*
- Learning*

Approach:

Talks with questions and one overall discussions at the end. Speakers are found through public announcements asking for submissions. Some speakers will be invited.

Agenda of the workshop:

- Depending on submitted papers

Speakers:

Depending on submitted papers and people coming to Odense

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

Paper submissions and Videos

Planned follow-up:

After the workshop, the information collected will be organized in a short report which will be made available on the EUROP Website and used for planning further awareness and training activities on Entrepreneurship.