

From Grippers to Hands

The present and the future of advanced robotic manipulators

Workshop, Tuesday March 6th, 8:30 – 12:30

The “hand” is the key differentiator between humans and other species. As robots strive for generality, they need more advanced hands and manipulators. And yet, complex and expensive end-effectors cannot compete with simpler grippers in important commercial markets. This workshop will bring together researchers and experts from both research institutes and leading companies developing along the spectrum of manipulation. We will present the state-of-the-art and approaches for developing versatile robotic hands. We will discuss the tensions between design approaches and application areas, and some ways that these have been resolved in the past, as well as exploring designs currently in the research domestic robotics. The key objective for this workshop is to give researchers deep insights into the range of options available for letting robots interact with the world, so they can both make practical choices for commissioning robots, and understand the contributions that future research can make.



Agenda



08:30	Welcome and introduction by the chairman, Rich Walker
08:40	“The Schunk Dexterous Hand” by Tomas Berg, Product Sales Manager, Schunk Intec
09:10	“The Hybrid Gripper Project” by Bo Genefke, Team leader, Danish Technological Institute
09:40	“The Bionic Handling Assistant: Innovation for Automation and Service Robotics” by Dr. Alexander Hildebrandt, Research Mechatronic Systems, Festo
10:10	Discussion
10:30	Coffee Break
11:00	“Evolutionary History of the Shadow Dexterous Hand” by Rich Walker, Managing Director, Shadow Robot Company
11:30	“Complexities of Advanced Robotic Manipulation” by Dr. Norman Hendrich, University of Hamburg.
12:00	Discussion
12:20	Final words by the chairman
12:30	End of workshop



Key topics

- Advanced Robotic manipulators
- Complex manipulation applications

Workshop category

The workshop will comprise presentations and a plenum discussion.

Organizers

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