CogMan: Cognitive manipulation

List of Publications

[C1] Thomas Rühr, Jürgen Sturm, Dejan Pangercic, Michael Beetz and Daniel Cremers,
A Generalized Framework for Opening Doors and Drawers in Kitchen Environ-
ments,
IEEE International Conference on Robotics and Automation (ICRA), St. Paul, MN, USA,
May 14–18 2012.

[C2] Moritz Tenorth, Alexander Clifford Perzylo, Reinhard Lafrenz and Michael Beetz,
The RoboEarth language: Representing and Exchanging Knowledge about Ac-
tions, Objects, and Environments,
IEEE International Conference on Robotics and Automation (ICRA), St. Paul, MN, USA,
May 14–18 2012.

[C3] Ingo Kresse and Michael Beetz,
Movement-aware Action Control – Integrating Symbolic and Control-theoretic
Action Execution,
IEEE International Conference on Robotics and Automation (ICRA), St. Paul, MN, USA,
May 14–18 2012.

[C4] Alexis Maldonado, Humberto Alvarez-Heredia and Michael Beetz,
Improving robot manipulation through fingertip perception,
IEEE International Conference on Intelligent Robots and Systems (IROS), Vilamoura,
Algarve, Portugal, October 7–11 2012.

[C1] Federico Ruiz-Ugalde, Gordon Cheng and Michael Beetz,
Fast adaptation for effect-aware pushing,
11th IEEE-RAS International Conference on Humanoid Robots, Bled, Slovenia, October,
26–28 2011.

[C2] Michael Beetz, Ulrich Klank, Alexis Maldonado, Dejan Pangercic and Thomas Rühr,
Robotic Roommates Making Pancakes - Look Into Perception-Manipulation
Loop,
IEEE International Conference on Robotics and Automation (ICRA), Workshop on Mobile

[C3] Michael Beetz, Ulrich Klank, Ingo Kresse, Alexis Maldonado, Lorenz Mösenlechner, Dejan
Pangercic, Thomas Rühr and Moritz Tenorth,
Robotic Roommates Making Pancakes,
11th IEEE-RAS International Conference on Humanoid Robots, Bled, Slovenia, October,
26–28 2011.

[C4] Ingo Kresse, Ulrich Klank and Michael Beetz,
Multimodal Autonomous Tool Analyses and Appropriate Application,
11th IEEE-RAS International Conference on Humanoid Robots, Bled, Slovenia, October,
26–28 2011.

[J1] Michael Beetz, Freek Stulp, Piotr Esden-Tempski, Andreas Fedrizzi, Ulrich Klank, Ingo
Kresse, Alexis Maldonado and Federico Ruiz,
Generality and Legibility in Mobile Manipulation,
[C1] Federico Ruiz-Ugalde, Gordon Cheng and Michael Beetz,
Prediction of action outcomes using an object model,

[C2] Alexis Maldonado, Ulrich Klank and Michael Beetz,
Robotic grasping of unmodeled objects using time-of-flight range data and finger torque information,

[C1] Freek Stulp, Erhan Oztop, Peter Pastor, Michael Beetz and Stefan Schaal,
Compact Models of Motor Primitive Variations for Predictable Reaching and Obstacle Avoidance,

[C2] Freek Stulp, Andreas Fedrizzi, Franziska Zacharias, Moritz Tenorth, Jan Bandouch and Michael Beetz,
Combining Analysis, Imitation, and Experience-based Learning to Acquire a Concept of Reachability,

[C3] Freek Stulp, Andreas Fedrizzi and Michael Beetz,
Action-Related Place-Based Mobile Manipulation,
Proceedings of the International Conference on Intelligent Robots and Systems (IROS),

[C4] Andreas Fedrizzi, Lorenz Moesenlechner, Freek Stulp and Michael Beetz,
Transformational Planning for Mobile Manipulation based on Action-related Places,

[C5] Freek Stulp, Andreas Fedrizzi and Michael Beetz,
Learning and Performing Place-based Mobile Manipulation,
Proceedings of the 8th International Conference on Development and Learning (ICDL),
1-7, 2009.

[C6] Freek Stulp, Ingo Kresse, Alexis Maldonado, Federico Ruiz, Andreas Fedrizzi and Michael Beetz,
Compact Models of Human Reaching Motions for Robotic Control in Everyday Manipulation Tasks,
Proceedings of the 8th International Conference on Development and Learning (ICDL), 2009.

[C7] Jun Li, Alexis Maldonado, Michael Beetz and Anna Schuboe,
Obstacle avoidance in a pick-and-place task,

[C8] Agnieszka Wykowska, Alexis Maldonado, Michael Beetz and Anna Schuboe,
How humans optimize their interaction with the environment: The impact of action context on human perception.,
Michael Beetz, Freek Stulp, Bernd Radig, Jan Bandouch, Nico Blodow, Mihai Dolha, Andreas Fedrizzi, Dominik Jain, Uli Klank, Ingo Kresse, Alexis Maldonado, Zoltan Marton, Lorenz Mösenlechner, Federico Ruiz, Radu Bogdan Rusu and Moritz Tenorth,

**The Assistive Kitchen — A Demonstration Scenario for Cognitive Technical Systems,**

*IEEE 17th International Symposium on Robot and Human Interactive Communication (RO-MAN), Muenchen, Germany, 1-8, 2008.*

Anna Schubö, Alexis Maldonado, Sonja Stork and Michael Beetz,

**Subsequent Actions Influence Motor Control Parameters of a Current Grasping Action,**

*IEEE 17th International Symposium on Robot and Human Interactive Communication (RO-MAN), Muenchen, Germany, 2008.*

Michael Beetz, Jan Bandouch, Alexandra Kirsch, Alexis Maldonado, Armin Müller and Radu Bogdan Rusu,

**The Assistive Kitchen — A Demonstration Scenario for Cognitive Technical Systems,**

*Proceedings of the 4th COE Workshop on Human Adaptive Mechatronics (HAM), 2007.*