Computer Vision Group Munich

List of Publications


[C1] Amin, Sikandar, Müller, Philipp, Bulling, Andreas, Andriluka and Mykhaylo, Test-time Adaptation for 3D Human Pose Estimation, German Conference on Pattern Recognition (GCPR/DAGM), Münster, Germany, September 2014.


[C1] Thomas Witzig, J. Marius Zöllner, Dejan Pangeric, Sarah Osentoski, Philip Roan, Rainer Jäkel and Rüdiger Dillmann, 
**Context Aware Shared Autonomy for Robotic Manipulation Tasks**, 

[C2] Karol Hausman, Ferenc Balint-Benczedi, Dejan Pangeric, Zoltan-Csaba Marton, Ryohei Ueda, Kei Okada and Michael Beetz, 
**Tracking-based Interactive Segmentation of Textureless Objects**, 

[C3] Amin, Sikandar, Mykhaylo Andriluka, Rohrbach, Marcus, Schiele and Bernt, 
**Multi-view Pictorial Structures for 3D Human Pose Estimation**, 

[C4] Charmayne Mary Lee Hughes, Moritz Tenorth, Marta Bienkiewicz and Joachim Hermsdörfer, 
**Action sequencing and error production in stroke patients with apraxia – Behavioral modeling using Bayesian Logic Networks**, 

[C5] Moritz Tenorth, Fernando De la Torre and Michael Beetz, 
**Learning Probability Distributions over Partially-Ordered Human Everyday Activities**, 

[C6] Lorenz Mösenlechner and Michael Beetz, 
**Fast Temporal Projection Using Accurate Physics-Based Geometric Reasoning**, 

[C7] Kriegel, Simon, Brucker, Manuel, Marton, Zoltan-Csaba, Bodenmuller, Tim, Suppa and Michael, 
**Combining object modeling and recognition for active scene exploration**, 

[C8] Rink, Christian, Marton, Zoltan-Csaba, Seth, Daniel, Bodenmuller, Tim, Suppa and Michael, 
**Feature based particle filter registration of 3D surface models and its application in robotics**, 

[C9] Nissler, Christian, Marton, Zoltan-Csaba, Suppa and Michael, 
**Sample consensus fitting of bivariate polynomials for initializing EM-based modeling of smooth 3D surfaces**, 


[C5] Rohrbach, Marcus, Amin, Sikandar, Andriluka, Mykhaylo, Schiele and Bernt, 
A Database for Fine Grained Activity Detection of Cooking Activities, 
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[C6] Martin Schuster, Dominik Jain, Moritz Tenorth and Michael Beetz, 
Learning Organizational Principles in Human Environments, 

[C7] Thomas Rühr, Jürgen Sturm, Dejan Pangercic, Michael Beetz and Daniel Cremers, 
A Generalized Framework for Opening Doors and Drawers in Kitchen Environments, 

[C8] Moritz Tenorth, Alexander Clifford Perzylo, Reinhard Lafrenz and Michael Beetz, 
The RoboEarth language: Representing and Exchanging Knowledge about Actions, Objects, and Environments, 

[C9] Lars Kunze, Michael Beetz, Manabu Saito, Haseru Azuma, Kei Okada and Masayuki Inaba, 
Searching Objects in Large-scale Indoor Environments: A Decision-theoretic Approach, 

[C10] Ulrich Klank, Lorenz Mösenlechner, Alexis Maldonado and Michael Beetz, 
Robots that Validate Learned Perceptual Models, 

[C11] Ingo Kresse and Michael Beetz, 
Movement-aware Action Control – Integrating Symbolic and Control-theoretic Action Execution, 

[C12] Moritz Tenorth and Michael Beetz, 
Knowledge Processing for Autonomous Robot Control, 
AAAI Spring Symposium on Designing Intelligent Robots: Reintegrating AI, Stanford, CA, USA, March 26–28 2012.

[C13] Michael Beetz, Moritz Tenorth, Dejan Pangercic and Benjamin Pitzer, 
Semantic Object Maps for Household Tasks, 

[C14] Michael Beetz, Lorenz Mösenlechner, Moritz Tenorth and Thomas Rühr, 
CRAM – a Cognitive Robot Abstract Machine, 
[C15] Ferenc Balint-Benczedi, Zoltan-Csaba Marton and Michael Beetz, 
Efficient Part-Graph Hashes for Object Categorization, 
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[C16] Daniel di Marco, Moritz Tenorth, Kai Häussermann, Oliver Zweigle and Paul Levi, 
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[C17] Moritz Tenorth and Michael Beetz, 
Exchange of Action-related Information among Autonomous Robots, 

[C18] Zoltan-Csaba Marton, Ferenc Balint-Benczedi, Florian Seidel, Lucian Cosmin Goron and 
Michael Beetz, 
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[C19] David Gossow, David Weikersdorfer and Michael Beetz, 
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[C20] David Weikersdorfer, David Gossow and Michael Beetz, 
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[C21] Christian Bersch, Dejan Pangercic, Sarah Osentoski, Karol Hausman, Zoltan-Csaba Mar- 
ton, Ryohei Ueda, Kei Okada and Michael Beetz, 
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ception, 
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Environments, Sydney, Australia, July 9–13 2012.

[C22] Moritz Tenorth and Michael Beetz, 
A Unified Representation for Reasoning about Robot Actions, Processes, and 
their Effects on Objects, 

[C23] Daniel Nyga and Michael Beetz, 
Everything Robots Always Wanted to Know about Housework (But were 
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[C24] Dejan Pangercic, Moritz Tenorth, Benjamin Pitzer and Michael Beetz, 
Semantic Object Maps for Robotic Housework - Representation, Acquisition 
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[C25] Alexis Maldonado, Humberto Alvarez-Heredia and Michael Beetz, 
Improving robot manipulation through fingertip perception, 
[C26] Lucian Cosmin Goron, Zoltan Csaba Marton, Gheorghe Lazea and Michael Beetz, 
Segmenting Cylindrical and Box-like Objects in Cluttered 3D Scenes, 
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[C27] Zoltan-Csaba Marton, Florian Seidel and Michael Beetz, 
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The SHERPA project: smart collaboration between humans and ground-aerial robots for improving rescuing activities in alpine environments, 
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[C31] Vladyslav Usenko, Florian Seidel, Zoltan-Csaba Marton and Dejan Pangercic Michael Beetz, 
Furniture Classification using WWW CAD Models, 
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[C32] Moritz Tenorth, Koji Kamei, Satoru Satake, Takahiro Miyashita and Norihiro Hagita, 
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[PhD1] Dominik Jain, 
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[PhD2] Ulrich Klank, 
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[J1] Séverin Lemaignan, Raquel Ros, E. Akin Sisbot, Rachid Alami and Michael Beetz,  
Grounding the Interaction: Anchoring Situated Discourse in Everyday Human-Robot Interaction,  

[J2] Moritz Tenorth, Ulrich Klank, Dejan Pangercic and Michael Beetz,  

[J3] Markus Waibel, Michael Beetz, Raffaello D’Andrea, Rob Janssen, Moritz Tenorth, Javier Civera, Jos Elfring, Dorian Gálvez-López, Kai Häussermann, J.M.M. Montiel, Alexander Perzylo, Björn Schießle, Oliver Zweigle and René van de Molengraft,  

[J4] Oscar Martinez Mozos, Zoltan Csaba Marton and Michael Beetz,  

[J5] Zoltan Csaba Marton, Dejan Pangercic, Nico Blodow and Michael Beetz,  
Combined 2D-3D Categorization and Classification for Multimodal Perception Systems,  

[C1] Federico Ruiz-Ugalde, Gordon Cheng and Michael Beetz,  
Fast adaptation for effect-aware pushing,  

[C2] Sebastian Albrecht, Karinne Ramirez-Amaro, Federico Ruiz-Ugalde, David Weikerdorfer, Marion Leibold, Michael Ulbrich and Michael Beetz,  
Imitating human reaching motions using physically inspired optimization principles,  

[C3] Lars Kunze, Mihai Emanuel Dolha, Emitza Guzman and Michael Beetz,  
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[C7] Michael Beetz, Ulrich Klank, Alexis Maldonado, Dejan Pangercic and Thomas Rühr, 
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Autonomous Semantic Mapping for Robots Performing Everyday Manipulation Tasks in Kitchen Environments, 

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Advantages of Spatial-temporal Object Maps for Service Robotics, 

[C12] Dominik Jain, Klaus von Gleissenthall and Michael Beetz, 
Bayesian Logic Networks and the Search for Samples with Backward Simulation and Abstract Constraint Learning, 

[C13] Paul Maier, Dominik Jain and Martin Sachenbacher, 
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Christoph Mayer and Bernd Radig,
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Barbara Gonsior, Stefan Sosnowski, Christoph Mayer, Jürgen Blume, Bernd Radig, Dirk Wollherr, and Kolja Kühnlenz,
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Jan Bandouch,
Observing and Interpreting Complex Human Activities in Everyday Environments,
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Michael Beetz, Freek Stulp, Piotr Esden-Tempski, Andreas Fedrizzi, Ulrich Klank, Ingo Kresse, Alexis Maldonado and Federico Ruiz,
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Towards Automated Models of Activities of Daily Life,
[J4] Michael Beetz, Dominik Jain, Lorenz Mösenlechner and Moritz Tenorth,
Towards Performing Everyday Manipulation Activities,

[J5] Michael Beetz, Martin Buss and Bernd Radig,
Learning from Humans – Cognition-enabled Computational Models of Everyday Activity,

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[J7] Moritz Tenorth, Dominik Jain and Michael Beetz,
Knowledge Representation for Cognitive Robots,

[J8] Freek Stulp, Hans Utz, Michael Isik and Gerd Mayer,
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[J9] Michael Beetz and Alexandra Kirsch,
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[J10] Alexandra Kirsch, Thibault Kruse, E. Akin Sisbot, Rachid Alami, Martin Lawitzky, Dražen Bršić, Sandra Hirche, Patrizia Basili and Stefan Glasauer,
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Artificial Cognition in Production Systems,

[BC1] Nicolai v. Hoyningen-Huene and Michael Beetz,
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[C1] Moritz Tenorth, Daniel Nyga and Michael Beetz,
Understanding and Executing Instructions for Everyday Manipulation Tasks from the World Wide Web,
[C2] Moritz Tenorth and Michael Beetz,
Priming Transformational Planning with Observations of Human Activities,
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Dynamic Parameters,

[C5] S. Sosnowski, C. Mayer, K. Kühnenz and B. Radig,
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[C9] Paul Maier, Dominik Jain, Stefan Waldherr and Martin Sachenbacher,
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[C11] Zoltan-Csaba Marton, Dejan Pangercic, Nico Blodow, Jonathan Kleinehellefert and Mi-
chael Beetz,
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[C14] Lorenz Mösenlechner, Nikolaus Demmel and Michael Beetz, 
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chael Beetz, 
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[C23] Moritz Tenorth, Lars Kunze, Dominik Jain and Michael Beetz, 
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[C24] Séverin Lemaignan, Raquel Ros, Lorenz Mösenlechner, Rachid Alami and Michael Beetz, 
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[C25] C. Mayer, S. Sosnowski, K. Kühnlenz and B. Radig, 
**Towards robotic facial mimicry: system development and evaluation**, 

[C26] Lucian Cosmin Goron, Zoltan Csaba Marton, Gheorghe Lazea and Michael Beetz, 
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[R3] Moritz Tenorth and Michael Beetz, 

[J1] Radu Bogdan Rusu, Aravind Sundaresan, Benoit Morisset, Kris Hauser, Motilal Agrawal, Jean-Claude Latombe and Michael Beetz, 
**Leaving Flatland: Efficient Real-Time 3D Navigation**, 
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[J2] Michael Beetz, Nicolai von Hoyningen-Huene, Bernhard Kirchlechner, Suat Gedikli, Francisco Siles, Murat Durus and Martin Lames, 
**ASpoGAMo: Automated Sports Game Analysis Models**, 

[J3] Alexandra Kirsch, 

[J4] Radu Bogdan Rusu, Jan Bandouch, Franziska Meier, Irfan Essa and Michael Beetz, 
**Human Action Recognition using Global Point Feature Histograms and Action Shapes**, 

[J5] Christoph Mayer, Matthias Wimmer and Bernd Radig, 
**Adjusted Pixel Features for Facial Component Classification**, 

[BC1] Wykowska, Agnieszka, Maldonado, Alexis, Beetz, Michael, Schuboe and Anna, 
**How Humans Optimize Their Interaction with the Environment: The Impact of Action Context on Human Perception**, 

**The Cognitive Factory**, 

[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**, 

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[C14] Andreas Fedrizzi, Lorenz Moesenlechner, Freek Stulp and Michael Beetz,
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Places,

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[C41] Maier, Paul, Sachenbacher and Martin,
Factory Monitoring and Control with Mixed Hardware/Software, Discrete/Continuous Models,

[C42] Li Sun, Ulrich Klank and Michael Beetz,
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[C43] Alexandra Kirsch, Thibault Kruse and Lorenz Mösenlechner,  
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