

- [J1] Beetz, Michael, Bálint-Benczédi, Ferenc, Blodow, Nico, Kerl, Christian, Márton, Zoltán-Csaba, Nyga, Daniel, Seidel, Florian, Wiedemeyer, Thiemo, Worch and Jan-Hendrik, **RoboSherlock: Unstructured Information Processing Framework for Robotic Perception**, Busoniu, Lucian, Tamás and Levente(Eds.), *Handling Uncertainty and Networked Structure in Robot Control*, 181-208, 2015.
- [C1] Michael Beetz, Ferenc Balint-Benczedi, Nico Blodow, Daniel Nyga, Thiemo Wiedemeyer and Zoltan-Csaba Marton, **RoboSherlock: Unstructured Information Processing for Robot Perception**, *IEEE International Conference on Robotics and Automation (ICRA)*, Seattle, Washington, USA, 2015.
- [J1] Marton, Zoltan-Csaba, Balint-Benczedi, Ferenc, Mozos, Oscar Martinez, Blodow, Nico, Kanezaki, Asako, Goron, Lucian Cosmin, Pangercic, Dejan, Beetz and Michael, **Part-Based Geometric Categorization and Object Reconstruction in Cluttered Table-Top Scenes**, *Journal of Intelligent & Robotic Systems*, 1-22, 2014.
- [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.
- [C2] Belagiannis, Vasileios, Amin, Sikandar, Andriluka, Mykhaylo, Schiele, Bernt, Navab, Nasir, Ilic and Slobodan, **3D Pictorial Structures for Multiple Human Pose Estimation**, *2014 IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, Columbus, Ohio, United States, June 2014.
- [PhD1] Nico Blodow, **Managing Belief States for Service Robots - Dynamic Scene Perception and Spatio-temporal Memory**, Technische Universität München, 2014.
- [J1] Moritz Tenorth, Alexander Clifford Perzylo, Reinhard Lafrenz and Michael Beetz, **Representation and Exchange of Knowledge about Actions, Objects, and Environments in the RoboEarth Framework**, *IEEE Transactions on Automation Science and Engineering (T-ASE)*, 2013.
- [J2] Moritz Tenorth and Michael Beetz, **KnowRob – A Knowledge Processing Infrastructure for Cognition-enabled Robots. Part 1: The KnowRob System**, *International Journal of Robotics Research (IJRR)*, 2013.

- [C1] Thomas Witzig, J. Marius Zöllner, Dejan Pangercic, Sarah Osentoski, Philip Roan, Rainer Jäkel and Rüdiger Dillmann,
Context Aware Shared Autonomy for Robotic Manipulation Tasks,
In IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), Tokyo Big Sight, Japan, 2013.
- [C2] Karol Hausman, Ferenc Balint-Benczedi, Dejan Pangercic, Zoltan-Csaba Marton, Ryohei Ueda, Kei Okada and Michael Beetz,
Tracking-based Interactive Segmentation of Textureless Objects,
IEEE International Conference on Robotics and Automation (ICRA), Karlsruhe, Germany, May 6–10 2013.
- [C3] Amin, Sikandar, Mykhaylo Andriluka, Rohrbach, Marcus, Schiele and Bernt,
Multi-view Pictorial Structures for 3D Human Pose Estimation,
British Machine Vision Conference (BMVC), Bristol, UK, 2013.
- [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,
6th International Conference on Health Informatics (HEALTHINF 2013), Barcelona, Spain, February 11–14 2013.
- [C5] Moritz Tenorth, Fernando De la Torre and Michael Beetz,
Learning Probability Distributions over Partially-Ordered Human Everyday Activities,
IEEE International Conference on Robotics and Automation (ICRA), Karlsruhe, Germany, May 6–10 2013.
- [C6] Lorenz Mösenlechner and Michael Beetz,
Fast Temporal Projection Using Accurate Physics-Based Geometric Reasoning,
IEEE International Conference on Robotics and Automation (ICRA), Karlsruhe, Germany, May 6–10 2013.
- [C7] Kriegel, Simon, Brucker, Manuel, Marton, Zoltan-Csaba, Bodenmuller, Tim, Suppa and Michael,
Combining object modeling and recognition for active scene exploration,
Intelligent Robots and Systems (IROS), 2013 IEEE/RSJ International Conference on, 2384-2391, 2013.
- [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,
Intelligent Robots and Systems (IROS), 2013 IEEE/RSJ International Conference on, 3187-3194, 2013.
- [C9] Nissler, Christian, Marton, Zoltan-Csaba, Suppa and Michael,
Sample consensus fitting of bivariate polynomials for initializing EM-based modeling of smooth 3D surfaces,
Intelligent Robots and Systems (IROS), 2013 IEEE/RSJ International Conference on, 4228-4234, 2013.

- [J1] Aldoma, Aitor, Marton, Zoltan-Csaba, Tombari, Federico, Wohlkinger, Walter, Potthast, Christian, Zeisl, Bernhard, Rusu, Radu Bogdan, Gedikli, Suat, Vincze and Markus,
Tutorial: Point Cloud Library: Three-Dimensional Object Recognition and 6 DOF Pose Estimation,
Robotics & Automation Magazine, IEEE, 19(3): 80-91, 2012.
- [J2] Jan Bandouch, Odest Chadwicke Jenkins and Michael Beetz,
A Self-Training Approach for Visual Tracking and Recognition of Complex Human Activity Patterns,
International Journal of Computer Vision, 99(2): 166-189, 2012.
- [J3] Michael Beetz, Dominik Jain, Lorenz Mösenlechner, Moritz Tenorth, Lars Kunze, Nico Blodow and Dejan Pangercic,
Cognition-Enabled Autonomous Robot Control for the Realization of Home Chore Task Intelligence,
Proceedings of the IEEE, Special Issue on Quality of Life Technology, 100(8): 2454-2471, 2012.
- [J4] Freek Stulp, Andreas Fedrizzi, Lorenz Mösenlechner and Michael Beetz,
Learning and Reasoning with Action-Related Places for Robust Mobile Manipulation,
Journal of Artificial Intelligence Research (JAIR), 43: 1-42, 2012.
- [J5] Zoltan-Csaba Marton, Florian Seidel, Ferenc Balint-Benczedi and Michael Beetz,
Ensembles of Strong Learners for Multi-cue Classification,
Pattern Recognition Letters (PRL), Special Issue on Scene Understandings and Behaviours Analysis, 2012.
- [C1] Julius Kammerl AND Nico Blodow AND Radu Bogdan Rusu AND Suat Gedikli AND Michael Beetz AND Eckehard Steinbach,
Real-time Compression of Point Cloud Streams,
IEEE International Conference on Robotics and Automation (ICRA), Minnesota, USA, May 2012.
- [C2] Rohrbach, Marcus, Regneri, Michaela, Andriluka, Micha, Amin, Sikandar, Pinkal, Manfred, Schiele and Bernt,
Script Data for Attribute-based Recognition of Composite Activities,
Computer Vision - ECCV 2012 : 12th European Conference on Computer Vision, Firenze, Italy, Springer, Lecture Notes in Computer Science, Vol. 2012, October 2012.
- [C3] Karol Hausman, Christian Bersch, Dejan Pangercic, Sarah Osentoski, Zoltan-Csaba Marton and Michael Beetz,
Segmentation of Cluttered Scenes through Interactive Perception,
ICRA 2012 Workshop on Semantic Perception and Mapping for Knowledge-enabled Service Robotics, St. Paul, MN, USA, May 14–18 2012.
- [C4] Ross Kidson, Darko Stanimirovic, Dejan Pangercic and Michael Beetz,
Elaborative Evaluation of RGB-D based Point Cloud Registration for Personal Robots,
ICRA 2012 Workshop on Semantic Perception and Mapping for Knowledge-enabled Service Robotics, St. Paul, MN, USA, May 14–18 2012.

- [C5] Rohrbach, Marcus, Amin, Sikandar, Andriluka, Mykhaylo, Schiele and Bernt,
A Database for Fine Grained Activity Detection of Cooking Activities,
2012 IEEE Conference on Computer Vision and Pattern Recognition (CVPR), Providence,
United States, June 2012.
- [C6] Martin Schuster, Dominik Jain, Moritz Tenorth and Michael Beetz,
Learning Organizational Principles in Human Environments,
IEEE International Conference on Robotics and Automation (ICRA), St. Paul, MN, USA,
3867-3874, May 14–18 2012.
- [C7] Thomas Rühr, Jürgen Sturm, Dejan Pangercic, Michael Beetz and Daniel Cremers,
**A Generalized Framework for Opening Doors and Drawers in Kitchen Envi-
ronments,**
IEEE International Conference on Robotics and Automation (ICRA), St. Paul, MN, USA,
May 14–18 2012.
- [C8] 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.
- [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,**
IEEE International Conference on Robotics and Automation (ICRA), St. Paul, MN, USA,
May 14–18 2012.
- [C10] Ulrich Klank, Lorenz Mösenlechner, Alexis Maldonado and Michael Beetz,
Robots that Validate Learned Perceptual Models,
IEEE International Conference on Robotics and Automation (ICRA), St. Paul, MN, USA,
May 14–18 2012.
- [C11] 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.
- [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,
5th International Conference on Cognitive Systems (CogSys 2012), 2012.
- [C14] Michael Beetz, Lorenz Mösenlechner, Moritz Tenorth and Thomas Rühr,
CRAM – a Cognitive Robot Abstract Machine,
5th International Conference on Cognitive Systems (CogSys 2012), 2012.

- [C15] Ferenc Balint-Benczedi, Zoltan-Csaba Marton and Michael Beetz,
Efficient Part-Graph Hashes for Object Categorization,
5th International Conference on Cognitive Systems (CogSys), 2012.
- [C16] Daniel di Marco, Moritz Tenorth, Kai Häussermann, Oliver Zweigle and Paul Levi,
RoboEarth Action Recipe Execution,
12th International Conference on Intelligent Autonomous Systems, 2012.
- [C17] Moritz Tenorth and Michael Beetz,
Exchange of Action-related Information among Autonomous Robots,
12th International Conference on Intelligent Autonomous Systems, 2012.
- [C18] Zoltan-Csaba Marton, Ferenc Balint-Benczedi, Nico Blodow, Lucian Cosmin Goron and Michael Beetz,
Object Categorization in Clutter using Additive Features and Hashing of Part-graph Descriptors,
Proceedings of Spatial Cognition (SC), Abbey Kloster Seeon, Germany, 2012.
- [C19] David Gossow, David Weikersdorfer and Michael Beetz,
Distinctive Texture Features from Perspective-Invariant Keypoints,
21st International Conference on Pattern Recognition, 2012.
- [C20] David Weikersdorfer, David Gossow and Michael Beetz,
Depth-Adaptive Superpixels,
21st International Conference on Pattern Recognition, 2012.
- [C21] Christian Bersch, Dejan Pangercic, Sarah Osentoski, Karol Hausman, Zoltan-Csaba Marton, Ryohei Ueda, Kei Okada and Michael Beetz,
Segmentation of Textured and Textureless Objects through Interactive Perception,
RSS Workshop on Robots in Clutter: Manipulation, Perception and Navigation in Human 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,
2012 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), Vilamoura, Portugal, October, 7–12 2012.
- [C23] Daniel Nyga and Michael Beetz,
Everything Robots Always Wanted to Know about Housework (But were afraid to ask),
2012 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), Vilamoura, Portugal, October, 7–12 2012.
- [C24] Dejan Pangercic, Moritz Tenorth, Benjamin Pitzer and Michael Beetz,
Semantic Object Maps for Robotic Housework - Representation, Acquisition and Use,
2012 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), Vilamoura, Portugal, October, 7–12 2012.
- [C25] 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.

- [C26] Lucian Cosmin Goron, Zoltan Csaba Marton, Gheorghe Lazea and Michael Beetz,
Segmenting Cylindrical and Box-like Objects in Cluttered 3D Scenes,
7th German Conference on Robotics (ROBOTIK), Munich, Germany, May 2012.
- [C27] Zoltan-Csaba Marton, Florian Seidel and Michael Beetz,
Towards Modular Spatio-temporal Perception for Task-adapting Robots,
*Postgraduate Conference on Robotics and Development of Cognition (RobotDoC-PhD),
a satellite event of the 22nd International Conference on Artificial Neural Networks
(ICANN)*, Lausanne, Switzerland, 2012.
- [C28] Reinhard Klapfer, Lars Kunze and Michael Beetz,
**Pouring and Mixing Liquids — Understanding the Physical Effects of Every-
day Robot Manipulation Actions**,
*35th German Conference on Artificial Intelligence (KI-2012), Workshop on Human Rea-
soning and Automated Deduction*, Saarbrücken, Germany, September 24–27 2012.
- [C29] Lars Kunze, Andrei Haidu and Michael Beetz,
**Making Virtual Pancakes — Acquiring and Analyzing Data of Everyday Ma-
nipulation Tasks through Interactive Physics-based Simulations**,
*Poster and Demo Track of the 35th German Conference on Artificial Intelligence (KI-
2012)*, Saarbrücken, Germany, September 24–27 2012.
- [C30] L. Marconi, C. Melchiorri, M. Beetz, D. Pangercic, R. Siegwart, S. Leutenegger, R. Carloni,
S. Stramigioli, H. Bruyninckx, P. Doherty, A. Kleiner, V. Lippiello, A. Finzi, B. Siciliano,
A. Sala and N. Tomatis,
**The SHERPA project: smart collaboration between humans and ground-aerial
robots for improving rescuing activities in alpine environments**,
IEEE International Symposium on Safety, Security, and Rescue Robotics (SSRR), College
Station, Texas, USA, Nov. 5-8 2012.
- [C31] Vladyslav Usenko, Florian Seidel, Zoltan-Csaba Marton and Dejan Pangercic Michael
Beetz,
Furniture Classification using WWW CAD Models,
IROS12 Workshop on Active Semantic Perception (ASP12), Vilamoura, Portugal, October
7 2012.
- [C32] Moritz Tenorth, Koji Kamei, Satoru Satake, Takahiro Miyashita and Norihiro Hagita,
**Towards a Networked Robot Architecture
for Distributed Task Execution and Knowledge Exchange**,
*Third International Workshop on Standards and Common Platforms for Robotics (SCPR
2012), in conjunction with SIMPAR 2012*, Tsukuba, Japan, November 5 2012.
- [PhD1] Dominik Jain,
**Probabilistic Cognition for Technical Systems: Statistical Relational Models
for High-Level Knowledge Representation, Learning and Reasoning**,
Technische Universität München, 2012.
- [PhD2] Ulrich Klank,
Everyday Perception for Mobile Manipulation in Human Environments,
Technische Universität München, 2012.

- [J1] Séverin Lemaignan, Raquel Ros, E. Akin Sisbot, Rachid Alami and Michael Beetz,
Grounding the Interaction: Anchoring Situated Discourse in Everyday Human-Robot Interaction,
International Journal of Social Robots, 1-19, 2011.
- [J2] Moritz Tenorth, Ulrich Klank, Dejan Pangercic and Michael Beetz,
Web-enabled Robots – Robots that Use the Web as an Information Resource,
Robotics & Automation Magazine, 18(2): 58-68, 2011.
- [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,
RoboEarth - A World Wide Web for Robots,
Robotics & Automation Magazine, 18(2): 69-82, 2011.
- [J4] Oscar Martinez Mozos, Zoltan Csaba Marton and Michael Beetz,
Furniture Models Learned from the WWW – Using Web Catalogs to Locate and Categorize Unknown Furniture Pieces in 3D Laser Scans,
Robotics & Automation Magazine, 18(2): 22-32, June 2011.
- [J5] Zoltan Csaba Marton, Dejan Pangercic, Nico Blodow and Michael Beetz,
Combined 2D-3D Categorization and Classification for Multimodal Perception Systems,
The International Journal of Robotics Research, 30(11): 1378-1402, September 2011.
- [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] Sebastian Albrecht, Karinne Ramirez-Amaro, Federico Ruiz-Ugalde, David Weikersdorfer, Marion Leibold, Michael Ulbrich and Michael Beetz,
Imitating human reaching motions using physically inspired optimization principles,
11th IEEE-RAS International Conference on Humanoid Robots, Bled, Slovenia, October, 26–28 2011.
- [C3] Lars Kunze, Mihai Emanuel Dolha, Emitza Guzman and Michael Beetz,
Simulation-based Temporal Projection of Everyday Robot Object Manipulation,
Yolum, Tumer, Stone and Sonenberg(Eds.), *Proc. of the 10th Int. Conf. on Autonomous Agents and Multiagent Systems (AAMAS 2011)*, Taipei, Taiwan, IFAAMAS, May, 2–6 2011.
- [C4] Lars Kunze, Tobias Roehm and Michael Beetz,
Towards Semantic Robot Description Languages,
IEEE International Conference on Robotics and Automation (ICRA), Shanghai, China, 5589-5595, May, 9–13 2011.
- [C5] Daniel Nyga, Moritz Tenorth and Michael Beetz,
How-Models of Human Reaching Movements in the Context of Everyday Manipulation Activities,
IEEE International Conference on Robotics and Automation (ICRA), Shanghai, China, May, 9–13 2011.

- [C6] Ulrich Klank, Daniel Carton and Michael Beetz,
Transparent Object Detection and Reconstruction on a Mobile Platform,
IEEE International Conference on Robotics and Automation (ICRA), Shanghai, China,
May, 9–13 2011.
- [C7] 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 Manipulation: Integrating Perception and Manipulation, 529-536, May, 9–13 2011.
- [C8] Nico Blodow, Zoltan-Csaba Marton, Dejan Pangercic, Thomas Rühr, Moritz Tenorth and Michael Beetz,
Inferring Generalized Pick-and-Place Tasks from Pointing Gestures,
IEEE International Conference on Robotics and Automation (ICRA), Workshop on Semantic Perception, Mapping and Exploration, May, 9–13 2011.
- [C9] Nico Blodow, Lucian Cosmin Goron, Zoltan-Csaba Marton, Dejan Pangercic, Thomas Rühr, Moritz Tenorth and Michael Beetz,
Autonomous Semantic Mapping for Robots Performing Everyday Manipulation Tasks in Kitchen Environments,
Proceedings of the IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), San Francisco, CA, USA, September, 25–30 2011.
- [C10] Lars Kunze, Mihai Emanuel Dolha and Michael Beetz,
Logic Programming with Simulation-based Temporal Projection for Everyday Robot Object Manipulation,
2011 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), San Francisco, CA, USA, September, 25–30 2011.
- [C11] Zoltan-Csaba Marton, Nico Blodow and Michael Beetz,
Advantages of Spatial-temporal Object Maps for Service Robotics,
IEEE Workshop on Advanced Robotics and its Social Impacts (ARSO), Half-Moon Bay, CA, USA, October 2-4 2011.
- [C12] Dominik Jain, Klaus von Gleissenthall and Michael Beetz,
Bayesian Logic Networks and the Search for Samples with Backward Simulation and Abstract Constraint Learning,
KI 2011: Advances in Artificial Intelligence, 34th Annual German Conference on AI, Springer, Lecture Notes in Computer Science, Vol. 7006, 144-156, October 4-7 2011.
- [C13] Paul Maier, Dominik Jain and Martin Sachenbacher,
Compiling AI Engineering Models for Probabilistic Inference,
KI 2011: Advances in Artificial Intelligence, 34th Annual German Conference on AI, Springer, Lecture Notes in Computer Science, Vol. 7006, 191-203, October 4-7 2011.
- [C14] Dominik Jain,
Knowledge Engineering with Markov Logic Networks: A Review,
DKB 2011: Proceedings of the Third Workshop on Dynamics of Knowledge and Belief, 2011.

- [C15] Lorenz Mösenlechner and Michael Beetz,
Parameterizing Actions to have the Appropriate Effects,
IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), San Francisco, CA, USA, September 25–30 2011.
- [C16] Shulei Zhu, Dejan Pangercic and Michael Beetz,
Contracting Curve Density Algorithm for Applications in Personal Robotics,
11th IEEE-RAS International Conference on Humanoid Robots, Bled, Slovenia, October, 26–28 2011.
- [C17] 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.
- [C18] 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.
- [C19] Manabu Saito, Haseru Chen, Kei Okada, Masayuki Inaba, Lars Kunze and Michael Beetz,
Semantic Object Search in Large-scale Indoor Environments,
IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), Workshop on Active Semantic Perception and Object Search in the Real World, San Francisco, CA, USA, September, 25–30 2011.
- [C20] Dejan Pangercic, Vladimir Haltakov and Michael Beetz,
Fast and Robust Object Detection in Household Environments Using Vocabulary Trees with SIFT Descriptors,
IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), Workshop on Active Semantic Perception and Object Search in the Real World, San Francisco, CA, USA, September, 25–30 2011.
- [C21] Asako Kanezaki, Zoltan-Csaba Marton, Dejan Pangercic, Tatsuya Harada, Yasuo Kuniyoshi and Michael Beetz,
Voxelized Shape and Color Histograms for RGB-D,
IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), Workshop on Active Semantic Perception and Object Search in the Real World, San Francisco, CA, USA, September, 25–30 2011.
- [C22] Zoltan-Csaba Marton, Dejan Pangercic and Michael Beetz,
Efficient Surface and Feature Estimation in RGBD,
RGB-D Workshop on 3D Perception in Robotics at the European Robotics (euRobotics) Forum, Västerås, Sweden, April 8 2011.
- [C23] William R. Murray and Dominik Jain,
Modeling Cognitive Frames for Situations with Markov Logic Networks,
Proceedings of the 8th International NLPCS Workshop: Human-Machine Interaction in Translation, Copenhagen Studies in Language 41, Samfundslitteratur, 167-178, August 11 2011.

- [C24] Christoph Mayer and Bernd Radig,
Learning Displacement Experts from Multi-band Images for Face Model Fitting,
International Conference on Advances in Computer-Human Interaction, February 11 2011.
- [C25] Barbara Gonsior, Stefan Sosnowski, Christoph Mayer, Jürgen Blume, Bernd Radig, Dirk Wollherr, and Kolja Kühnlenz,
Improving Aspects of Empathy and Subjective Performance for HRI through Mirroring Facial Expressions,
Proceedings of the 19th IEEE International Symposium on Robot and Human Interactive Communication, 2011.
- [C26] Maier, Paul, Jain, Dominik, Sachenbacher and Martin,
Diagnostic Hypothesis Enumeration vs. Probabilistic Inference for Hierarchical Automata Models,
Proceedings of the 22nd International Workshop on Principles of Diagnosis (DX-2011), Murnau, Germany, 2011.
- [C27] Aitor Aldoma, Markus Vincze, Nico Blodow, David Gossow, Suat Gedikli, Radu Bogdan Rusu and Gary R. Bradski,
CAD-model recognition and 6DOF pose estimation using 3D cues,
IEEE International Conference on Computer Vision Workshops, ICCV 2011 Workshops, Barcelona, Spain, November 6-13, 2011, 585-592, 2011.
- [PhD1] von Hoyningen-Huene and Nicolai,
Real-time Tracking of Player Identities in Team Sports,
Technische Universität München, 2011.
- [PhD2] Jan Bandouch,
Observing and Interpreting Complex Human Activities in Everyday Environments,
Technische Universität München, 2011.
- [PhD3] Moritz Tenorth,
Knowledge Processing for Autonomous Robots,
Technische Universität München, 2011.
- [J1] Michael Beetz, Freerk Stulp, Piotr Esden-Tempski, Andreas Fedrizzi, Ulrich Klank, Ingo Kresse, Alexis Maldonado and Federico Ruiz,
Generality and Legibility in Mobile Manipulation,
Autonomous Robots Journal (Special Issue on Mobile Manipulation), 28(1): 21-44, 2010.
- [J2] 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,
International Journal of Social Robotics, 1-9, 2010.
- [J3] Michael Beetz, Moritz Tenorth, Dominik Jain and Jan Bandouch,
Towards Automated Models of Activities of Daily Life,
Technology and Disability, 22(1-2): 27-40, 2010.

- [J4] Michael Beetz, Dominik Jain, Lorenz Mösenlechner and Moritz Tenorth,
Towards Performing Everyday Manipulation Activities,
Robotics and Autonomous Systems, 58(9): 1085-1095, 2010.
- [J5] Michael Beetz, Martin Buss and Bernd Radig,
Learning from Humans – Cognition-enabled Computational Models of Every-day Activity,
Künstliche Intelligenz, 2010.
- [J6] Martin Buss and Michael Beetz,
CoTeSys – Cognition for Technical Systems,
Künstliche Intelligenz, 2010.
- [J7] Moritz Tenorth, Dominik Jain and Michael Beetz,
Knowledge Representation for Cognitive Robots,
Künstliche Intelligenz, 24(3): 233-240, 2010.
- [J8] Freek Stulp, Hans Utz, Michael Isik and Gerd Mayer,
Implicit Coordination with Shared Belief: A Heterogeneous Robot Soccer Team Case Study,
Advanced Robotics, the International Journal of the Robotics Society of Japan, 2010.
- [J9] Michael Beetz and Alexandra Kirsch,
Special Issue on Cognition for Technical Systems,
Künstliche Intelligenz, 24: 2010.
- [J10] Alexandra Kirsch, Thibault Kruse, E. Akin Sisbot, Rachid Alami, Martin Lawitzky, Dražen Brščić, Sandra Hirche, Patrizia Basili and Stefan Glasauer,
Plan-based Control of Joint Human-Robot Activities,
Künstliche Intelligenz, 24(3): 223-231, 2010.
- [J11] M. F. Zaeh, W. Roesel, A. Bannat, T. Bautze, M. Beetz, J. Blume, K. Diepold, C. Ertelt, F. Geiger, T. Gmeiner, T. Gyger, A. Knoll, C. Lau, C. Lenz, M. Ostgathe, G. Reinhart, T. Ruehr, A. Schuboe, K. Shea, I. Stork genannt Wersborg, S. Stork, W. Tekouo, F. Wallhoff and M. Wiesbeck,
Artificial Cognition in Production Systems,
IEEE Transactions on Automation Science and Engineering, 7(3): 1-27, 2010.
- [BC1] Nicolai v. Hoyningen-Huene and Michael Beetz,
Importance Sampling as One Solution to the Data Association Problem in Multi-target Tracking,
AlpeshKumar Ranchordas and Helder Araujo(Eds.), *VISIGRAPP 2009*, Springer-Verlag Berlin Heidelberg, Communications in Computer and Information Science (CCIS), 309-325, 2010.
- [C1] Moritz Tenorth, Daniel Nyga and Michael Beetz,
Understanding and Executing Instructions for Everyday Manipulation Tasks from the World Wide Web,
IEEE International Conference on Robotics and Automation (ICRA), Anchorage, AK, USA, 1486-1491, May 3–8 2010.

- [C2] Moritz Tenorth and Michael Beetz,
Priming Transformational Planning with Observations of Human Activities,
IEEE International Conference on Robotics and Automation (ICRA), Anchorage, AK, USA, 1499-1504, May 3–8 2010.
- [C3] Thibault Kruse, Alexandra Kirsch, E. Akin Sisbot and Rachid Alami,
Dynamic Generation and Execution of Human Aware Navigation Plans,
Proceedings of the Ninth International Conference on Autonomous Agents and Multiagent Systems (AAMAS), 2010.
- [C4] Dominik Jain, Andreas Barthels and Michael Beetz,
Adaptive Markov Logic Networks: Learning Statistical Relational Models with Dynamic Parameters,
19th European Conference on Artificial Intelligence (ECAI), 937-942, 2010.
- [C5] S. Sosnowski, C. Mayer, K. Kühnlenz and B. Radig,
Mirror my emotions! Combining facial expression analysis and synthesis on a robot,
The Thirty Sixth Annual Convention of the Society for the Study of Artificial Intelligence and Simulation of Behaviour (AISB2010), , , Vol. , 2010.
- [C6] Frank Wallhoff, Tobias Rehrl, Christoph Mayer and Bernd Radig,
Real-Time Face and Gesture Analysis for Human-Robot Interaction,
Real-Time Image and Video Processing 2010, , Proceedings of SPIE, Vol. , 2010.
- [C7] Alexandra Kirsch and Fan Cheng,
Learning Ability Models for Human-Robot Collaboration,
Robotics: Science and Systems (RSS) — Workshop on Learning for Human-Robot Interaction Modeling, 2010.
- [C8] Dominik Jain and Michael Beetz,
Soft Evidential Update via Markov Chain Monte Carlo Inference,
KI 2010: Advances in Artificial Intelligence, 33rd Annual German Conference on AI, Springer, Lecture Notes in Computer Science, Vol. 6359, 280-290, 2010.
- [C9] Paul Maier, Dominik Jain, Stefan Waldherr and Martin Sachenbacher,
Plan Assessment for Autonomous Manufacturing as Bayesian Inference,
KI 2010: Advances in Artificial Intelligence, 33rd Annual German Conference on AI, Springer, Lecture Notes in Computer Science, Vol. 6359, 263-271, 2010.
- [C10] Nico Blodow, Zoltan-Csaba Marton, Dejan Pangercic and Michael Beetz,
Making Sense of 3D Data,
Robotics: Science and Systems Conference (RSS), Workshop on Strategies and Evaluation for Mobile Manipulation in Household Environments, 2010.
- [C11] Zoltan-Csaba Marton, Dejan Pangercic, Nico Blodow, Jonathan Kleinhellefort and Michael Beetz,
General 3D Modelling of Novel Objects from a Single View,
Proceedings of the IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), Taipei, Taiwan, October 18-22 2010.
- [C12] Dejan Pangercic, Moritz Tenorth, Dominik Jain and Michael Beetz,
Combining Perception and Knowledge Processing for Everyday Manipulation,
IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), Taipei, Taiwan, 1065-1071, October 18-22 2010.

- [C13] Michael Beetz, Lorenz Mösenlechner and Moritz Tenorth,
CRAM – A Cognitive Robot Abstract Machine for Everyday Manipulation in Human Environments,
IEEE/RSJ International Conference on Intelligent Robots and Systems, Taipei, Taiwan, 1012-1017, October 18-22 2010.
- [C14] Lorenz Mösenlechner, Nikolaus Demmel and Michael Beetz,
Becoming Action-aware through Reasoning about Logged Plan Execution Traces,
IEEE/RSJ International Conference on Intelligent RObots and Systems., Taipei, Taiwan, 2231-2236, October 18-22 2010.
- [C15] Thibault Kruse, Alexandra Kirsch, E. Akin Sisbot and Rachid Alami,
Exploiting Human Cooperation in Human-Centered Robot Navigation,
IEEE International Symposium in Robot and Human Interactive Communication (RoMan), 2010.
- [C16] Federico Ruiz-Ugalde, Gordon Cheng and Michael Beetz,
Prediction of action outcomes using an object model,
2010 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), Taipei, Taiwan, October 18-22 2010.
- [C17] Alexis Maldonado, Ulrich Klank and Michael Beetz,
Robotic grasping of unmodeled objects using time-of-flight range data and finger torque information,
2010 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), Taipei, Taiwan, 2586-2591, October 18-22 2010.
- [C18] Lars Kunze, Moritz Tenorth and Michael Beetz,
Putting People’s Common Sense into Knowledge Bases of Household Robots,
33rd Annual German Conference on Artificial Intelligence (KI 2010), Karlsruhe, Germany, Springer, 151-159, September 21-24 2010.
- [C19] Alexandra Kirsch and Yuxiang Chen,
A Testbed for Adaptive Human-Robot Collaboration,
33rd Annual German Conference on Artificial Intelligence (KI 2010), 2010.
- [C20] Thibault Kruse and Alexandra Kirsch,
Towards Opportunistic Action Selection in Human-Robot Cooperation,
33rd Annual German Conference on Artificial Intelligence (KI 2010), 2010.
- [C21] Zoltan-Csaba Marton, Dejan Pangercic, Radu Bogdan Rusu, Andreas Holzbach and Michael Beetz,
Hierarchical Object Geometric Categorization and Appearance Classification for Mobile Manipulation,
Proceedings of the IEEE-RAS International Conference on Humanoid Robots, Nashville, TN, USA, December 6-8 2010.
- [C22] Nico Blodow, Dominik Jain, Zoltan-Csaba Marton and Michael Beetz,
Perception and Probabilistic Anchoring for Dynamic World State Logging,
10th IEEE-RAS International Conference on Humanoid Robots, Nashville, TN, USA, 160-166, December 6-8 2010.

- [C23] Moritz Tenorth, Lars Kunze, Dominik Jain and Michael Beetz,
KNOWROB-MAP – Knowledge-Linked Semantic Object Maps,
10th IEEE-RAS International Conference on Humanoid Robots, Nashville, TN, USA, 430-435, December 6-8 2010.
- [C24] Séverin Lemaignan, Raquel Ros, Lorenz Mösenlechner, Rachid Alami and Michael Beetz,
ORO, a knowledge management module for cognitive architectures in robotics,
Proceedings of the 2010 IEEE/RSJ International Conference on Intelligent Robots and Systems, Taipei, Taiwan, 3548-3553, October 18-22 2010.
- [C25] C. Mayer, S. Sosnowski, K. Kühnlenz and B. Radig,
Towards robotic facial mimicry: system development and evaluation,
Proceedings of the 19th IEEE International Symposium on Robot and Human Interactive Communication, , , Vol. , 2010.
- [C26] Lucian Cosmin Goron, Zoltan Csaba Marton, Gheorghe Lazea and Michael Beetz,
Automatic Layered 3D Reconstruction of Simplified Object Models for Grasping,
Joint 41st International Symposium on Robotics (ISR) and 6th German Conference on Robotics (ROBOTIK), Munich, Germany, 2010.
- [C27] C. Lenz, T. Röder, M. Eggers, S. Amin, T. Kisler, B. Radig, G. Panin and A. Knoll,
A Distributed Many-Camera System for Multi-Person Tracking,
R. Wichert and B. de Ruyter(Eds.), *Proceedings of the First International Joint Conference on Ambient Intelligence (AmI 2010)*, Springer Lecture Notes in Computer Science, November 2010.
- [R1] Alexandra Kirsch,
Be a Robot — A Study on Everyday Activities Performed in Real and Virtual Worlds,
TUM-I1006, Technische Universität München, 2010.
- [R2] D. Bršćić, M. Eggers, F. Rohrmüller, O. Kourakos, S. Sosnowski, D. Althoff, M. Lawitzky, A. Mörtl, M. Rambow, V. Koropouli, J.R. Medina Hernández, X. Zang, W. Wang, D. Wollherr, K. Kühnlenz, C. Mayer, T. Kruse, A. Kirsch, J. Blume, A. Bannat, T. Rehrl, F. Wallhoff, T. Lorenz, P. Basili, C. Lenz, T. Röder, G. Panin, W. Maier, S. Hirche, M. Buss, M. Beetz, B. Radig, A. Schubö, S. Glasauer, A. Knoll and E. Steinbach,
Multi Joint Action in CoTeSys — Setup and Challenges,
CoTeSys-TR-10-01, CoTeSys Cluster of Excellence: Technische Universität München & 38; Ludwig-Maximilians-Universität München, Munich, Germany, June 2010.
- [R3] Moritz Tenorth and Michael Beetz,
Deliverable D5.2: The RoboEarth Language – Language Specification,
D5.2, FP7-ICT-248942 RoboEarth, 2010.
- [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,
Journal of Field Robotics (JFR), 2009.

- [J2] Michael Beetz, Nicolai von Hoyningen-Huene, Bernhard Kirchlechner, Suat Gedikli, Francisco Siles, Murat Durus and Martin Lames,
ASpoGAMo: Automated Sports Game Analysis Models,
International Journal of Computer Science in Sport, 8(1): 2009.
- [J3] Alexandra Kirsch,
Robot Learning Language – Integrating Programming and Learning for Cognitive Systems,
Robotics and Autonomous Systems Journal, 57(9): 943-954, 2009.
- [J4] Radu Bogdan Rusu, Jan Bandouch, Franziska Meier, Irfan Essa and Michael Beetz,
Human Action Recognition using Global Point Feature Histograms and Action Shapes,
Advanced Robotics journal, Robotics Society of Japan (RSJ), 2009.
- [J5] Christoph Mayer, Matthias Wimmer and Bernd Radig,
Adjusted Pixel Features for Facial Component Classification,
Image and Vision Computing Journal, 2009.
- [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,
Kim, Jong-Hwan, Ge, Shuzhi Sam, Vadakkepat, Prahlad, Jesse, Norbert, Al Manum, Abdullah, Puthusserypady K, Sadasivan, Rückert, Ulrich, Sitte, Joaquin, Witkowski, Ulf, Nakatsu, Ryohei, Braunl, Thomas, Baltés, Jacky, Anderson, John, Wong, Ching-Chang, Verner, Igor, Ahlgren and David(Eds.), *Progress in Robotics*, Springer Berlin Heidelberg, Communications in Computer and Information Science, Vol. 44, 162-172, 2009.
- [BC2] Michael F. Zäh, Michael Beetz, Kristina Shea, Gunther Reinhart, K. Bender, Christian Lau, Martin Ostgathe, W. Vogl, Mathey Wiesbeck, Marco Engelhard, Christoph Ertelt, Thomas Rühr, M. Friedrich and S. Herle,
The Cognitive Factory,
H. A. ElMaraghy(Ed.), *Changeable and Reconfigurable Manufacturing Systems*, Springer, 355-371, 2009.
- [C1] Freek Stulp, Erhan Oztop, Peter Pastor, Michael Beetz and Stefan Schaal,
Compact Models of Motor Primitive Variations for Predictable Reaching and Obstacle Avoidance,
9th IEEE-RAS International Conference on Humanoid Robots, 2009.
- [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,
9th IEEE-RAS International Conference on Humanoid Robots, 161-167, 2009.
- [C3] Ulrich Klank, Dejan Pangercic, Radu Bogdan Rusu and Michael Beetz,
Real-time CAD Model Matching for Mobile Manipulation and Grasping,
9th IEEE-RAS International Conference on Humanoid Robots, Paris, France, 290-296, December 7-10 2009.

- [C4] Zoltan Csaba Marton, Radu Bogdan Rusu, Dominik Jain, Ulrich Klank and Michael Beetz, **Probabilistic Categorization of Kitchen Objects in Table Settings with a Composite Sensor**, *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, St. Louis, MO, USA, 4777-4784, October 11-15 2009.
- [C5] Radu Bogdan Rusu, Ioan Alexandru Sucas, Brian Gerkey, Sachin Chitta, Michael Beetz and Lydia E. Kavraki, **Real-time Perception-Guided Motion Planning for a Personal Robot**, *Proceedings of the IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, St. Louis, MO, USA, 4245-4252, October 11-15 2009.
- [C6] Radu Bogdan Rusu, Zoltan Csaba Marton, Nico Blodow, Andreas Holzbach and Michael Beetz, **Model-based and Learned Semantic Object Labeling in 3D Point Cloud Maps of Kitchen Environments**, *Proceedings of the IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, St. Louis, MO, USA, October 11-15 2009.
- [C7] Radu Bogdan Rusu, Nico Blodow, Zoltan Csaba Marton and Michael Beetz, **Close-range Scene Segmentation and Reconstruction of 3D Point Cloud Maps for Mobile Manipulation in Human Environments**, *Proceedings of the IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, St. Louis, MO, USA, October 11-15 2009.
- [C8] Radu Bogdan Rusu, Andreas Holzbach, Nico Blodow and Michael Beetz, **Fast Geometric Point Labeling using Conditional Random Fields**, *Proceedings of the IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, St. Louis, MO, USA, October 11-15 2009.
- [C9] Christoph Ertelt, Thomas Rühr, Dejan Pangercic, Kristina Shea and Michael Beetz, **Integration of Perception, Global Planning and Local Planning in the Manufacturing Domain**, *Proceedings of Emerging Technologies and Factory Automation (ETFA)*., 2009.
- [C10] Freek Stulp, Andreas Fedrizzi and Michael Beetz, **Action-Related Place-Based Mobile Manipulation**, *Proceedings of the International Conference on Intelligent Robots and Systems (IROS)*, 3115-3120, 2009.
- [C11] Florian Friesdorf, Dejan Pangercic, Heiner Bubb and Michael Beetz, **Mutually Augmented Cognition**, *Proceedings of the International Conference on Social Robotics (ICSR)*., 2009.
- [C12] Radu Bogdan Rusu, Wim Meeussen, Sachin Chitta and Michael Beetz, **Laser-based Perception for Door and Handle Identification**, *Proceedings of the International Conference on Advanced Robotics (ICAR)*, Munich, June 22-26 2009.
- [C13] Dejan Pangercic, Rok Tavcar, Moritz Tenorth and Michael Beetz, **Visual Scene Detection and Interpretation using Encyclopedic Knowledge and Formal Description Logic**, *Proceedings of the International Conference on Advanced Robotics (ICAR)*., Munich, Germany, June 22 - 26 2009.

- [C14] Andreas Fedrizzi, Lorenz Moesenlechner, Freek Stulp and Michael Beetz,
Transformational Planning for Mobile Manipulation based on Action-related Places,
Proceedings of the International Conference on Advanced Robotics (ICAR)., 1-8, 2009.
- [C15] 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.
- [C16] 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.
- [C17] Benoit Morisset, Radu Bogdan Rusu, Aravind Sundaresan, Kris Hauser, Motilal Agrawal, Jean-Claude Latombe and Michael Beetz,
Leaving Flatland: Toward Real-Time 3D Navigation,
Proceedings of the IEEE International Conference on Robotics and Automation (ICRA), Kobe, Japan, May 12-17, 2009.
- [C18] Radu Bogdan Rusu, Nico Blodow and Michael Beetz,
Fast Point Feature Histograms (FPFH) for 3D Registration,
Proceedings of the IEEE International Conference on Robotics and Automation (ICRA), Kobe, Japan, May 12-17, 2009.
- [C19] Zoltan Csaba Marton, Radu Bogdan Rusu and Michael Beetz,
On Fast Surface Reconstruction Methods for Large and Noisy Point Clouds,
Proceedings of the IEEE International Conference on Robotics and Automation (ICRA), Kobe, Japan, May 12-17 2009.
- [C20] Morten Rufus Blas, Radu Bogdan Rusu, Mogens Blanke and Michael Beetz,
Fault-tolerant 3D Mapping with Application to an Orchard Robot,
Proceedings of the 7th IFAC International Symposium on Fault Detection, Supervision and Safety of Technical Processes (SAFEPROCESS'09), Barcelona, Spain, June 30 - July 3, 2009.
- [C21] Ulrich Klank, Muhammad Zeeshan Zia and Michael Beetz,
3D Model Selection from an Internet Database for Robotic Vision,
International Conference on Robotics and Automation (ICRA), 2406-2411, 2009.
- [C22] Dominik Jain, Lorenz Mosenlechner and Michael Beetz,
Equipping Robot Control Programs with First-Order Probabilistic Reasoning Capabilities,
IEEE International Conference on Robotics and Automation (ICRA), 3626-3631, 2009.
- [C23] Nicolai von Hoyningen-Huene and Michael Beetz,
Rao-Blackwellized Resampling Particle Filter for Real-Time Player Tracking in Sports,
AlpeshKumar Ranchordas and Helder Araujo(Eds.), *Fourth International Conference on Computer Vision Theory and Applications (VISAPP)*, Lisboa, Portugal, INSTICC press, Vol. 1, 464-470, Feb. 2009.

- [C24] Andreas Andreakis, Nicolai von Hoyningen-Huene and Michael Beetz,
Incremental Unsupervised Time Series Analysis Using Merge Growing Neural Gas,
José Carlos Príncipe and Risto Miikkulainen(Eds.), *WSOMWSOM*, Springer, Lecture Notes in Computer Science, Vol. 5629, 10-18, 2009.
- [C25] Nicolai von Hoyningen-Huene and Michael Beetz,
Robust real-time multiple target tracking,
Ninth Asian Conference on Computer Vision (ACCV), Xi'an, China, Sep. 2009.
- [C26] Moritz Tenorth and Michael Beetz,
KnowRob – Knowledge Processing for Autonomous Personal Robots,
IEEE/RSJ International Conference on Intelligent Robots and Systems, 4261-4266, 2009.
- [C27] Muhammad Zeeshan Zia, Ulrich Klank and Michael Beetz,
Acquisition of a Dense 3D Model Database for Robotic Vision,
International Conference on Advanced Robotics (ICAR), 2009.
- [C28] Lorenz Mösenlechner and Michael Beetz,
Using Physics- and Sensor-based Simulation for High-fidelity Temporal Projection of Realistic Robot Behavior,
19th International Conference on Automated Planning and Scheduling (ICAPS'09)., 2009.
- [C29] Jan Bandouch and Michael Beetz,
Tracking Humans Interacting with the Environment Using Efficient Hierarchical Sampling and Layered Observation Models,
IEEE Int. Workshop on Human-Computer Interaction (HCI). In conjunction with IC-CV2009, 2009.
- [C30] Moritz Tenorth, Jan Bandouch and Michael Beetz,
The TUM Kitchen Data Set of Everyday Manipulation Activities for Motion Tracking and Action Recognition,
IEEE International Workshop on Tracking Humans for the Evaluation of their Motion in Image Sequences (THEMIS), in conjunction with ICCV2009, 2009.
- [C31] Michael Beetz, Jan Bandouch, Dominik Jain and Moritz Tenorth,
Towards Automated Models of Activities of Daily Life,
First International Symposium on Quality of Life Technology – Intelligent Systems for Better Living, Pittsburgh, Pennsylvania USA, 2009.
- [C32] Dominik Jain, Paul Maier and Gregor Wylezich,
Markov Logic as a Modelling Language for Weighted Constraint Satisfaction Problems,
Eighth International Workshop on Constraint Modelling and Reformulation, in conjunction with CP2009, 2009.
- [C33] Andreas Leha, Dejan Pangercic, Thomas Rühr and Michael Beetz,
Optimization of Simulated Production Process Performance using Machine Learning,
Proceedings of Emerging Technologies and Factory Automation (ETFA)., 2009.

- [C34] Maier and Paul,
Self-Diagnosis and Self-Planning with Constraint-based Hybrid Models,
Proc. First International Conference on Prognostics and Health Management (PHM'09)/Doctoral Consortium, San Diego, CA, USA, September 2009.
- [C35] Maier, Paul, Sachenbacher, Martin, Rühr, Thomas, Kuhn and Lukas,
Integrating Model-based Diagnosis and Prognosis in Autonomous Production,
Proc. First International Conference on Prognostics and Health Management (PHM'09), San Diego, CA, USA, September 2009.
- [C36] Maier, Paul, Sachenbacher and Martin,
Self-Monitoring and Control for Embedded Systems using Hybrid Constraint Automata,
Proc. Workshop on Self-X in Mechatronics and other Engineering Applications, Paderborn, Germany, September 2009.
- [C37] Maier, Paul, Sachenbacher and Martin,
Diagnosis and Fault-adaptive Control for Mechatronic Systems using Hybrid Constraint Automata,
Proc. First International Conference on Prognostics and Health Management (PHM'09), San Diego, CA, USA, September 2009.
- [C38] Maier, Paul, Sachenbacher, Martin, Rühr, Thomas, Kuhn and Lukas,
Integrated Plan Tracking and Prognosis for Autonomous Production Processes,
Proc. of 14th IEEE International Conference on Emerging Technologies and Factory Automation (ETFA-2009), September 2009.
- [C39] Maier, Paul, Sachenbacher, Martin, Rühr, Thomas, Kuhn and Lukas,
Integrated Diagnosis and Plan Assessment for Autonomous Production Processes,
Proc. of The IJCAI-09 Workshop on Self- and Autonomous Systems (SAS-2009)*, July 2009.
- [C40] Maier, Paul, Sachenbacher, Martin, Rühr, Thomas, Kuhn and Lukas,
Constraint-Based Integration of Plan Tracking and Prognosis for Autonomous Production,
KI 2009: Advances in Artificial Intelligence, 32nd Annual German Conference on AI, Paderborn, Germany, Springer, Lecture Notes in Computer Science, Vol. 5803, 403-410, September 15-18 2009.
- [C41] Maier, Paul, Sachenbacher and Martin,
Factory Monitoring and Control with Mixed Hardware/Software, Discrete/Continuous Models,
Proc. of 14th IEEE International Conference on Emerging Technologies and Factory Automation (ETFA-2009), 2009.
- [C42] Li Sun, Ulrich Klank and Michael Beetz,
EYEWATCHME - 3D Hand and object tracking for inside out activity analysis,
IEEE Computer Society Conference on Computer Vision and Pattern Recognition, 2009. CVPR 2009., Vol. , 9-16, June 2009.

- [C43] Alexandra Kirsch, Thibault Kruse and Lorenz Mösenlechner,
An Integrated Planning and Learning Framework for Human-Robot Interaction,
4th Workshop on Planning and Plan Execution for Real-World Systems (held in conjunction with ICAPS 09), 2009.
- [C44] Zoltan Csaba Marton, Lucian Cosmin Goron, Radu Bogdan Rusu and Michael Beetz,
Reconstruction and Verification of 3D Object Models for Grasping,
Proceedings of the 14th International Symposium on Robotics Research (ISRR09), Lucerne, Switzerland, August 31 – September 3 2009.
- [C45] Radu Bogdan Rusu, Andreas Holzbach, Gary Bradski and Michael Beetz,
Detecting and Segmenting Objects for Mobile Manipulation,
Proceedings of IEEE Workshop on Search in 3D and Video (S3DV), held in conjunction with the 12th IEEE International Conference on Computer Vision (ICCV), Kyoto, Japan, September 27 2009.
- [C46] Nico Blodow, Radu Bogdan Rusu, Zoltan Csaba Marton and Michael Beetz,
Partial View Modeling and Validation in 3D Laser Scans for Grasping,
9th IEEE-RAS International Conference on Humanoid Robots (Humanoids), Paris, France, December 7-10 2009.
- [C47] Radu Bogdan Rusu, Andreas Holzbach, Rosen Diankov, Gary Bradski and Michael Beetz,
Perception for Mobile Manipulation and Grasping using Active Stereo,
9th IEEE-RAS International Conference on Humanoid Robots (Humanoids), Paris, France, December 7-10 2009.
- [C48] Michael Beetz, Nico Blodow, Ulrich Klank, Zoltan Csaba Marton, Dejan Pangercic and Radu Bogdan Rusu,
CoP-Man – Perception for Mobile Pick-and-Place in Human Living Environments,
Proceedings of the 22nd IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS) Workshop on Semantic Perception for Mobile Manipulation, St. Louis, MO, USA, October 11-15 2009.
- [C49] Jun Li, Alexis Maldonado, Michael Beetz and Anna Schuboe,
Obstacle avoidance in a pick-and-place task,
Proceedings of the 2009 IEEE Conference on Robotics and Biomimetics, Guilin, Guangxi, China, December 19-23 2009.
- [C50] 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.,
Progress in Robotics. Proceedings of the FIRA RoboWorld Congress, Incheon, Korea, August 16-20 2009.
- [C51] Florian Engstler, Jan Bandouch and Heiner Bubb,
MeMoMan - Model Based Markerless Capturing of Human Motion,
The 17th World Congress on Ergonomics (International Ergonomics Association, IEA), Beijing, China, 2009.
- [C52] Zahid Riaz, Christoph Mayer, Matthias Wimmer, Michael Beetz and Bernd Radig,
A Model Based approach for Expression Invariant Face Recognition,
3rd International Conference on Biometrics, Alghero Italy, Springer, , Vol. , , 2009.

- [C53] Zahid Riaz, Christoph Mayer, Michael Beetz and Bernd Radig,
Facial Expressions Recognition from Image Sequences,
2nd International Conference on Cross-Modal Analysis of Speech, Gestures, Gaze and Facial Expressions, Prague, Czech Republic, Springer, , Vol. , , 2009.
- [C54] Zahid Riaz, Christoph Mayer, Michael Beetz and Bernd Radig,
Model Based Analysis of Face Images for Facial Feature Extraction,
Computer Analysis of Images and Patterns, Munster, Germany, Springer, , Vol. , , 2009.
- [C55] Christoph Mayer, Matthias Wimmer, Martin Eggers and Bernd Radig,
Facial Expression Recognition with 3D Deformable Models,
Proceedings of the 2nd International Conference on Advancements Computer-Human Interaction (ACHI), Springer, , Vol. , , 2009.
- [C56] Zahid Riaz, Michael Beetz and Bernd Radig,
Image Normalization for Face Recognition using 3D Model,
International Conference of Information and Communication Technologies, Karachi, Pakistan, IEEE, , Vol. , , 2009.
- [C57] Zahid Riaz, Christoph Mayer, Michael Beetz and Bernd Radig,
3D Model for Face Recognition across Facial Expressions,
Biometric ID Management and Multimodal Communication, Madrid, Spain, Springer, , Vol. , , 2009.
- [C58] Zahid Riaz, Suat Gedikli, Michael Beetz and Bernd Radig,
A Unified Features Approach to Human Face Image Analysis and Interpretation,
Affective Computing and Intelligent Interaction, Amsterdam, Netherlands, IEEE, , Vol. , , 2009.
- [C59] Zahid Riaz, Christoph Mayer, Saquib Sarfraz, Michael Beetz and Bernd Radig,
Multi-Feature Fusion in Advanced Robotics Applications,
International Conference on Frontier of Information Technology, ACM, , Vol. , , 2009.
- [C60] M.S. Sarfraz, A. Saeed, M.H. Khan and Zahid Riaz,
Bayesian Prior Models for Vehicle Make and Model Recognition,
International Conference on Frontier of Information Technology, ACM, , Vol. , , 2009.
- [C61] Jürgen Gast, Alexander Bannat, Tobias Rehrl, Christoph Mayer, Frank Wallhoff, Gerhard Rigoll and Bernd Radig,
Did I Get it Right: Head Gesture Analysis for Human-Machine Interaction,
Human-Computer Interaction. Novel Interaction Methods and Techniques, Springer, Lecture Notes in Computer Science, Vol. , , 2009.
- [PhD1] Suat Gedikli,
Continual and Robust Estimation of Camera Parameters in Broadcasted Sports Games,
Technische Universität München, 2009.
- [PhD2] Rusu and Radu Bogdan,
Semantic 3D Object Maps for Everyday Manipulation in Human Living Environments,
Technische Universität München, 2009.

- [R1] Moritz Tenorth, Daniel Nyga and Michael Beetz,
Understanding and Executing Instructions for Everyday Manipulation Tasks from the World Wide Web,
IAS group, Technische Universität München, Fakultät für Informatik, 2009.
- [R2] Dominik Jain, Stefan Waldherr and Michael Beetz,
Bayesian Logic Networks,
IAS Group, Fakultät für Informatik, Technische Universität München, 2009.
- [J1] Radu Bogdan Rusu, Zoltan Csaba Marton, Nico Blodow, Mihai Dolha and Michael Beetz,
Towards 3D Point Cloud Based Object Maps for Household Environments,
Robotics and Autonomous Systems Journal (Special Issue on Semantic Knowledge in Robotics), 56(11): 927-941, 30 November 2008.
- [J2] Freek Stulp and Michael Beetz,
Refining the execution of abstract actions with learned action models,
Journal of Artificial Intelligence Research (JAIR), 32: June 2008.
- [J3] Freek Stulp and Michael Beetz,
Combining Declarative, Procedural and Predictive Knowledge to Generate and Execute Robot Plans Efficiently and Robustly,
Robotics and Autonomous Systems Journal (Special Issue on Semantic Knowledge), 2008.
- [J4] Radu Bogdan Rusu, Brian Gerkey and Michael Beetz,
Robots in the kitchen: Exploiting ubiquitous sensing and actuation,
Robotics and Autonomous Systems Journal (Special Issue on Network Robot Systems), 2008.
- [J5] Ulrich Klank, N. Padoy, H. Feussner and N. Navab,
Automatic feature generation in endoscopic images,
International Journal of Computer Assisted Radiology and Surgery, 3(3): 331-339, 2008.
- [J6] Matthias Wimmer, Freek Stulp, Sylvia Pietzsch and Bernd Radig,
Learning Local Objective Functions for Robust Face Model Fitting,
IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI), 30(8): 1357-1370, 2008.
- [J7] Matthias Wimmer, Zahid Riaz, Christoph Mayer and Bernd Radig,
Recognizing Facial Expressions Using Model-based Image Interpretation,
Shane Pinder(Ed.), *Advances in Human-Computer Interaction*, 1: 587-600, October 2008.
- [B1] Matthias Wimmer,
Future User Interfaces Enhanced by Facial Expression Recognition – Interpreting Human Faces with Model-based Techniques,
VDM, Verlag Dr. Müller March 2008.

- [C1] Zoltan Csaba Marton, Nico Blodow, Mihai Dolha, Moritz Tenorth, Radu Bogdan Rusu and Michael Beetz,
Autonomous Mapping of Kitchen Environments and Applications,
Proceedings of the 1st International Workshop on Cognition for Technical Systems, Munich, Germany, 6-8 October, 2008.
- [C2] Radu Bogdan Rusu, Aravind Sundaresan, Benoit Morisset, Motilal Agrawal, Michael Beetz and Kurt Konolige,
Realtime Extended 3D Reconstruction from Stereo for Navigation,
Proceedings of the 21st IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS) Workshop on 3D Mapping, Nice, France, September 26, 2008.
- [C3] Radu Bogdan Rusu, Zoltan Csaba Marton, Nico Blodow and Michael Beetz,
Interpretation of Urban Scenes based on Geometric Features,
Proceedings of the 21st IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS) Workshop on 3D Mapping, Nice, France, September 26, 2008.
- [C4] Paul Maier and Martin Sachenbacher,
Constraint Optimization and Abstraction for Embedded Intelligent Systems,
Proc. Fifth International Conference on Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems (CPAIOR'08), Paris, France, 338-342, 2008.
- [C5] Paul Maier,
Adaptive Abstraction of Constraint-Based Models for Self-Diagnosis and Planning,
Proc. AAAI/SIGART Doctoral Consortium, Menlo Park, California, The AAAI Press, 1859-1860, July 2008.
- [C6] Martin Sachenbacher and Stefan Schwoon,
Model-based Testing Using Quantified CSPs: A Map,
Proc. Workshop on Model-based Systems (MBS-2008), Patras, Greece, 37-41, 2008.
- [C7] Stefan Heinz and Martin Sachenbacher,
Using Model Counting to Find Optimal Distinguishing Tests,
Proc. First International Workshop on Counting Problems in CSP and SAT, and other neighbouring problems (Counting'08), 2008.
- [C8] Paul Maier and Martin Sachenbacher,
Adaptive Domain Abstraction in a Soft-Constraint Message-Passing Algorithm,
Proc. Ninth International Workshop on Preferences and Soft Constraints (Soft'08), 2008.
- [C9] Martin Sachenbacher and Paul Maier,
Test Strategy Generation using Quantified CSPs,
Proc. International Conference on Principles and Practice of Constraint Programming (CP'08), 2008.
- [C10] Martin Sachenbacher and Stefan Schwoon,
Model-based Test Generation Using Quantified CSPs,
Proc. International Workshop on Principles of Diagnosis (DX'08), 2008.

- [C11] Radu Bogdan Rusu, Aravind Sundaresan, Benoit Morisset, Motilal Agrawal and Michael Beetz,
Leaving Flatland: Realtime 3D Stereo Semantic Reconstruction,
Proceedings of the International Conference on Intelligent Robotics and Applications (ICIRA) 2008, October 15-17, Wuhan, China, 2008.
- [C12] Radu Bogdan Rusu, Zoltan Csaba Marton, Nico Blodow and Michael Beetz,
Learning Informative Point Classes for the Acquisition of Object Model Maps,
Proceedings of the 10th International Conference on Control, Automation, Robotics and Vision (ICARCV), Hanoi, Vietnam, December 17-20, 2008.
- [C13] 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.
- [C14] 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.
- [C15] Freek Stulp and Michael Beetz,
Learning Predictive Knowledge to Optimize Robot Motor Control,
International Conference on Cognitive Systems (CogSys 2008), 2008.
- [C16] Jan Bandouch, Florian Engstler and Michael Beetz,
Evaluation of Hierarchical Sampling Strategies in 3D Human Pose Estimation,
Proceedings of the 19th British Machine Vision Conference (BMVC), 2008.
- [C17] Jan Bandouch, Florian Engstler and Michael Beetz,
Accurate Human Motion Capture Using an Ergonomics-Based Anthropometric Human Model,
Proceedings of the Fifth International Conference on Articulated Motion and Deformable Objects (AMDO), 2008.
- [C18] Radu Bogdan Rusu, Jan Bandouch, Zoltan Csaba Marton, Nico Blodow and Michael Beetz,
Action Recognition in Intelligent Environments using Point Cloud Features Extracted from Silhouette Sequences,
IEEE 17th International Symposium on Robot and Human Interactive Communication (RO-MAN), Muenchen, Germany, 2008.
- [C19] Radu Bogdan Rusu, Zoltan Csaba Marton, Nico Blodow and Michael Beetz,
Persistent Point Feature Histograms for 3D Point Clouds,
Proceedings of the 10th International Conference on Intelligent Autonomous Systems (IAS-10), Baden-Baden, Germany, 2008.

- [C20] Radu Bogdan Rusu, Zoltan Csaba Marton, Nico Blodow, Mihai Emanuel Dolha and Michael Beetz,
Functional Object Mapping of Kitchen Environments,
Proceedings of the 21st IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), Nice, France, September 22-26, 2008.
- [C21] Radu Bogdan Rusu, Nico Blodow, Zoltan Csaba Marton and Michael Beetz,
Aligning Point Cloud Views using Persistent Feature Histograms,
Proceedings of the 21st IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), Nice, France, September 22-26, 2008.
- [C22] Thomas Rühr, Dejan Pangercic and Michael Beetz,
Structured Reactive Controllers and Transformational Planning for Manufacturing,
Proceedings of the 13th IEEE International Conference on Emerging Technologies and Factory Automation (ETFA), Hamburg, Germany, September 15-18, 2008.
- [C23] Dejan Pangercic, Radu Bogdan Rusu and Michael Beetz,
3D-Based Monocular SLAM for Mobile Agents Navigating in Indoor Environments,
Proceedings of the 13th IEEE International Conference on Emerging Technologies and Factory Automation (ETFA), Hamburg, Germany, September 15-18, 2008.
- [C24] M. F. Zäh, M. Beetz, K. Shea, G. Reinhart, O. Stursberg, M. Ostgathe, C. Lau, C. Ertelt, D. Pangercic, Thomas Rühr, H. Ding and T. Paschedag,
An Integrated Approach to Realize the Cognitive Machine Shop,
Proceedings of the 1st International Workshop on Cognition for Technical Systems, München, Germany, 6-8 October, 2008.
- [C25] Moritz Tenorth and Michael Beetz,
Towards Practical and Grounded Knowledge Representation Systems for Autonomous Household Robots,
Proceedings of the 1st International Workshop on Cognition for Technical Systems, München, Germany, 6-8 October, 2008.
- [C26] Dominik Jain, Lorenz Mösenlechner and Michael Beetz,
Equipping Robot Control Programs with First-Order Probabilistic Reasoning Capabilities,
Proceedings of the 1st International Workshop on Cognition for Technical Systems, München, Germany, 6-8 October 2008.
- [C27] Lorenz Mösenlechner, Armin Müller and Michael Beetz,
High Performance Execution of Everyday Pick-and-Place Tasks by Integrating Transformation Planning and Reactive Execution,
Proceedings of the 1st International Workshop on Cognition for Technical Systems, München, Germany, 6-8 October, 2008.
- [C28] Matthias Wimmer, Christoph Mayer, Freek Stulp and Bernd Radig,
Face Model Fitting based on Machine Learning from Multi-band Images of Facial Components,
Workshop on Non-Rigid Shape Analysis and Deformable Image Alignment, held in conjunction with CVPR, Anchorage, AK, USA, June 2008.

- [C29] Matthias Wimmer, Christoph Mayer, Sylvia Pietzsch and Bernd Radig,
Tailoring Model-based Techniques for Facial Expression Interpretation,
The First International Conference on Advances in Computer-Human Interaction (ACHI08), Sainte Luce, Martinique, February 2008.
- [C30] Matthias Wimmer, Björn Schuller, Dejan Arsic, Bernd Radig and Gerhard Rigoll,
Low-level Fusion of Audio and Video Feature for Multi-modal Emotion Recognition,
3rd International Conference on Computer Vision Theory and Applications (VISAPP), Madeira, Portugal, Vol. 2, 145-151, January 2008.
- [C31] Sylvia Pietzsch, Matthias Wimmer, Freek Stulp and Bernd Radig,
Face Model Fitting with Generic, Group-specific, and Person-specific Objective Functions,
3rd International Conference on Computer Vision Theory and Applications (VISAPP), Madeira, Portugal, Vol. 2, 5-12, January 2008.
- [C32] Matthias Wimmer, Bruce A. MacDonald, Dinuka Jayamuni and Arpit Yadav,
Facial Expression Recognition for Human-robot Interaction – A Prototype,
Reinhard Klette and Gerald Sommer(Eds.), *2nd Workshop Robot Vision. Lecture Notes in Computer Science.*, Auckland, New Zealand, Springer, Vol. 4931/2008, 139-152, February 2008.
- [C33] Björn Schuller, Matthias Wimmer, Lorenz Mösenlechner, Christian Kern and Gerhard Rigoll,
Brute-Forcing Hierarchical Functionals for Paralinguistics: a Waste of Feature Space?,
Proceedings of ICASSP 2008, Las Vegas, Nevada, USA, April 2008.
- [C34] Matthias Wimmer, Christoph Mayer and Bernd Radig,
Robustly Classifying Facial Components Using a Set of Adjusted Pixel Features,
Proc. of the International Conference on Face and Gesture Recognition (FGR08), Amsterdam, Netherlands, September 2008.
- [C35] Matthias Wimmer, Shinya Fujie, Freek Stulp, Tetsunori Kobayashi and Bernd Radig,
An ASM Fitting Method Based on Machine Learning that Provides a Robust Parameter Initialization for AAM Fitting,
Proc. of the International Conference on Automatic Face and Gesture Recognition (FGR08), Amsterdam, Netherlands, September 2008.
- [C36] Christoph Mayer, Matthias Wimmer, Freek Stulp, Zahid Riaz, Anton Roth, Martin Eggers and Bernd Radig,
A Real Time System for Model-based Interpretation of the Dynamics of Facial Expressions,
Proc. of the International Conference on Automatic Face and Gesture Recognition (FGR08), Amsterdam, Netherlands, September 2008.
- [C37] Matthias Wimmer, Christoph Mayer, Martin Eggers and Bernd Radig,
Are You Happy with Your First Name?,
Proceedings of the 3rd Workshop on Emotion and Computing: Current Research and Future Impact, Kaiserslautern, Germany, 23-29, September 2008.

- [C38] Christoph Mayer, Matthias Wimmer, Freek Stulp, Zahid Riaz, Anton Roth, Martin Eggers and Bernd Radig,
Interpreting the Dynamics of Facial Expressions in Real Time Using Model-based Techniques,
Proceedings of the 3rd Workshop on Emotion and Computing: Current Research and Future Impact, Kaiserslautern, Germany, 45-46, September 2008.
- [C39] Björn Schuller, Matthias Wimmer, Dejan Arsic, Tobias Moosmayr and Gerhard Rigoll,
Detection of Security Related Affect and Behaviour in Passenger Transport,
Proc. of the 9th INTERSPEECH, Brisbane, Australia, ISCA, ASSTA, September 2008.
- [C40] Matthias Wimmer, Sylvia Pietzsch, Christoph Mayer and Bernd Radig,
Robustly Estimating the Color of Facial Components Using a Set of Adjusted Pixel Features,
14. Workshop Farbbildverarbeitung, Aachen, Germany, 85-96, October 2008.
- [C41] Matthias Wimmer, Christoph Mayer and Bernd Radig,
Recognizing Facial Expressions Using Model-based Image Interpretation,
Verbal and Nonverbal Communication Behaviours, COST Action 2102 International Workshop, Vietri sul Mare, Italy, , April 2008.
- [C42] Zahid Riaz, Christoph Mayer, Matthias Wimmer and Bernd Radig,
Model Based Face Recognition Across Facial Expressions,
Journal of Information and Communication Technology, , , December 2008.
- [C43] Zahid Riaz, Michael Beetz and Bernd Radig,
Shape Invariant Recognition of Segmented Human Faces using Eigenfaces,
Proceedings of the 12th International Multitopic Conference, , IEEE, 2008.
- [PhD1] Alexandra Kirsch,
Integration of Programming and Learning in a Control Language for Autonomous Robots Performing Everyday Activities,
Technische Universität München, 2008.
- [PhD2] Armin Müller,
Transformational Planning for Autonomous Household Robots using Libraries of Robust and Flexible Plans,
Technische Universität München, 2008.
- [R1] Stefan Heinz and Martin Sachenbacher,
Using Model Counting to Find Optimal Distinguishing Tests,
08-32, Zuse Institute Berlin, 2008.
- [J1] Martin Buss, Michael Beetz and Dirk Wollherr,
CoTeSys — Cognition for Technical Systems,
International Journal of Assistive Robotics and Mechatronics, 8(4): 25-36, 2007.

- [B1] **KI 2007: Advances in Artificial Intelligence**,
Joachim Hertzberg, Michael Beetz and Roman Englert(Eds.), Springer-Verlag August 2007.
- [C1] Nicolai v. Hoyningen-Huene, Bernhard Kirchlechner and Michael Beetz,
GrAM: Reasoning with Grounded Action Models by Combining Knowledge Representation and Data Mining,
Towards Affordance-based Robot Control, 2007.
- [C2] Freek Stulp, Wolfram Koska, Alexis Maldonado and Michael Beetz,
Seamless Execution of Action Sequences,
Proceedings of the IEEE International Conference on Robotics and Automation (ICRA), 3687-3692, 2007.
- [C3] Michael Beetz, Suat Gedikli, Jan Bandouch, Bernhard Kirchlechner, Nico von Hoyningen-Huene and Alexander Perzylo,
Visually Tracking Football Games Based on TV Broadcasts,
Proceedings of the Twentieth International Joint Conference on Artificial Intelligence (IJCAI), 2007.
- [C4] Suat Gedikli, Jan Bandouch, Nico von Hoyningen-Huene, Bernhard Kirchlechner and Michael Beetz,
An Adaptive Vision System for Tracking Soccer Players from Variable Camera Settings,
Proceedings of the 5th International Conference on Computer Vision Systems (ICVS), 2007.
- [C5] Matthias Kranz, Alexis Maldonado, Benedikt Hoernler, Radu Bogdan Rusu, Michael Beetz, Gerhard Rigoll and Albrecht Schmidt,
A Knife and a Cutting Board as Implicit User Interface - Towards Context-Aware Kitchen Utilities,
Proceedings of First International Conference on Tangible and Embedded Interaction 2007, TEI 2007, February 15-17 Baton Rouge, Louisiana, USA, 2007.
- [C6] Matthias Kranz, Alexis Maldonado, Radu Bogdan Rusu, Benedikt Hoernler, Gerhard Rigoll, Michael Beetz and Albrecht Schmidt,
Sensing Technologies and the Player-Middleware for Context-Awareness in Kitchen Environments,
Proceedings of Fourth International Conference on Networked Sensing Systems, June 6 - 8, 2007, Braunschweig, Germany, 2007.
- [C7] Radu Bogdan Rusu, Alexis Maldonado, Michael Beetz and Brian Gerkey,
Extending Player/Stage/Gazebo towards Cognitive Robots Acting in Ubiquitous Sensor-equipped Environments,
Proceedings of the IEEE International Conference on Robotics and Automation (ICRA) Workshop for Network Robot Systems, 2007, April 14, Rome, Italy, 2007.
- [C8] Martin Buss, Michael Beetz and Dirk Wollherr,
CoTeSys — Cognition for Technical Systems,
Proceedings of the 4th COE Workshop on Human Adaptive Mechatronics (HAM), 2007.

- [C9] 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.
- [C10] Alexandra Kirsch and Michael Beetz,
Training on the Job — Collecting Experience with Hierarchical Hybrid Automata,
J. Hertzberg, M. Beetz and R. Englert(Eds.), *Proceedings of the 30th German Conference on Artificial Intelligence (KI-2007), 473-476, 2007.*
- [C11] Armin Müller, Alexandra Kirsch and Michael Beetz,
Transformational Planning for Everyday Activity,
Proceedings of the 17th International Conference on Automated Planning and Scheduling (ICAPS'07), Providence, USA, 248-255, September 2007.
- [C12] Armin Müller and Michael Beetz,
Towards a Plan Library for Household Robots,
Proceedings of the ICAPS'07 Workshop on Planning and Plan Execution for Real-World Systems: Principles and Practices for Planning in Execution, Providence, USA, September 2007.
- [C13] Michael Beetz, Martin Buss and Dirk Wollherr,
Cognitive Technical Systems — What Is the Role of Artificial Intelligence?,
J. Hertzberg, M. Beetz and R. Englert(Eds.), *Proceedings of the 30th German Conference on Artificial Intelligence (KI-2007), 19-42, 2007.*
- [C14] Radu Bogdan Rusu, Nico Blodow, Zoltan-Csaba Marton, Alina Soos and Michael Beetz,
Towards 3D Object Maps for Autonomous Household Robots,
Proceedings of the 20th IEEE International Conference on Intelligent Robots and Systems (IROS), San Diego, CA, USA, 2007.
- [C15] Dominik Jain, Bernhard Kirchlechner and Michael Beetz,
Extending Markov Logic to Model Probability Distributions in Relational Domains,
KI 2007: Advances in Artificial Intelligence, 30th Annual German Conference on AI, Springer, Lecture Notes in Computer Science, Vol. 4667, 129-143, 2007.
- [C16] Lars Kunze, Kai Lingemann, Andreas Nüchter and Joachim Hertzberg,
Salient Visual Features to Help Close the Loop in 6D SLAM,
The 5th International Conference on Computer Vision Systems, 2007, 2007.
- [C17] Matthias Wimmer, Bernd Radig and Christoph Mayer,
SIPBILD – Mimik- und Gestikererkennung in der Mensch-Maschine-Schnittstelle,
Beiträge der 37. Jahrestagung der Gesellschaft für Informatik (GI), Bremen, Germany, Vol. 1, 271-274, September 2007.
- [C18] Björn Schuller, Matthias Wimmer, Dejan Arsic, Gerhard Rigoll and Bernd Radig,
Audiovisual Behavior Modeling by Combined Feature Spaces,
IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP), Honolulu, Hawaii, USA, Vol. 2, 733-736, April 2007.

- [C19] Matthias Wimmer, Sylvia Pietzsch, Freek Stulp and Bernd Radig,
Learning Robust Objective Functions with Application to Face Model Fitting,
Proceedings of the 29th DAGM Symposium, Heidelberg, Germany, Vol. 1, 486-496, September 2007.
- [C20] Matthias Wimmer and Bernd Radig,
Automatically Learning the Objective Function for Model Fitting,
Proceedings of the Meeting in Image Recognition and Understanding (MIRU), Hiroshima, Japan, July 2007.
- [C21] Matthias Wimmer, Ursula Zucker and Bernd Radig,
Human Capabilities on Video-based Facial Expression Recognition,
Dirk Reichardt and Paul Levi(Eds.), *Proceedings of the 2nd Workshop on Emotion and Computing – Current Research and Future Impact*, Osnabrück, Germany, 7-10, September 2007.
- [C22] Martin A. Tischler, Christian Peter, Matthias Wimmer and Jörg Voskamp,
Application of emotion recognition methods in automotive research,
Dirk Reichardt and Paul Levi(Eds.), *Proceedings of the 2nd Workshop on Emotion and Computing – Current Research and Future Impact*, Oldenburg, Germany, 50-55, September 2007.
- [C23] Matthias Wimmer and Bernd Radig,
Initial Pose Estimation for 3D Models Using Learned Objective Functions,
Yasushi Yagi, Sing Bing Kang, In So Kweon and Hongbin Zha(Eds.), *Proceedings of the 8th Asian Conference on Computer Vision (ACCV07)*, Tokyo, Japan, Springer, LNCS, Vol. 4844, 332-341, November 2007.
- [C24] Matthias Wimmer, Christoph Mayer, Freek Stulp and Bernd Radig,
Estimating Natural Activity by Fitting 3D Models via Learned Objective Functions,
Workshop on Vision, Modeling, and Visualization (VMV), Saarbrücken, Germany, Vol. 1, 233-241, November 2007.
- [C25] R. Schultz, K. Oertel, Christian Peter, Matthias Wimmer, Jörg Voskamp and B. Urban,
Emotionale Aspekte in Produktevaluationen,
2. Kongress Multimediaetechnik, Wismar, Germany, October 2007.
- [C26] Matthias Wimmer, Freek Stulp and Bernd Radig,
Enabling Users to Guide the Design of Robust Model Fitting Algorithms,
Workshop on Interactive Computer Vision, held in conjunction with ICCV 2007, Rio de Janeiro, Brazil, Omnipress, 28, October 2007.
- [PhD1] Freek Stulp,
Tailoring Robot Actions to Task Contexts using Action Models,
Technische Universität München, 2007.
- [PhD2] Matthias Wimmer,
Model-based Image Interpretation with Application to Facial Expression Recognition,
Technische Universität München, Institute for Informatics, December 2007.

- [J1] Radu Bogdan Rusu,
Acquiring Models of Everyday Activities for Robotic Control in 'Current PhD Research in Pervasive Computing',
A. Ferscha, M. Langheinrich and A. Schmidt(Eds.), *Technical Reports - University of Munich, Department of Computer Science, Media Informatics Group*, LMU-MI-2005-3: March 2006.
- [J2] Matthias Wimmer and Bernd Radig,
Adaptive Skin Color Classifier,
ICGST International Journal on Graphics, Vision and Image Processing, Special Issue on Biometrics: 2006.
- [J3] Matthias Wimmer and Simone Hämmerle,
Bitte recht freundlich,
Journal: Zukunft im Brennpunkt, 5: 35-38, December 2006.
- [C1] Radu Bogdan Rusu, Alexis Maldonado, Michael Beetz, Matthias Kranz, Lorenz Mösenlechner, Paul Holleis and Albrecht Schmidt,
Player/Stage as Middleware for Ubiquitous Computing,
Proceedings of the 8th Annual Conference on Ubiquitous Computing (UbiComp 2006), Orange County California, September 17-21, 2006.
- [C2] Matthias Kranz, Radu Bogdan Rusu, Alexis Maldonado, Michael Beetz and Albrecht Schmidt,
A Player/Stage System for Context-Aware Intelligent Environments,
Proceedings of UbiSys'06, System Support for Ubiquitous Computing Workshop, at the 8th Annual Conference on Ubiquitous Computing (UbiComp 2006), Orange County California, September 17-21, 2006, 2006.
- [C3] Freek Stulp, Mark Pflüger and Michael Beetz,
Feature Space Generation using Equation Discovery,
Proceedings of the 29th German Conference on Artificial Intelligence (KI), 2006.
- [C4] Michael Isik, Freek Stulp, Gerd Mayer and Hans Utz,
Coordination without Negotiation in Teams of Heterogeneous Robots,
Proceedings of the RoboCup Symposium, Bremen, Germany, 355-362, 2006.
- [C5] Michael Beetz, Jan Bandouch, Suat Gedikli, Nico von Hoyningen-Huene, Bernhard Kirchlechner and Alexis Maldonado,
Camera-based Observation of Football Games for Analyzing Multi-agent Activities,
Proceedings of the Fifth International Joint Conference on Autonomous Agents and Multiagent Systems (AAMAS), 2006.
- [C6] Freek Stulp, Michael Isik and Michael Beetz,
Implicit Coordination in Robotic Teams using Learned Prediction Models,
Proceedings of the IEEE International Conference on Robotics and Automation (ICRA), 1330-1335, 2006.
- [C7] Freek Stulp and Michael Beetz,
Action Awareness – Enabling Agents to Optimize, Transform, and Coordinate Plans,
Proceedings of the Fifth International Joint Conference on Autonomous Agents and Multiagent Systems (AAMAS), 2006.

- [C8] Armin Müller and Michael Beetz,
Designing and Implementing a Plan Library for a Simulated Household Robot,
Michael Beetz, Kanna Rajan, Michael Thielscher and Radu Bogdan Rusu(Eds.), *Cognitive Robotics: Papers from the AAAI Workshop*, Menlo Park, California, American Association for Artificial Intelligence, Technical Report WS-06-03, 119-128, 2006.
- [C9] Markus Geipel and Michael Beetz,
Learning to shoot goals, Analysing the Learning Process and the Resulting Policies,
Gerhard Lakemeyer, Elizabeth Sklar, Domenico Sorenti and Tomoichi Takahashi(Eds.), *RoboCup-2006: Robot Soccer World Cup X*, Springer Verlag, Berlin, 2006.
- [C10] Matthias Wimmer, Freek Stulp, Stephan Tschechne and Bernd Radig,
Learning Robust Objective Functions for Model Fitting in Image Understanding Applications,
Michael J. Chantler, Emanuel Trucco and Robert B. Fisher(Eds.), *Proceedings of the 17th British Machine Vision Conference (BMVC)*, Edinburgh, UK, BMVA, Vol. 3, 1159-1168, September 2006.
- [C11] Matthias Wimmer, Bernd Radig and Michael Beetz,
A Person and Context Specific Approach for Skin Color Classification,
Proceedings of the 18th International Conference of Pattern Recognition (ICPR 2006), Los Alamitos, CA, USA, IEEE Computer Society, Vol. 2, 39-42, August 2006.
- [J1] Michael Beetz, Bernhard Kirchlechner and Martin Lames,
Computerized Real-Time Analysis of Football Games,
IEEE Pervasive Computing, 4(3): 33-39, 2005.
- [J2] Michael Beetz and Henrik Grosskreutz,
Probabilistic Hybrid Action Models for Predicting Concurrent Percept-driven Robot Behavior,
Journal of Artificial Intelligence Research, 24: 799-849, 2005.
- [BC1] Michael Beetz,
Towards Comprehensive Computational Models for Plan-Based Control of Autonomous Robots,
Dieter Hutter and Werner Stephan(Ed.), *Mechanizing Mathematical Reasoning: Essays in Honor of Jörg H. Siekmann on the Occasion of His 60th Birthday*, Springer LNCS 2605, 514-527, 2005.
- [C1] Alexandra Kirsch and Michael Beetz,
Combining Learning and Programming for High-Performance Robot Controllers,
Tagungsband Autonome Mobile Systeme 2005, Springer Verlag, Reihe Informatik aktuell, 2005.
- [C2] Alexandra Kirsch,
Towards High-performance Robot Plans with Grounded Action Models: Integrating Learning Mechanisms into Robot Control Languages,
ICAPS Doctoral Consortium, 2005.

- [C3] Alexandra Kirsch, Michael Schweitzer and Michael Beetz,
Making Robot Learning Controllable: A Case Study in Robot Navigation,
Proceedings of the ICAPS Workshop on Plan Execution: A Reality Check, 2005.
- [C4] Freek Stulp and Michael Beetz,
Optimized Execution of Action Chains Using Learned Performance Models of Abstract Actions,
Proceedings of the Nineteenth International Joint Conference on Artificial Intelligence (IJCAI), 2005.
- [C5] Matthias Wimmer and Bernd Radig,
Adaptive Skin Color Classifier,
Ashraf Aboshosha et al.(Ed.), *Proceedings of the first International Conference on Graphics, Vision and Image Processing*, Cairo, Egypt, ICGST, Vol. I, 324-327, December 2005.
- [C6] Simone Hämmerle, Matthias Wimmer, Bernd Radig and Michael Beetz,
Sensor-based Situated, Individualized, and Personalized Interaction in Smart Environments,
Armin B. Cremers, Rainer Manthey, Peter Martini and Volker Steinhage(Eds.), *INFORMATIK 2005 - Informatik LIVE! Band 1, Beiträge der 35. Jahrestagung der Gesellschaft für Informatik (GI)*, Bonn, Germany, GI, LNI, Vol. 67, 261-265, September 2005.
- [J1] Robert Hanek and Michael Beetz,
The Contracting Curve Density Algorithm: Fitting Parametric Curve Models to Images Using Local Self-adapting Separation Criteria,
International Journal of Computer Vision, 59(3): 233-258, 2004.
- [J2] Michael Beetz, Thorsten Schmitt, Robert Hanek, Sebastian Buck, Freek Stulp, Derik Schröter and Bernd Radig,
The AGILO Robot Soccer Team – Experience-based Learning and Probabilistic Reasoning in Autonomous Robot Control,
Autonomous Robots, 17(1): 55-77, 2004.
- [C1] Derik Schröter and Michael Beetz,
RG Mapping: Building Object-Oriented Representations of Structured Human Environments,
6-th Open Russian-German Workshop on Pattern Recognition and Image Understanding (OGRW), Katun/Russia, 2004.
- [C2] Michael Beetz, Sven Flossmann and Thomas Stämmeier,
Motion and Episode Models for (Simulated) Football Games: Acquisition, Representation, and Use,
3rd International Joint Conference on Autonomous Agents & Multi Agent Systems (AAMAS), 2004.
- [C3] Michael Beetz, Alexandra Kirsch and Armin Müller,
RPL-LEARN: Extending an Autonomous Robot Control Language to Perform Experience-based Learning,
3rd International Joint Conference on Autonomous Agents & Multi Agent Systems (AAMAS), 2004.

- [C4] Armin Müller, Alexandra Kirsch and Michael Beetz,
Object-oriented Model-based Extensions of Robot Control Languages,
27th German Conference on Artificial Intelligence, 2004.
- [C5] Freek Stulp, Alexandra Kirsch, Suat Gedikli and Michael Beetz,
AGILO RoboCuppers 2004,
RoboCup International Symposium 2004, Lisbon, July 2004.
- [C6] Freek Stulp, Suat Gedikli and Michael Beetz,
Evaluating Multi-Agent Robotic Systems Using Ground Truth,
Proceedings of the Workshop on Methods and Technology for Empirical Evaluation of Multi-agent Systems and Multi-robot Teams (MTEE), 2004.
- [C7] M. Beetz, F. Fischer, S. Flossmann, B. Kirchlechner, A. Unseld and C. Holzer,
Watching Football with the Eyes of Experts: Integrated Intelligent Systems for the Automatic Analysis of (Simulated) Football Games,
5th Annual Conference dvs-Section Computer Science in Sport, 2004.
- [C8] M. Beetz, B. Kirchlechner and F. Fischer,
Interpretation and Processing of Position Data for the Empirical Study of the Behavior of Simulation League Robocup Teams,
KI 2004 Workshop, 2004.
- [C9] Hans Utz, Freek Stulp and Arndt Mühlendorf,
Sharing Belief in Teams of Heterogeneous Robots,
Daniele Nardi, Martin Riedmiller and Claude Sammut(Eds.), *RoboCup-2004: The Eighth RoboCup Competitions and Conferences*, Lisbon, Portugal, Springer Verlag, 508-515, 2004.
- [C10] D. Schröter and M. Beetz,
Acquiring Modells of Rectangular Objects for Robot Maps,
Proc. of IEEE International Conference on Robotics and Automation (ICRA), New Orleans/USA, 2004.
- [C11] D. Schröter, T. Weber, M. Beetz and B. Radig,
Detection and Classification of Gateways for the Acquisition of Structured Robot Maps,
Proc. of 26th Pattern Recognition Symposium (DAGM), Tübingen/Germany, 2004.
- [C12] Stefan Fischer, Sven Döring, Matthias Wimmer and Antonia Krummheuer,
Experiences with an Emotional Sales Agent,
Elisabeth André, Laila Dybkjær, Wolfgang Minker and Paul Heisterkamp(Eds.), *Affective Dialogue Systems*, Kloster Irsee, Germany, Springer, Lecture Notes in Computer Science, Vol. 3068, 309-312, June 2004.
- [PhD1] Robert Hanek,
Fitting Parametric Curve Models to Images Using Local Self-adapting Separation Criteria,
Department of Informatics, Technische Universität München, 2004.
- [PhD2] Thorsten Schmitt,
Vision-based Probabilistic State Estimation for Cooperating autonomous Robots,
Department of Informatics, Technische Universität München, 2004.

- [J1] Robert Hanek, Thorsten Schmitt, Sebastian Buck and Michael Beetz,
Towards RoboCup without color labeling,
AI Magazine, 24(2): 37-40, 2003.
- [C1] Michael Beetz, Freek Stulp, Alexandra Kirsch, Armin Müller and Sebastian Buck,
Autonomous Robot Controllers Capable of Acquiring Repertoires of Complex Skills,
RoboCup International Symposium 2003, Padova, July 2003.
- [C2] Thorsten Schmitt and Michael Beetz,
Designing Probabilistic State Estimators for Autonomous Robot Control,
IEEE/RSJ Intl. Conf. on Intelligent Robots and Systems (IROS), 2003.
- [C3] Thorsten Schmitt, Robert Hanek and Michael Beetz,
Developing Comprehensive State Estimators for Robot Soccer,
RoboCup International Symposium 2003, Padova, 2003.
- [C4] Michael Beetz, Suat Gedikli, Robert Hanek, Thorsten Schmitt and Freek Stulp,
AGILO RoboCuppers 2003: Computational Principles and Research Directions,
RoboCup International Symposium 2003, Padova, 2003.
- [PhD1] Sebastian Buck,
Experience-Based Control and Coordination of Autonomous Mobile Systems in Dynamic Environments,
Department of Informatics, Technische Universität München, 2003.
- [J1] Thorsten Belker, Michael Beetz and Armin Cremers,
Learning Action Models for the Improved Execution of Navigation Plans,
Robotics and Autonomous Systems, 38(3-4): 137-148, March 2002.
- [J2] Thorsten Schmitt, Robert Hanek, Michael Beetz, Sebastian Buck and Bernd Radig,
Cooperative Probabilistic State Estimation for Vision-based Autonomous Mobile Robots,
IEEE Transactions on Robotics and Automation, 18(5): October 2002.
- [J3] Meyer, M., Desbrun, M., Schröder, P., Barr and A.H.,
Discrete differential-geometry operators for triangulated 2-manifolds,
Visualization and mathematics, 3(7): 34-57, 2002.
- [B1] Michael Beetz,
Plan-based Control of Robotic Agents,
Springer Publishers 2002.
- [B2] Michael Beetz, Joachim Hertzberg, Malik Ghallab and Martha Pollack,
Advances in Plan-based Control of Robotic Agents,
Springer Publishers 2002.

- [BC1] Michael Beetz,
Towards integrated computational models for the plan-based control of robotic agents.,
Festschrift zum 60. Geburtstag von Prof. J. Siekmann, Springer Publishers, Lecture Notes in Artificial Intelligence, 2002.
- [C1] Robert Hanek, Thorsten Schmitt, Sebastian Buck and Michael Beetz,
Towards RoboCup without Color Labeling,
RoboCup International Symposium 2002, Fukuoka, Japan, Springer Publishers, Lecture Notes in Artificial Intelligence (LNAI), 2002.
- [C2] Thorsten Schmitt, Michael Beetz, Robert Hanek and Sebastian Buck,
Watch their Moves: Applying Probabilistic Multiple Object Tracking to Autonomous Robot Soccer,
The Eighteenth National Conference on Artificial Intelligence, Edmonton, Canada, 2002.
- [C3] Robert Hanek, Thorsten Schmitt, Sebastian Buck and Michael Beetz,
Fast Image-based Object Localization in Natural Scenes,
IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS) 2002, Lausanne, 116-122, 2002.
- [C4] Michael Beetz, Sebastian Buck, Robert Hanek, Thorsten Schmitt and Bernd Radig,
The AGILO Autonomous Robot Soccer Team: Computational Principles, Experiences, and Perspectives,
International Joint Conference on Autonomous Agents and Multi Agent Systems (AAMAS) 2002, Bologna, Italy, 805-812, 2002.
- [C5] Sebastian Buck, Michael Beetz and Thorsten Schmitt,
Approximating the Value Function for Continuous Space Reinforcement Learning in Robot Control,
Proc. of the IEEE Intl. Conf. on Intelligent Robots and Systems, 2002.
- [C6] Sebastian Buck, Michael Beetz and Thorsten Schmitt,
M-ROSE: A Multi Robot Simulation Environment for Learning Cooperative Behavior,
H. Asama, T. Arai, T. Fukuda and T. Hasegawa(Eds.), *Distributed Autonomous Robotic Systems 5, Lecture Notes in Artificial Intelligence*, Springer-Verlag, LNAI, 2002.
- [C7] Sebastian Buck, Michael Beetz and Thorsten Schmitt,
Reliable Multi Robot Coordination Using Minimal Communication and Neural Prediction,
M. Beetz, J. Hertzberg, M. Ghallab and M. Pollack(Eds.), *Advances in Plan-based Control of Autonomous Robots. Selected Contributions of the Dagstuhl Seminar "Plan-based Control of Robotic Agents"*, Springer, Lecture Notes in Artificial Intelligence, 2002.
- [C8] Sebastian Buck, Freek Stulp, Michael Beetz and Thorsten Schmitt,
Machine Control Using Radial Basis Value Functions and Inverse State Projection,
Proc. of the IEEE Intl. Conf. on Automation, Robotics, Control, and Vision, 2002.

- [C9] Michael Beetz, Sebastian Buck, Robert Hanek, Andreas Hofhauser and Thorsten Schmitt,
AGILO RoboCuppers 2002: Applying Cooperative Game State Estimation Experience-based Learning, and Plan-based Control to Autonomous Robot Soccer,
RoboCup International Symposium 2002, Lecture Notes in Computer Science, 2002.
- [C10] Michael Beetz and Andreas Hofhauser,
Plan-based control for autonomous robot soccer,
Advances in Plan-based Control of Autonomous Robots. Selected Contributions of the Dagstuhl Seminar Plan-based Control of Robotic Agents, Lecture Notes in Artificial Intelligence (LNAI), Springer-Verlag, 2002.
- [C11] Michael Beetz,
Plan Representation for Robotic Agents,
Proceedings of the Sixth International Conference on AI Planning and Scheduling, Menlo Park, CA, AAAI Press, 223-232, 2002.
- [C12] D. Schröter, M. Beetz and J.-S. Gutmann,
RG Mapping: Learning Compact and Structured 2D Line Maps of Indoor Environments,
11th IEEE International Workshop on Robot and Human Interactive Communication (RO-MAN), Berlin/Germany, 2002.
- [PhD1] Christoph Hansen,
Modellgetriebene Verfolgung formvariabler Objekte in Videobildfolgen,
Department of Informatics, Technische Universität München, 2002.
- [J1] Michael Beetz, Tom Arbuckle, Maren Bennewitz, Wolfram Burgard, Armin Cremers, Dieter Fox, Henrik Grosskreutz, Dirk Hähnel and Dirk Schulz,
Integrated Plan-based Control of Autonomous Service Robots in Human Environments,
IEEE Intelligent Systems, 16(5): 56-65, 2001.
- [J2] Michael Beetz,
Plan Management for Robotic Agents,
KI - Künstliche Intelligenz; Special Issue on Planning and Scheduling, 15(2): 12-17, 2001.
- [J3] Michael Beetz,
Structured Reactive Controllers,
Journal of Autonomous Agents and Multi-Agent Systems. Special Issue: Best Papers of the International Conference on Autonomous Agents '99, 4: 25-55, March/June 2001.
- [C1] Thorsten Schmitt, Robert Hanek, Sebastian Buck and Michael Beetz,
Cooperative Probabilistic State Estimation for Vision-based Autonomous Mobile Robots,
Proc. of the IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), Maui, Hawaii, 1630-1638, 2001.

- [C2] Thorsten Schmitt, Robert Hanek, Sebastian Buck and Michael Beetz,
Cooperative Probabilistic State Estimation for Vision-based Autonomous Soccer Robots,
DAGM Symposium, Springer, Lecture Notes in Computer Science, Vol. 2191, 321-328, 2001.
- [C3] Thorsten Schmitt, Robert Hanek, Sebastian Buck and Michael Beetz,
Cooperative Probabilistic State Estimation fo Vision-based Autonomous Soccer Robots,
RoboCup International Symposium 2001, Seattle, USA, 2001.
- [C4] Sebastian Buck, Michael Beetz and Thorsten Schmitt,
Planning and Executing Joint Navigation Tasks in Autonomous Robot Soccer,
5th International Workshop on RoboCup (Robot World Cup Soccer Games and Conferences), 2001.
- [C5] Sebastian Buck, U. Weber, Michael Beetz and Thorsten Schmitt,
Multi Robot Path Planning for Dynamic Evironments: A case study,
Proc. of the IEEE Intl. Conf. on Intelligent Robots and Systems, 2001.
- [C6] Thorsten Schmitt, Sebastian Buck and Michael Beetz,
AGILO RoboCuppers 2001: Utility- and Plan-based Action Selection based on Probabilistically Estimated Game Situations,
P. Stone, T. Balch and G. Kraetzschmar(Eds.), *5th International Workshop on RoboCup (Robot World Cup Soccer Games and Conferences)*, Springer Verlag, Lecture Notes in Computer Science, 2001.
- [C7] Michael Beetz and Thorsten Belker,
Learning Structured Reactive Navigation Plans from Executing MDP policies,
Proceedings of the 5th International Conference on Autonomous Agents, 19-20, 2001.
- [C8] Thorsten Belker and Michael Beetz,
Learning to Execute Robot Navigation Plans,
Proceedings of the 25th German Conference on Artificial Intelligence (KI 01), Wien, Austria, Springer Verlag, 2001.
- [C9] Michael Beetz,
Runtime Plan Adaptation in Structured Reactive Controllers,
E. Andre and S. Sen(Eds.), *Proceedings of the Fourth International Conference on Autonomous Agents*, 2001.
- [C10] Jürgen Schumacher and Michael Beetz,
Ein agentenbasiertes Verfahren zur effizienten Beantwortung von Lieferterminanfragen in einer Supply-Chain,
Proceedings der Verbundtagung VertIS 2001, 2001.
- [C11] Robert Hanek,
The Contracting Curve Density Algorithm and its Application to Model-based Image Segmentation,
IEEE Conf. Computer Vision and Pattern Recognition, Kauai, Hawaii, USA, I:797-804, 2001.

- [J1] Michael Beetz, Tom Arbuckle, Thorsten Belker, Maren Bennewitz, Armin Cremers, Dirk Hähnel and Dirk Schulz,
Enabling Autonomous Robots to Perform Complex Tasks,
KI - Künstliche Intelligenz; Special Issue on Autonomous Robots, 2000.
- [J2] Sebastian Thrun, Michael Beetz, Maren Bennewitz, Armin Cremers, Frank Dellaert, Dieter Fox, Dirk Hähnel, Charles Rosenberg, Nicholas Roy, Jamieson Schulte and Dirk Schulz,
Probabilistic Algorithms and the Interactive Museum Tour-Guide Robot Minerva,
International Journal of Robotics Research, 2000.
- [B1] Michael Beetz,
Concurrent Reactive Plans: Anticipating and Forestalling Execution Failures,
Springer Publishers 2000.
- [C1] Robert Hanek and Thorsten Schmitt,
Vision-Based Localization and Data Fusion in a System of Cooperating Mobile Robots,
Proc. of the IEEE Intl. Conf. on Intelligent Robots and Systems, 1199-1204, 2000.
- [C2] Robert Hanek, Thorsten Schmitt, Michael Klupsch and Sebastian Buck,
From Multiple Images to a Consistent View,
The Fourth Robot World Cup Soccer Games and Conferences, RoboCup-2000 Melbourne, 288-296, 2000.
- [C3] Sebastian Buck and Martin Riedmiller,
Learning Situation Dependent Success Rates Of Actions In A RoboCup Scenario,
Pacific Rim International Conference on Artificial Intelligence, 809, 2000.
- [C4] Sebastian Buck, Robert Hanek, Michael Klupsch and Thorsten Schmitt,
Agilo RoboCuppers: RoboCup Team Description,
The Fourth Robot World Cup Soccer Games and Conferences, RoboCup-2000 Melbourne, 2000.
- [C5] Rainer Malaka and Sebastian Buck,
Solving Nonlinear Optimization Problems Using Networks Of Spiking Neurons,
IEEE International Joint Conference on Neural Networks, Vol. 6, 486-491, 2000.
- [C6] Michael Beetz and Thorsten Belker,
Environment and Task Adaptation for Robotic Agents,
W. Horn(Ed.), *Procs. of the 14th European Conference on Artificial Intelligence (ECAI-2000)*, 648-652, 2000.
- [C7] Michael Beetz and Thorsten Belker,
Learning Structured Reactive Navigation Plans from Executing MDP Navigation Policies,
Ferryman(Ed.), *8th International Symposium on Intelligent Robotic Systems, SIRS 2000*, 2000.

- [C8] Michael Beetz, Jürgen Schumacher, Armin Cremers, Bernd Hellingrath and Christian Mazzocco,
Perspectives on Plan-based Multiagent Systems for Distributed Supply Chain Management in the Steel Industry,
I. Timm(Ed.), *Proceedings of the ECAI2000 Workshop on Agent Technologies and Their Application Scenarios in Logistics*, 2000.
- [C9] Michael Beetz and Henrik Grosskreutz,
Probabilistic Hybrid Action Models for Predicting Concurrent Percept-driven Robot Behavior,
Proceedings of the Sixth International Conference on AI Planning Systems, AAAI Press, 2000.
- [C10] Michael Beetz,
Runtime Plan Adaptation in Structured Reactive Controllers,
M. Gini and J. Rosenschein(Eds.), *Proceedings of the Fourth International Conference on Autonomous Agents*, 2000.
- [PhD1] Christof Ridder,
Interpretation von Videobildfolgen zur Beobachtung artikularer Bewegung von Personen anhand eines generischen 3D Objektmodells,
Technische Universität München, Fachbereich Informatik, 2000.
- [PhD2] Michael Klupsch,
Objektorientierte Daten- und Zeitmodelle für die Echtzeit-Bildfolgenauswertung,
Fakultät für Informatik, Technische Universität München, 2000.
- [PhD3] Michael Beetz,
Plan-based Control of Robotic Agents,
University of Bonn, 2000.
- [C1] Thorsten Bandlow, Michael Klupsch, Robert Hanek and Thorsten Schmitt,
Fast Image Segmentation, Object Recognition and Localization in a RoboCup Scenario,
3. RoboCup Workshop, IJCAI 99, 174-185, 1999.
- [C2] Thorsten Bandlow, Michael Klupsch, Robert Hanek and Thorsten Schmitt,
Agilo RoboCuppers: RoboCup Team Description,
3. RoboCup Workshop, IJCAI 99, 691-694, 1999.
- [C3] Tom Arbuckle and Michael Beetz,
Controlling Image Processing: Providing Extensible, Run-time Configurable Functionality on Autonomous Robots,
Proceedings of the 1999 IEEE/RSJ International Conference on Intelligent Robots and Systems, Vol. 2, 787-792, 1999.
- [C4] Michael Beetz and Thorsten Belker,
Experience- and Model-based Transformational Learning of Symbolic Behavior Specifications,
Proceedings of the IJCAI Workshop on Robot Action Planning, 1999.

- [C5] T. Arbuckle and M. Beetz,
Extensible, Runtime-configurable Image Processing on Robots — the RECIPE system,
Proceedings of the 1999 IEEE/RSJ International Conference on Intelligent Robots and Systems, 1999.
- [C6] Michael Beetz, Maren Bennewitz and Henrik Grosskreutz,
Probabilistic, Prediction-based Schedule Debugging for Autonomous Robot Office Couriers,
Proceedings of the 23rd German Conference on Artificial Intelligence (KI 99), Bonn, Germany, Springer Verlag, 1999.
- [C7] Michael Beetz,
Structured Reactive Controllers — A computational Model of Everyday Activity,
O. Etzioni, J. Müller and J. Bradshaw(Eds.), *Proceedings of the Third International Conference on Autonomous Agents*, 228-235, 1999.
- [C8] Michael Beetz, Markus Giesenschlag, Roman Englert, Eberhard Gülch and Armin Cremers,
Semi-automatic Acquisition of Symbolically-annotated 3D Models of Office Environments,
International Conference on Robotics and Automation (ICRA-99), 1999.
- [J1] Michael Beetz, Wolfram Burgard, Dieter Fox and Armin Cremers,
Integrating Active Localization into High-level Control Systems,
Robotics and Autonomous Systems, 23: 205-220, 1998.
- [C1] M. Beetz and H. Grosskreutz,
Causal Models of Mobile Service Robot Behavior,
R. Simmons, M. Veloso and S. Smith(Eds.), *Fourth International Conference on AI Planning Systems*, Morgan Kaufmann, 163-170, 1998.
- [C2] Michael Klupsch,
Object-Oriented Representation of Time-Varying Data Sequences in Multi-agent Systems,
Nagib C. Callaos(Ed.), *World Multiconference on Systemics, Cybernetics and Informatics (SCI '98) - 4th International Conference on Information Systems, Analysis and Synthesis (ISAS '98)*, Orlando, FL, International Institute of Informatics and Systemics (IIIS), Vol. 2, 33-40, July 1998.
- [C3] Michael Klupsch, Maximilian Lückenhaus, Christoph Zierl, Ivan Laptev, Thorsten Bandlow, Marc Grimme, Ignaz Kellerer and Fabian Schwarzer,
Agilo RoboCuppers: RoboCup Team Description,
Minoru Asada(Ed.), *Proceedings of the Second RoboCup Workshop, RoboCup-98*, Paris, 431-438, July 1998.
- [C4] Tom Arbuckle and Michael Beetz,
RECIPE - A System for Building Extensible, Run-time Configurable, Image Processing Systems,
Proceedings of Computer Vision and Mobile Robotics (CVMR) Workshop, 91-98, 1998.

- [C5] Michael Beetz and Maren Bennewitz,
Planning, Scheduling, and Plan Execution for Autonomous Robot Office Couriers,
R. Bergmann and A. Kott(Eds.), *Proceedings of the workshop “Integrating Planning, Scheduling and Execution in Dynamic and Uncertain Environments” at the Fourth International Conference on AI in Planning Systems (AIPS)*, AAAI Press, Vol. Workshop Notes 98-02, 1998.
- [C6] Michael Beetz, Tom Arbuckle, Armin Cremers and Markus Mann,
Transparent, Flexible, and Resource-adaptive Image Processing for Autonomous Service Robots,
H. Prade(Ed.), *Procs. of the 13th European Conference on Artificial Intelligence (ECAI-98)*, 632-636, 1998.
- [C7] Michael Beetz and Hanno Peters,
Structured Reactive Communication Plans — Integrating Conversational Actions into High-level Robot Control Systems,
Proceedings of the 22nd German Conference on Artificial Intelligence (KI 98), Bremen, Germany, Springer Verlag, 1998.
- [C1] M. Beetz and D. McDermott,
Expressing Transformations of Structured Reactive Plans,
Recent Advances in AI Planning. Proceedings of the 1997 European Conference on Planning, Springer Publishers, 64-76, 1997.
- [C2] M. Beetz and D. McDermott,
Fast Probabilistic Plan Debugging,
Recent Advances in AI Planning. Proceedings of the 1997 European Conference on Planning, Springer Publishers, 77-90, 1997.
- [PhD1] Stefan Lanser,
Modellbasierte Lokalisation gestützt auf monokulare Videobilder,
Technische Universität München, 1997.
- [C1] M. Beetz and D. McDermott,
Executing Structured Reactive Plans,
L. Pryor and S. Steel(Eds.), *AAAI Fall Symposium: Issues in Plan Execution*, 1996.
- [C2] M. Beetz and D. McDermott,
Local Planning of Ongoing Activities,
Brian Drabble(Ed.), *Third International Conference on AI Planning Systems*, Morgan Kaufmann, 19-26, 1996.
- [PhD1] M. Beetz,
Anticipating and Forestalling Execution Failures in Structured Reactive Plans,
Yale University, 1996.

- [C1] M. Beetz and D. McDermott,
Improving Robot Plans During Their Execution,
K. Hammond(Ed.), *Second International Conference on AI Planning Systems*, Morgan Kaufmann, 3-12, 1994.
- [C1] M. Beetz and D. McDermott,
Declarative Goals in Reactive Plans,
J. Hendler(Ed.), *First International Conference on AI Planning Systems*, Morgan Kaufmann, 3-12, 1992.
- [C1] R. Bertelsmeier and Bernd Radig,
Kontextunterstützte Analyse von Szenen mit bewegten Objekten.,
Hans-Hellmut Nagel(Ed.), *Digital Bildverarbeitung - Digital Image Processing, GI/NTG Fachtagung, München, 28.-30. März 1977*, Springer, 101-128, 1977.