[J1] Hoernig, Martin, Herrmann, Michael, Radig and Bernd,  
Real-Time Segmentation Methods for Monocular Soccer Videos,  
Pattern Recognition and Image Analysis, To appear, 2015.

[J1] Michael Herrmann, Martin Hoernig and Bernd Radig,  
Online Multi-player Tracking in Monocular Soccer Videos,  
AASRI Procedia, 8(0): 30 - 37, 2014.

[J2] Herrmann, Michael, Mayer, Christoph, Radig and Bernd,  
Automatic Generation of Image Analysis Programs,  
Pattern Recognition and Image Analysis, 24(3): 400-408, 2014.

[J3] Martin Hoernig, Andreas Bigontina and Bernd Radig,  
A Comparative Evaluation of Current HTML5 Web Video Implementations,  

[J4] Mayer, Christoph, Eggers, Martin, Radig and Bernd,  
Cross-database evaluation for facial expression recognition,  

[C1] Andreas Bigontina, Michael Herrmann, Martin Hoernig and Bernd Radig,  
Human Body Part Classification in Monocular Soccer Images,  
9-th Open German-Russian Workshop on Pattern Recognition and Image Understanding, Koblenz, 12 2014.

[C2] Martin Hoernig, Michael Herrmann and Bernd Radig,  
Multi Temporal Distance Images for Shot Detection in Soccer Games,  

[PhD1] Durus and Murat,  
Ball Tracking and Action Recognition of Soccer Players in TV Broadcast Videos,  
Technische Universitit Munchen, Munchen, 2014.

[PhD2] Kunze and Lars,  
Nave Physics and Commonsense Reasoning for Everyday Robot Manipulation,  
Technische Universitit Munchen, Munchen, 2014.

[PhD3] Siles Canales and Francisco,  
Automated Semantic Annotation of Football Games from TV Broadcast,  
Technische Universitit Munchen, Munchen, 2014.


[C7] Msenlechner, Lorenz, Beetz and Michael, 
Fast Temporal Projection Using Accurate Physics-Based Geometric Reasoning, 
IEEE International Conference on Robotics and Automation (ICRA), Karlsruhe, Germany, May 2013.

[C8] Nissler, Christian, Marton, Zoltan-Csaba, Suppa and Michael, 
Sample consensus fitting of bivariate polynomials for initializing EM-based modeling of smooth 3D surfaces, 

[C9] 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, 

[C10] Tenorth, Moritz, Torre, Fernando De la, Beetz and Michael, 
Learning Probability Distributions over Partially-Ordered Human Everyday Activities, 
IEEE International Conference on Robotics and Automation (ICRA), Karlsruhe, Germany, May 2013.

[C11] Witzig, Thomas, Zllner, J. Marius, Pangercic, Dejan, Osentoski, Sarah, Roan, Philip, Jkel, Rainer, Dillmann and Rdiger, 
Context Aware Shared Autonomy for Robotic Manipulation Tasks, 

Tutorial: Point Cloud Library: Three-Dimensional Object Recognition and 6 DOF Pose Estimation, 

[J2] Bandouch, Jan, Jenkins, Odest Chadwicke, Beetz and Michael, 
A Self-Training Approach for Visual Tracking and Recognition of Complex Human Activity Patterns, 

[J3] Beetz, Michael, Jain, Dominik, Msenlechner, Lorenz, Tenorth, Moritz, Kunze, Lars, Blodow, Nico, Pangercic and Dejan, 
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): 24542471, 2012.

Ensembles of Strong Learners for Multi-cue Classification, 
Pattern Recognition Letters (PRL), Special Issue on Scene Understandings and Behaviours Analysis, 2012.
[J5] Stulp, Freek, Fedrizzi, Andreas, Msenlechner, Lorenz, Beetz and Michael,
Learning and Reasoning with Action-Related Places for Robust Mobile Manipulation,

[B1] Intelligent Autonomous Systems Group and Technische Universit"at M"unchen,
TUM-ROS code repository,
2012.

[B2] Marco, Daniel Di, Koch, Andreas, Zweigle, Oliver, Hussermann, Kai, le, Bjrn Schie, Levi,
Paul, Lopez, Dorian Galvez, Riazuco, Luis, Civera, Javier, Montiel, J. M. M., Tenorth,
Moritz, Perzylo, Alexander Clifford, Waibel, Markus, Molengraft and Marinus Jacobus
Gerardus van de,
Creating and using RoboEarth object models,
May 2012.

[C1] Balint-Benczedi, Ferenc, Marton, Zoltan-Csaba, Beetz and Michael,
Efficient Part-Graph Hashes for Object Categorization,
5th International Conference on Cognitive Systems (CogSys), 2012.

[C2] Beetz, Michael, Msenlechner, Lorenz, Tenorth, Moritz, Rhr and Thomas,
CRAM a Cognitive Robot Abstract Machine,

[C3] Beetz, Michael, Tenorth, Moritz, Pangercic, Dejan, Pitzer and Benjamin,
Semantic Object Maps for Household Tasks,

[C4] Bersch, Christian, Pangercic, Dejan, Osentoski, Sarah, Hausman, Karol, Marton, Zoltan-
Csaba, Ueda, Ryohei, Okada, Kei, Beetz and Michael,
Segmentation of Textured and Textureless Objects through Interactive Percep-
tion,
RSS Workshop on Robots in Clutter: Manipulation, Perception and Navigation in Human
Environments, Sydney, Australia, July 2012.

[C5] Goron, Lucian Cosmin, Marton, Zoltan Csaba, Lazea, Gheorghe, Beetz and Michael,
Segmenting Cylindrical and Box-like Objects in Cluttered 3D Scenes,
7th German Conference on Robotics (ROBOTIK), Munich, Germany, May 2012.

[C6] Gossow, David, Weikersdorfer, David, Beetz and Michael,
Distinctive Texture Features from Perspective-Invariant Keypoints,

[C7] Hausman, Karol, Bersch, Christian, Pangercic, Dejan, Osentoski, Sarah, Marton, Zoltan-
Csaba, Beetz and Michael,
Segmentation of Cluttered Scenes through Interactive Perception,
ICRA 2012 Workshop on Semantic Perception and Mapping for Knowledge-enabled Ser-
[C8] Kammerl, Julius, Blodow, Nico, Rusu, Radu Bogdan, Gedikli, Suat, Beetz, Michael, Steinbach and Eckehard, 
Real-time Compression of Point Cloud Streams, 
IEEE International Conference on Robotics and Automation (ICRA), Minnesota, USA, May 2012.

[C9] Kidson, Ross, Stanimirovic, Darko, Pangercic, Dejan, Beetz and Michael, 
Elaborative Evaluation of RGB-D based Point Cloud Registration for Personal Robots, 

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

[C11] Klapfer, Reinhard, Kunze, Lars, Beetz and Michael, 
Pouring and Mixing Liquids Understanding the Physical Effects of Everyday Robot Manipulation Actions, 
35th German Conference on Artificial Intelligence (KI-2012), Workshop on Human Reasoning and Automated Deduction, Saarbrücken, Germany, September 2012.

[C12] Kresse, Ingo, Beetz and Michael, 
Movement-aware Action Control Integrating Symbolic and Control-theoretic Action Execution, 

[C13] Kunze, Lars, Beetz, Michael, Saito, Manabu, Azuma, Haseru, Okada, Kei, Inaba and Masayuki, 
Searching Objects in Large-scale Indoor Environments: A Decision-theoretic Approach, 

[C14] Kunze, Lars, Haidu, Andrei, Beetz and Michael, 
Making Virtual Pancakes Acquiring and Analyzing Data of Everyday Manipulation Tasks through Interactive Physics-based Simulations, 
Poster and Demo Track of the 35th German Conference on Artificial Intelligence (KI-2012), Saarbrücken, Germany, September 2012.

[C15] Maldonado, Alexis, Alvarez-Heredia, Humberto, Beetz and Michael, 
Improving robot manipulation through fingertip perception, 

[C16] Marco, Daniel di, Tenorth, Moritz, Hussermann, Kai, Zweigle, Oliver, Levi and Paul, 
RoboEarth Action Recipe Execution, 
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, November 2012.

[C18] Marton, Zoltan-Csaba, Balint-Benczedi, Ferenc, Blodow, Nico, Goron, Lucian Cosmin, Beetz and Michael,
Object Categorization in Clutter using Additive Features and Hashing of Part-graph Descriptors,
Proceedings of Spatial Cognition (SC), Abbey Kloster Seeon, Germany, 2012.

[C19] Marton, Zoltan-Csaba, Seidel, Florian, Beetz and Michael,
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.

[C20] Nyga, Daniel, Beetz and Michael,
Everything Robots Always Wanted to Know about Housework (But were afraid to ask),

[C21] Pangercic, Dejan, Tenorth, Moritz, Pitzer, Benjamin, Beetz and Michael,
Semantic Object Maps for Robotic Housework - Representation, Acquisition and Use,

[C22] 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.

[C23] Rohrbach, Marcus, Regneri, Michaela, Andriluka, Micha, Amin, Sikandar, Pinkal, Manfred, Schiele and Bernt,
Script Data for Attribute-based Recognition of Composite Activities,

[C24] Rhr, Thomas, Sturm, Jrgen, Pangercic, Dejan, Beetz, Michael, Cremers and Daniel,
A Generalized Framework for Opening Doors and Drawers in Kitchen Environments,

[C25] Schuster, Martin, Jain, Dominik, Tenorth, Moritz, Beetz and Michael,
Learning Organizational Principles in Human Environments,
Publications

[C26] Tenorth, Moritz, Beetz and Michael,
**Exchange of Action-related Information among Autonomous Robots,**

[C27] Tenorth, Moritz, Beetz and Michael,
**Knowledge Processing for Autonomous Robot Control,**
AAAI Spring Symposium on Designing Intelligent Robots: Reintegrating AI, Stanford, CA, USA, March 2012.

[C28] Tenorth, Moritz, Beetz and Michael,
**A Unified Representation for Reasoning about Robot Actions, Processes, and their Effects on Objects,**

[C29] Tenorth, Moritz, Kamei, Koji, Satake, Satoru, Miyashita, Takahiro, Hagita and Norihiro,
**Towards a Networked Robot Architecture for Distributed Task Execution and Knowledge Exchange,**

[C30] Tenorth, Moritz, Perzylo, Alexander Clifford, Lafrenz, Reinhard, Beetz and Michael,
**The RoboEarth language: Representing and Exchanging Knowledge about Actions, Objects, and Environments,**

[C31] Usenko, Vladyslav, Seidel, Florian, Marton, Zoltan-Csaba, Beetz and Dejan Pangeric Michael,
**Furniture Classification using WWW CAD Models,**
IROS12 Workshop on Active Semantic Perception (ASP12), Vilamoura, Portugal, October 2012.

[C32] Weikersdorfer, David, Gossow, David, Beetz and Michael,
**Depth-Adaptive Superpixels,**

[PhD1] Jain and Dominik,
**Probabilistic Cognition for Technical Systems: Statistical Relational Models for High-Level Knowledge Representation, Learning and Reasoning,**
Technische Universitt Mnchen, 2012.

[PhD2] Klank and Ulrich,
**Everyday Perception for Mobile Manipulation in Human Environments,**
Technische Universitt Mnchen, 2012.

[PhD3] Mayer and Christoph,
**Facial Expression Recognition With A Three-Dimensional Face Model,**
Technische Universitt Mnchen, Mnchen, 2012.
Publications List of Publications


[B2] Pangercic, Dejan, Mathe, Koppany, Marton, Zoltan-Csaba, Goron, Lucian Cosmin, Opris, Monica-Simona, Schuster, Martin, Tenorth, Moritz, Jain, Dominik, Ruehr, Thomas, Beetz and Michael, A Robot that Shops for and Stores Groceries, August 2011.

[C2] Aldoma, Aitor, Vincze, Markus, Blodow, Nico, Gossow, David, Gedikli, Suat, Rusu, Radu Bogdan, Bradski and Gary R.,
**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.

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

[C4] Beetz, Michael, Klank, Ulrich, Maldonado, Alexis, Pangercic, Dejan, Rhr and Thomas,
**Robotic Roommates Making Pancakes - Look Into Perception-Manipulation Loop,**

[C5] Blodow, Nico, Goron, Lucian Cosmin, Marton, Zoltan-Csaba, Pangercic, Dejan, Rhr, Thomas, Tenorth, Moritz, Beetz and Michael,
**Autonomous Semantic Mapping for Robots Performing Everyday Manipulation Tasks in Kitchen Environments,**

[C6] Blodow, Nico, Marton, Zoltan-Csaba, Pangercic, Dejan, Rhr, Thomas, Tenorth, Moritz, Beetz and Michael,
**Inferring Generalized Pick-and-Place Tasks from Pointing Gestures,**

[C7] Gonsior, Barbara, Sosnowski, Stefan, Mayer, Christoph, Blume, Jürgen, Radig, Bernd, Dirk Wollherr, Khahnezi and Kolja,
**Improving Aspects of Empathy and Subjective Performance for HRI through Mirroring Facial Expressions,**

[C8] Jain and Dominik,
**Knowledge Engineering with Markov Logic Networks: A Review,**
*DKB 2011: Proceedings of the Third Workshop on Dynamics of Knowledge and Belief, 2011.*

[C9] Jain, Dominik, Gleissenthall, Klaus von, Beetz and Michael,
**Bayesian Logic Networks and the Search for Samples with Backward Simulation and Abstract Constraint Learning,**
[C10] Kanezaki, Asako, Marton, Zoltan-Csaba, Pangercic, Dejan, Harada, Tatsuya, Kuniyoshi, Yasuo, Beetz and Michael,
*Voxelized Shape and Color Histograms for RGB-D*,

[C11] Klank, Ulrich, Carton, Daniel, Beetz and Michael,
*Transparent Object Detection and Reconstruction on a Mobile Platform*,
IEEE International Conference on Robotics and Automation (ICRA), Shanghai, China, May 2011.

[C12] Kresse, Ingo, Klank, Ulrich, Beetz and Michael,
*Multimodal Autonomous Tool Analyses and Appropriate Application*,
11th IEEE-RAS International Conference on Humanoid Robots, Bled, Slovenia, October 2011.

[C13] Kunze, Lars, Dolha, Mihai Emanuel, Beetz and Michael,
*Logic Programming with Simulation-based Temporal Projection for Everyday Robot Object Manipulation*,

[C14] Kunze, Lars, Dolha, Mihai Emanuel, Guzman, Emitza, Beetz and Michael,
*Simulation-based Temporal Projection of Everyday Robot Object Manipulation*,

[C15] Kunze, Lars, Roehm, Tobias, Beetz and Michael,
*Towards Semantic Robot Description Languages*,
IEEE International Conference on Robotics and Automation (ICRA), Shanghai, China, 55895595, May 2011.

[C16] Maier, Paul, Jain, Dominik, Sachenbacher and Martin,
*Compiling AI Engineering Models for Probabilistic Inference*,

[C17] Maier, Paul, Jain, Dominik, Sachenbacher and Martin,
*Diagnostic Hypothesis Enumeration vs. Probabilistic Inference for Hierarchical Automata Models*,

[C18] Marton, Zoltan-Csaba, Blodow, Nico, Beetz and Michael,
*Advantages of Spatial-temporal Object Maps for Service Robotics*,
[C19] Marton, Zoltan-Csaba, Pangercic, Dejan, Beetz and Michael, 
Efficient Surface and Feature Estimation in RGBD, 
RGB-D Workshop on 3D Perception in Robotics at the European Robotics (euRobotics) 
Forum, Vster\nas, Sweden, April 2011.

[C20] Mayer, Christoph, Radig and Bernd, 
Learning Displacement Experts from Multi-band Images for Face Model Fitting, 
International Conference on Advances in Computer-Human Interaction, February 2011.

[C21] Murray, William R., Jain and Dominik, 
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, 167178, August 
2011.

[C22] Msenlechner, Lorenz, Beetz and Michael, 
Parameterizing Actions to have the Appropriate Effects, 
IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), San Francis-
cisco, CA, USA, September 2011.

[C23] Nyga, Daniel, Tenorth, Moritz, Beetz and Michael, 
How-Models of Human Reaching Movements in the Context of Everyday Manipulation Activities, 
IEEE International Conference on Robotics and Automation (ICRA), Shanghai, China, 
May 2011.

[C24] Pangercic, Dejan, Haltakov, Vladimir, Beetz and Michael, 
Fast and Robust Object Detection in Household Environments Using Vocabulary Trees with SIFT Descriptors, 

[C25] Ruiz-Ugalde, Federico, Cheng, Gordon, Beetz and Michael, 
Fast adaptation for effect-aware pushing, 
11th IEEE-RAS International Conference on Humanoid Robots, Bled, Slovenia, October 
2011.

[C26] Saito, Manabu, Chen, Haseru, Okada, Kei, Inaba, Masayuki, Kunze, Lars, Beetz and Michael, 
Semantic Object Search in Large-scale Indoor Environments, 

[C27] Zhu, Shulei, Pangercic, Dejan, Beetz and Michael, 
Contracting Curve Density Algorithm for Applications in Personal Robotics, 
11th IEEE-RAS International Conference on Humanoid Robots, Bled, Slovenia, October 
2011.
Publications

[PhD1] Bandouch and Jan,
Observing and Interpreting Complex Human Activities in Everyday Environments,
Technische Universititt Mnchen, 2011.

[PhD2] von Hoyningen-Huene and Nicolai,
Real-time Tracking of Player Identities in Team Sports,
Technische Universititt Mnchen, 2011.

[PhD3] Tenorth and Moritz,
Knowledge Processing for Autonomous Robots,
Technische Universititt Mnchen, 2011.

[J1] Beetz, Michael, Buss, Martin, Radig and Bernd,
Learning from Humans Cognition-enabled Computational Models of Everyday Activity,
Knstliche Intelligenz, 2010.

[J2] Beetz, Michael, Jain, Dominik, Msenlechner, Lorenz, Tenorth and Moritz,
Towards Performing Everyday Manipulation Activities,

[J3] Beetz, Michael, Kirsch and Alexandra,
Special Issue on Cognition for Technical Systems,

[J4] Beetz, Michael, Stulp, Freek, Esden-Tempski, Piotr, Fedrizzi, Andreas, Klank, Ulrich, Kresse, Ingo, Maldonado, Alexis, Ruiz and Federico,
Generality and Legibility in Mobile Manipulation,

[J5] Beetz, Michael, Tenorth, Moritz, Jain, Dominik, Bandouch and Jan,
Towards Automated Models of Activities of Daily Life,

[J6] Buss, Martin, Beetz and Michael,
CoTeSys Cognition for Technical Systems,
Knstliche Intelligenz, 2010.

[J7] Kirsch, Alexandra, Kruse, Thibault, Sisbot, E. Akin, Alami, Rachid, Lawitzky, Martin, Bri, Draen, Hirche, Sandra, Basili, Patrizia, Glasauer and Stefan,
Plan-based Control of Joint Human-Robot Activities,

[J8] Stulp, Freek, Utz, Hans, Isik, Michael, Mayer and Gerd,
Implicit Coordination with Shared Belief: A Heterogeneous Robot Soccer Team Case Study,

[J9] Tenorth, Moritz, Jain, Dominik, Beetz and Michael,
Knowledge Representation for Cognitive Robots,
[J10] 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,

[J11] Zaeh, M. F., Roesel, W., Bannat, A., Bautze, T., Beetz, M., Blume, J., Diepold, K.,
  Ertelt, C., Geiger, F., Gmeiner, T., Gyger, T., Knoll, A., Lau, C., Lenz, C., Ostgathe, M.,
  Reinhart, G., Ruehr, T., Schuboe, A., Shea, K., Wersborg, I. Stork genannt, Stork, S.,
  Tekouo, W., Wallhoff, F., Wiesbeck and M.,
  Artificial Cognition in Production Systems,

[BC1] Hoyningen-Huene, Nicolai v, Beetz and Michael,
  Importance Sampling as One Solution to the Data Association Problem in
  Multi-target Tracking,
  Ranchordas, AlpeshKumar, Araujo and Helder(Eds.), VISIGRAPP 2009, Springer-Verlag
  Berlin Heidelberg, Communications in Computer and Information Science (CCIS), 309325,
  2010.

[C1] Beetz, Michael, Msenlechner, Lorenz, Tenorth and Moritz,
  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 2010.

[C2] Blodow, Nico, Jain, Dominik, Marton, Zoltan-Csaba, Beetz and Michael,
  Perception and Probabilistic Anchoring for Dynamic World State Logging,
  10th IEEE-RAS International Conference on Humanoid Robots, Nashville, TN, USA, 160-
  166, December 2010.

[C3] Blodow, Nico, Marton, Zoltan-Csaba, Pangercic, Dejan, Beetz and Michael,
  Making Sense of 3D Data,
  Robotics: Science and Systems Conference (RSS), Workshop on Strategies and Evaluation

[C4] Goron, Lucian Cosmin, Marton, Zoltan Csaba, Lazea, Gheorghe, Beetz and Michael,
  Automatic Layered 3D Reconstruction of Simplified Object Models for Gra-
  sping,
  Joint 41st International Symposium on Robotics (ISR) and 6th German Conference on
  Robotics (ROBOTIK), Munich, Germany, 2010.

[C5] Jain, Dominik, Barthels, Andreas, Beetz and Michael,
  Adaptive Markov Logic Networks: Learning Statistical Relational Models with
  Dynamic Parameters,

[C6] Jain, Dominik, Beetz and Michael,
  Soft Evidential Update via Markov Chain Monte Carlo Inference,
  KI 2010: Advances in Artificial Intelligence, 33rd Annual German Conference on AI,
  Karlsruhe, Germany, Springer, Lecture Notes in Computer Science, Vol. 6359, 280-290,
  2010.
Publications

[C7] Kirsch, Alexandra, Chen and Yuxiang,
A Testbed for Adaptive Human-Robot Collaboration,
33rd Annual German Conference on Artificial Intelligence (KI 2010), 2010.

[C8] Kirsch, Alexandra, Cheng and Fan,
Learning Ability Models for Human-Robot Collaboration,

[C9] Kruse, Thibault, Kirsch and Alexandra,
Towards Opportunistic Action Selection in Human-Robot Cooperation,
33rd Annual German Conference on Artificial Intelligence (KI 2010), 2010.

[C10] Kruse, Thibault, Kirsch, Alexandra, Sisbot, E. Akin, Alami and Rachid,
Dynamic Generation and Execution of Human Aware Navigation Plans,

[C11] Kruse, Thibault, Kirsch, Alexandra, Sisbot, E. Akin, Alami and Rachid,
Exploiting Human Cooperation in Human-Centered Robot Navigation,
IEEE International Symposium in Robot and Human Interactive Communication (Roman), 2010.

[C12] Kunze, Lars, Tenorth, Moritz, Beetz and Michael,
Putting People's Common Sense into Knowledge Bases of Household Robots,
33rd Annual German Conference on Artificial Intelligence (KI 2010), Karlsruhe, Germany, Springer, 151159, September 2010.

[C13] Lemaignan, Sverin, Ros, Raquel, Msenlechner, Lorenz, Alami, Rachid, Beetz and Michael,
ORO, a knowledge management module for cognitive architectures in robotics,

[C14] Lenz, C., Rder, T., Eggers, Martin, Amin, S., Kisler, T., Radig, Bernd, Panin, G., Knoll and A.,
A Distributed Many-Camera System for Multi-Person Tracking,
Wichert, R., Ruyter and B. de(Eds.), Proceedings of the First International Joint Conference on Ambient Intelligence (AmI 2010), Springer Lecture Notes in Computer Science, November 2010.

[C15] Maier, Paul, Jain, Dominik, Waldherr, Stefan, Sachenbacher and Martin,
Plan Assessment for Autonomous Manufacturing as Bayesian Inference,

[C16] Maldonado, Alexis, Klank, Ulrich, Beetz and Michael,
Robotic grasping of unmodeled objects using time-of-flight range data and finger torque information,
Publications

[C17] Marton, Zoltan-Csaba, Pangercic, Dejan, Blodow, Nico, Kleinehellefort, Jonathan, Beetz and Michael,
*General 3D Modelling of Novel Objects from a Single View*,

[C18] Marton, Zoltan-Csaba, Pangercic, Dejan, Rusu, Radu Bogdan, Holzbach, Andreas, Beetz and Michael,
*Hierarchical Object Geometric Categorization and Appearance Classification for Mobile Manipulation*,

[C19] Mayer, Christoph, Sosnowski, Stefan, Khnlenz, Kolja, Radig and Bernd,
*Towards robotic facial mimicry: system development and evaluation*,

[C20] Msenlechner, Lorenz, Demmel, Nikolaus, Beetz and Michael,
*Becoming Action-aware through Reasoning about Logged Plan Execution Traces*,

[C21] Pangercic, Dejan, Tenorth, Moritz, Jain, Dominik, Beetz and Michael,
*Combining Perception and Knowledge Processing for Everyday Manipulation*,

[C22] Ruiz-Ugalde, Federico, Cheng, Gordon, Beetz and Michael,
*Prediction of action outcomes using an object model*,

[C23] Sosnowski, Stefan, Mayer, Christoph, Khnlenz, Kolja, Radig and Bernd,
*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), 2010.

[C24] Tenorth, Moritz, Beetz and Michael,
*Priming Transformational Planning with Observations of Human Activities*,

[C25] Tenorth, Moritz, Kunze, Lars, Jain, Dominik, Beetz and Michael,
*KNOWROB-MAP Knowledge-Linked Semantic Object Maps*,
[C26] Tenorth, Moritz, Nyga, Daniel, Beetz and Michael,
Understanding and Executing Instructions for Everyday Manipulation Tasks from the World Wide Web,

[C27] Wallhoff, Frank, Rehrl, Tobias, Mayer, Christoph, Radig and Bernd,
Real-Time Face and Gesture Analysis for Human-Robot Interaction,

Multi Joint Action in CoTeSys Setup and Challenges,
CoTeSys-TR-10-01, CoTeSys Cluster of Excelence: Technische Universitt Mnchen &38; Ludw-Maximilians-Universitt Mnchen, Munich, Germany, June 2010.

[R2] Kirsch and Alexandra,
Be a Robot A Study on Everyday Activities Performed in Real and Virtual Worlds,
TUM-I1006, Technische Universitt Mnchen, 2010.

[R3] Tenorth, Moritz, Beetz and Michael,
Deliverable D5.2: The RoboEarth Language Language Specification,

[J1] Beetz, Michael, Hoyningen-Huene, Nicolai von, Kirchlechner, Bernhard, Gedikli, Suat, Siles, Francisco, Durus, Murat, Lames and Martin,
ASpO-AM: Automated Sports Game Analysis Models,

[J2] Kirsch and Alexandra,
Robot Learning Language Integrating Programming and Learning for Cognitive Systems,

[J3] Mayer, Christoph, Wimmer, Matthias, Radig and Bernd,
Adjusted Pixel Features for Facial Component Classification,

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

[J5] Rusu, Radu Bogdan, Sundaresan, Aravind, Morisset, Benoit, Hauser, Kris, Agrawal, Motilal, Latombe, Jean-Claude, Beetz and Michael,
Leaving Flatland: Efficient Real-Time 3D Navigation,
Publications


[C7] Engstler, Florian, Bandouch, Jan, Bubb and Heiner, 
MeMoMan - Model Based Markerless Capturing of Human Motion, 
The 17th World Congress on Ergonomics (International Ergonomics Association, IEA), 
Beijing, China, 2009.

[C8] Ertelt, Christoph, Rhr, Thomas, Pangercic, Dejan, Shea, Kristina, Beetz and Michael, 
Integration of Perception, Global Planning and Local Planning in the Manufacturing Domain, 

[C9] Fedrizzi, Andreas, Moesenlechner, Lorenz, Stulp, Freek, Beetz and Michael, 
Transformational Planning for Mobile Manipulation based on Action-related Places, 

[C10] Friesdorf, Florian, Pangercic, Dejan, Bubb, Heiner, Beetz and Michael, 
Mutually Augmented Cognition, 

[C11] Gast, Jrgen, Bannat, Alexander, Rehrl, Tobias, Mayer, Christoph, Wallhoff, Frank, Rigoll, Gerhard, Radig and Bernd, 
Did I Get it Right: Head Gesture Analysis for Human-Machine Interaction, 

[C12] Hoyningen-Huene, Nicolai von, Beetz and Michael, 
Rao-Blackwellized Resampling Particle Filter for Real-Time Player Tracking in Sports, 

[C13] Hoyningen-Huene, Nicolai von, Beetz and Michael, 
Robust real-time multiple target tracking, 
Ninth Asian Conference on Computer Vision (ACCV), Xi’an, China, September 2009.

[C14] Jain, Dominik, Maier, Paul, Wylezich and Gregor, 
Markov Logic as a Modelling Language for Weighted Constraint Satisfaction Problems, 

[C15] Jain, Dominik, Msenlechner, Lorenz, Beetz and Michael, 
Equipping Robot Control Programs with First-Order Probabilistic Reasoning Capabilities, 

[C16] Kirsch, Alexandra, Kruse, Thibault, Msenlechner and Lorenz, 
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.


Maier, Paul, Sachenbacher, Martin, Rhr, Thomas, Kuhn and Lukas,
Integrated Plan Tracking and Prognosis for Autonomous Production Processes,

Maier, Paul, Sachenbacher, Martin, Rhr, Thomas, Kuhn and Lukas,
Integrated Diagnosis and Plan Assessment for Autonomous Production Processes,

Maier, Paul, Sachenbacher, Martin, Rhr, 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.

Marton, Zoltan Csaba, Goron, Lucian Cosmin, Rusu, Radu Bogdan, Beetz and Michael,
Reconstruction and Verification of 3D Object Models for Grasping,
Proceedings of the 14th International Symposium on Robotics Research (ISRR09), Lucerne, Switzerland, September 2009.

Marton, Zoltan Csaba, Rusu, Radu Bogdan, Beetz and Michael,
On Fast Surface Reconstruction Methods for Large and Noisy Datasets,

Marton, Zoltan Csaba, Rusu, Radu Bogdan, Jain, Dominik, Klank, Ulrich, Beetz and Michael,
Probabilistic Categorization of Kitchen Objects in Table Settings with a Composite Sensor,

Mayer, Christoph, Wimmer, Matthias, Eggers, Martin, Radig and Bernd,
Facial Expression Recognition with 3D Deformable Models,

Morisset, Benoit, Rusu, Radu Bogdan, Sundaresan, Aravind, Hauser, Kris, Agrawal, Motilal, Latombe, Jean-Claude, Beetz and Michael,
Leaving Flatland: Toward Real-Time 3D Navigation,

Msenlechner, Lorenz, Beetz and Michael,
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.
Publications

[C36] Pangercic, Dejan, Tavcar, Rok, Tenorth, Moritz, Beetz and Michael,
Visual Scene Detection and Interpretation using Encyclopedic Knowledge and
Formal Description Logic,
Proceedings of the International Conference on Advanced Robotics (ICAR)., Munich, Germany, June 2009.

[C37] Riaz, Zahid, Beetz, Michael, Radig and Bernd,
Image Normalization for Face Recognition using 3D Model,

[C38] Riaz, Zahid, Gedikli, Suat, Beetz, Michael, Radig and Bernd,
A Unified Features Approach to Human Face Image Analysis and Interpretation,

[C39] Riaz, Zahid, Mayer, Christoph, Beetz, Michael, Radig and Bernd,
3D Model for Face Recognition across Facial Expressions,

[C40] Riaz, Zahid, Mayer, Christoph, Beetz, Michael, Radig and Bernd,
Facial Expressions Recognition from Image Sequences,

[C41] Riaz, Zahid, Mayer, Christoph, Beetz, Michael, Radig and Bernd,
Model Based Analysis of Face Images for Facial Feature Extraction,

[C42] Riaz, Zahid, Mayer, Christoph, Sarfraz, Saquib, Beetz, Michael, Radig and Bernd,
Multi-Feature Fusion in Advanced Robotics Applications,

[C43] Riaz, Zahid, Mayer, Christoph, Wimmer, Matthias, Beetz, Michael, Radig and Bernd,
A Model Based approach for Expression Invariant Face Recognition,

[C44] Rusu, Radu Bogdan, Blodow, Nico, Beetz and Michael,
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.

[C45] Rusu, Radu Bogdan, Blodow, Nico, Marton, Zoltan Csaba, Beetz and Michael,
Close-range Scene Segmentation and Reconstruction of 3D Point Cloud Maps
for Mobile Manipulation in Human Environments,

[C46] Rusu, Radu Bogdan, Holzbach, Andreas, Blodow, Nico, Beetz and Michael,
Fast Geometric Point Labeling using Conditional Random Fields,
[C47] Rusu, Radu Bogdan, Holzbach, Andreas, Bradski, Gary, Beetz and Michael,
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 2009.

[C48] Rusu, Radu Bogdan, Holzbach, Andreas, Diankov, Rosen, Bradski, Gary, Beetz and Mi-
chael,
Perception for Mobile Manipulation and Grasping using Active Stereo,
9th IEEE-RAS International Conference on Humanoid Robots (Humanoids), Paris, France,
December 2009.

[C49] Rusu, Radu Bogdan, Marton, Zoltan Csaba, Blodow, Nico, Holzbach, Andreas, Beetz and
Michael,
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 2009.

[C50] Rusu, Radu Bogdan, Meeussen, Wim, Chitta, Sachin, Beetz and Michael,
Laser-based Perception for Door and Handle Identification,
Proceedings of the International Conference on Advanced Robotics (ICAR), Munich, June 2009.

[C51] Rusu, Radu Bogdan, Sucan, Ioan Alexandru, Gerkey, Brian, Chitta, Sachin, Beetz, Mi-
chael, Kavraki and Lydia E.,
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, 42454252, October 2009.

[C52] Sarfraz, M. S., Saeed, A., Khan, M. H., Riaz and Zahid,
Bayesian Prior Models for Vehicle Make and Model Recognition,

[C53] Stulp, Freek, Fedrizzi, Andreas, Beetz and Michael,
Action-Related Place-Based Mobile Manipulation,
Proceedings of the International Conference on Intelligent Robots and Systems (IROS),
31153120, 2009.

[C54] Stulp, Freek, Fedrizzi, Andreas, Beetz and Michael,
Learning and Performing Place-based Mobile Manipulation,
Proceedings of the 8th International Conference on Development and Learning (ICDL),
17, 2009.

[C55] Stulp, Freek, Fedrizzi, Andreas, Zacharias, Franziska, Tenorth, Moritz, Bandouch, Jan,
Beetz and Michael,
Combining Analysis, Imitation, and Experience-based Learning to Acquire a
Concept of Reachability,
<table>
<thead>
<tr>
<th>Publications List of Publications</th>
</tr>
</thead>
<tbody>
<tr>
<td>[C56] Stulp, Freek, Kresse, Ingo, Maldonado, Alexis, Ruiz, Federico, Fedrizzi, Andreas, Beetz and Michael,</td>
</tr>
<tr>
<td>Compact Models of Human Reaching Motions for Robotic Control in Everyday Manipulation Tasks,</td>
</tr>
<tr>
<td>Proceedings of the 8th International Conference on Development and Learning (ICDL), 2009.</td>
</tr>
<tr>
<td>[C57] Stulp, Freek, Oztop, Erhan, Pastor, Peter, Beetz, Michael, Schaal and Stefan,</td>
</tr>
<tr>
<td>Compact Models of Motor Primitive Variations for Predictable Reaching and Obstacle Avoidance,</td>
</tr>
<tr>
<td>[C58] Sun, Li, KIank,Ulrich,Beetz and Michael,</td>
</tr>
<tr>
<td>EYEWATCHME - 3D Hand and object tracking for inside out activity analysis,</td>
</tr>
<tr>
<td>[C59] Tenorth, Moritz, Bandouch, Jan, Beetz and Michael,</td>
</tr>
<tr>
<td>The TUM Kitchen Data Set of Everyday Manipulation Activities for Motion Tracking and Action Recognition,</td>
</tr>
<tr>
<td>[C60] Tenorth, Moritz, Beetz and Michael,</td>
</tr>
<tr>
<td>KnowRob Knowledge Processing for Autonomous Personal Robots,</td>
</tr>
<tr>
<td>[C61] Wykowska, Agnieszka, Maldonado, Alexis, Beetz, Michael, Schuboe and Anna,</td>
</tr>
<tr>
<td>How humans optimize their interaction with the environment: The impact of action context on human perception.,</td>
</tr>
<tr>
<td>[C62] Zia, Muhammad Zeeshan, Klank, Ulrich, Beetz and Michael,</td>
</tr>
<tr>
<td>Acquisition of a Dense 3D Model Database for Robotic Vision,</td>
</tr>
<tr>
<td>International Conference on Advanced Robotics (ICAR), 2009.</td>
</tr>
<tr>
<td>[PhD1] Gedikli and Suat,</td>
</tr>
<tr>
<td>Continual and Robust Estimation of Camera Parameters in Broadcasted Sports Games,</td>
</tr>
<tr>
<td>Technische Universitt Mnchen, 2009.</td>
</tr>
<tr>
<td>[PhD2] Rusu and Radu Bogdan,</td>
</tr>
<tr>
<td>Semantic 3D Object Maps for Everyday Manipulation in Human Living Environments,</td>
</tr>
<tr>
<td>Technische Universitt Mnchen, 2009.</td>
</tr>
</tbody>
</table>


[J5] Stulp, Freek, Beetz and Michael, Refining the execution of abstract actions with learned action models, Journal of Artificial Intelligence Research (JAIR), 32: June 2008.


<table>
<thead>
<tr>
<th>Publication</th>
</tr>
</thead>
<tbody>
<tr>
<td>[C1] Bandouch, Jan, Engstler, Florian, Beetz and Michael,</td>
</tr>
<tr>
<td>Accurate Human Motion Capture Using an Ergonomics-Based Anthropometric Human Model,</td>
</tr>
<tr>
<td>Proceedings of the Fifth International Conference on Articulated Motion and Deformable Objects (AMDO), 2008.</td>
</tr>
<tr>
<td>[C2] Bandouch, Jan, Engstler, Florian, Beetz and Michael,</td>
</tr>
<tr>
<td>Evaluation of Hierarchical Sampling Strategies in 3D Human Pose Estimation,</td>
</tr>
<tr>
<td>[C3] Beetz, Michael, Stulp, Freek, Bernd, Bandouch, Jan, Blodow, Nico, Dolha, Mihai, Fedrizzi, Andreas, Jain, Dominik, Klank, Uli, Kresse, Ingo, Maldonado, Alexis, Marton, Zoltan, Msenlechner, Lorenz, Ruiz, Federico, Rusu, Radu Bogdan, Tenorth and Moritz,</td>
</tr>
<tr>
<td>The Assistive Kitchen A Demonstration Scenario for Cognitive Technical Systems,</td>
</tr>
<tr>
<td>IEEE 17th International Symposium on Robot and Human Interactive Communication (RO-MAN), Muenchen, Germany, 1-8, 2008.</td>
</tr>
<tr>
<td>[C4] Heinz, Stefan, Sachenbacher and Martin,</td>
</tr>
<tr>
<td>Using Model Counting to Find Optimal Distinguishing Tests,</td>
</tr>
<tr>
<td>Proc. First International Workshop on Counting Problems in CSP and SAT, and other neighbouring problems (Counting’08), 2008.</td>
</tr>
<tr>
<td>[C5] Jain, Dominik, Msenlechner, Lorenz, Beetz and Michael,</td>
</tr>
<tr>
<td>Equipping Robot Control Programs with First-Order Probabilistic Reasoning Capabilities,</td>
</tr>
<tr>
<td>[C6] Maier and Paul,</td>
</tr>
<tr>
<td>Adaptive Abstraction of Constraint-Based Models for Self-Diagnosis and Planning,</td>
</tr>
<tr>
<td>[C7] Maier, Paul, Sachenbacher and Martin,</td>
</tr>
<tr>
<td>Adaptive Domain Abstraction in a Soft-Constraint Message-Passing Algorithm,</td>
</tr>
<tr>
<td>[C8] Maier, Paul, Sachenbacher and Martin,</td>
</tr>
<tr>
<td>Constraint Optimization and Abstraction for Embedded Intelligent Systems,</td>
</tr>
<tr>
<td>[C9] Marton, Zoltan Csaba, Blodow, Nico, Dolha, Mihai, Tenorth, Moritz, Rusu, Radu Bogdan, Beetz and Michael,</td>
</tr>
<tr>
<td>Autonomous Mapping of Kitchen Environments and Applications,</td>
</tr>
</tbody>
</table>
[C10] Mayer, Christoph, Wimmer, Matthias, Stulp, Freek, Riaz, Zahid, Roth, Anton, Eggers, Martin, Radig and Bernd, 
Interpreting the Dynamics of Facial Expressions in Real Time Using Model-based Techniques, 

[C11] Mayer, Christoph, Wimmer, Matthias, Stulp, Freek, Riaz, Zahid, Roth, Anton, Eggers, Martin, Radig and Bernd, 
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.

[C12] Msenlechner, Lorenz, Müller, Armin, Beetz and Michael, 
High Performance Execution of Everyday Pick-and-Place Tasks by Integrating Transformation Planning and Reactive Execution, 

[C13] Pangercic, Dejan, Rusu, Radu Bogdan, Beetz and Michael, 
3D-Based Monocular SLAM for Mobile Agents Navigating in Indoor Environments, 

[C14] Pietzsch, Sylvia, Wimmer, Matthias, Stulp, Freek, Radig and Bernd, 
Face Model Fitting with Generic, Group-specific, and Person-specific Objective Functions, 

[C15] Riaz, Zahid, Beetz, Michael, Radig and Bernd, 
Shape Invariant Recognition of Segmented Human Faces using Eigenfaces, 

[C16] Riaz, Zahid, Mayer, Christoph, Wimmer, Matthias, Radig and Bernd, 
Model Based Face Recognition Across Facial Expressions, 

[C17] Rusu, Radu Bogdan, Bandouch, Jan, Marton, Zoltan Csaba, Blodow, Nico, Beetz and Michael, 
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)*, München, Germany, 2008.

[C18] Rusu, Radu Bogdan, Blodow, Nico, Marton, Zoltan Csaba, Beetz and Michael, 
Aligning Point Cloud Views using Persistent Feature Histograms, 
Publications


[C29] Schub, Anna, Maldonado, Alexis, Stork, Sonja, Beetz and Michael, 
Subsequent Actions Influence Motor Control Parameters of a Current Gra- 
sping Action, 
*IEEE 17th International Symposium on Robot and Human Interactive Communication (RO-MAN), Muenchen, Germany, 2008.*

[C30] Schuller, Bjrn, Wimmer, Matthias, Arsic, Dejan, Moosmayr, Tobias, Rigoll and Gerhard, 
Detection of Security Related Affect and Behaviour in Passenger Transport, 
*Proc. of the 9th INTERSPEECH*, Brisbane, Australia, ISCA, ASSTA, September 2008.

[C31] Schuller, Bjrn, Wimmer, Matthias, Msenlechner, Lorenz, Kern, Christian, Rigoll and Ger- 
hard, 
Brute-Forcing Hierarchical Functionals for Paralinguistics: a Waste of Feature 
Space?, 

[C32] Stulp, Freek, Beetz and Michael, 
Learning Predictive Knowledge to Optimize Robot Motor Control, 

[C33] Tenorth, Moritz, Beetz and Michael, 
Towards Practical and Grounded Knowledge Representation Systems for Au-
tononomous Household Robots, 

[C34] Wimmer, Matthias, Fujie, Shinya, Stulp, Freek, Kobayashi, Tetsunori, Radig and Bernd, 
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.

[C35] Wimmer, Matthias, MacDonald, Bruce A., Jayamuni, Dinuka, Yadav and Arpit, 
Facial Expression Recognition for Human-robot Interaction A Prototype, 
Klette, Reinhard, Sommer and Gerald(Eds.), 2

[C36] Wimmer, Matthias, Mayer, Christoph, Eggers, Martin, Radig and Bernd, 
Are You Happy with Your First Name?, 

[C37] Wimmer, Matthias, Mayer, Christoph, Pietzsch, Sylvia, Radig and Bernd, 
Tailoring Model-based Techniques for Facial Expression Interpretation, 
The First International Conference on Advances in Computer-Human Interaction (ACHI08), Sainte Luce, Martinique, February 2008.

[C38] Wimmer, Matthias, Mayer, Christoph, Radig and Bernd, 
Recognizing Facial Expressions Using Model-based Image Interpretation, 
*Verbal and Nonverbal Communication Behaviours, COST Action 2102 International Workshop*, Vietri sul Mare, Italy, April 2008.
Publications

[C39] Wimmer, Matthias, Mayer, Christoph, Radig and Bernd, 
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.

[C40] Wimmer, Matthias, Mayer, Christoph, Stulp, Freek, Radig and Bernd, 
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.

[C41] Wimmer, Matthias, Pietzsch, Sylvia, Mayer, Christoph, Radig and Bernd, 
Robustly Estimating the Color of Facial Components Using a Set of Adjusted Pixel Features, 

[C42] Wimmer, Matthias, Schuller, Björn, Arsic, Dejan, Radig, Bernd, Rigoll and Gerhard, 
Low-level Fusion of Audio and Video Feature for Multi-modal Emotion Recognition, 

[C43] Zh, M. F., Beetz, M., Shea, K., Reinhart, G., Stursberg, O., Ostgathe, M., Lau, C., Ertelt, C., Pangercic, D., Rhr, Thomas, Ding, H., Paschedag and T., 
An Integrated Approach to Realize the Cognitive Machine Shop, 

[PhD1] Kirsch and Alexandra, 
Integration of Programming and Learning in a Control Language for Autonomous Robots Performing Everyday Activities, 
Technische Universität München, 2008.

[PhD2] Müller and Armin, 
Transformational Planning for Autonomous Household Robots using Libraries of Robust and Flexible Plans, 
Technische Universität München, 2008.

[R1] Heinz, Stefan, Sachenbacher and Martin, 
Using Model Counting to Find Optimal Distinguishing Tests, 

[J1] Buss, Martin, Beetz, Michael, Wollherr and Dirk, 
CoTeSys Cognition for Technical Systems, 
Publications

Hertzberg, Joachim, Beetz, Michael, Englert and Roman(Eds.), Springer-Verlag August 2007.

[C1] Beetz, Michael, Bandouch, Jan, Kirsch, Alexandra, Maldonado, Alexis, Müller, Armin, Rusu and Radu Bogdan,  
The Assistive Kitchen: A Demonstration Scenario for Cognitive Technical Systems,  

[C2] Beetz, Michael, Buss, Martin, Wollherr and Dirk,  

[C3] Beetz, Michael, Gedikli, Suat, Bandouch, Jan, Kirchlechner, Bernhard, Hoyningen-Huene, Nico von, Perzylo and Alexander,  
Visually Tracking Football Games Based on TV Broadcasts,  
*Proceedings of the Twentieth International Joint Conference on Artificial Intelligence (IJCAI)*, 2007.

[C4] Buss, Martin, Beetz, Michael, Wollherr and Dirk,  
CoTeSys: Cognition for Technical Systems,  

[C5] Gedikli, Suat, Bandouch, Jan, Hoyningen-Huene, Nico von, Kirchlechner, Bernhard, Beetz and Michael,  
An Adaptive Vision System for Tracking Soccer Players from Variable Camera Settings,  

[C6] Hoyningen-Huene, Nicolai V, Kirchlechner, Bernhard, Beetz and Michael,  
GrAM: Reasoning with Grounded Action Models by Combining Knowledge Representation and Data Mining,  

[C7] Jain, Dominik, Kirchlechner, Bernhard, Beetz and Michael,  
Extending Markov Logic to Model Probability Distributions in Relational Domains,  

[C8] Kirsch, Alexandra, Beetz and Michael,  
Training on the Job: Collecting Experience with Hierarchical Hybrid Automata,  
[C9] Kranz, Matthias, Maldonado, Alexis, Hoernler, Benedikt, Rusu, Radu Bogdan, Beetz, Michael, Rigoll, Gerhard, Schmidt and Albrecht, 
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,  

[C10] Kranz, Matthias, Maldonado, Alexis, Rusu, Radu Bogdan, Hoernler, Benedikt, Rigoll, Gerhard, Beetz, Michael, Schmidt and Albrecht, 
Sensing Technologies and the Player-Middleware for Context-Awareness in Kitchen Environments,  

[C11] Kunze, Lars, Lingemann, Kai, Nchter, Andreas, Hertzberg and Joachim, 
Salient Visual Features to Help Close the Loop in 6D SLAM,  

[C12] Muller, Armin, Beetz and Michael, 
Towards a Plan Library for Household Robots,  

[C13] Muller, Armin, Kirsch, Alexandra, Beetz and Michael, 
Transformational Planning for Everyday Activity,  
Proceedings of the 17th International Conference on Automated Planning and Scheduling (ICAPS’07), Providence, USA, 248255, September 2007.

[C14] Rusu, Radu Bogdan, Blodow, Nico, Marton, Zoltan-Csaba, Soos, Alina, Beetz and Michael, 
Towards 3D Object Maps for Autonomous Household Robots,  

[C15] Rusu, Radu Bogdan, Maldonado, Alexis, Beetz, Michael, Gerkey and Brian, 
Extending Player/Stage/Gazebo towards Cognitive Robots Acting in Ubiquitous Sensor-equipped Environments,  

[C16] Schuller, Bjrn, Wimmer, Matthias, Arsic, Dejan, Rigoll, Gerhard, Radig and Bernd, 
Audiovisual Behavior Modeling by Combined Feature Spaces,  

[C17] Schultz, R., Oertel, K., Peter, Christian, Wimmer, Matthias, Voskamp, Jrg, Urban and B., 
Emotionale Aspekte in Produktevaluationen,  

[C18] Stulp, Freek, Koska, Wolfram, Maldonado, Alexis, Beetz and Michael, 
Seamless Execution of Action Sequences,  
Publications

[C19] Tischler, Martin A., Peter, Christian, Wimmer, Matthias, Voskamp and Jrg, 
Application of emotion recognition methods in automotive research, 

[C20] Wimmer, Matthias, Mayer, Christoph, Stulp, Freek, Radig and Bernd, 
Estimating Natural Activity by Fitting 3D Models via Learned Objective Functions, 

[C21] Wimmer, Matthias, Pietzsch, Sylvia, Stulp, Freek, Radig and Bernd, 
Learning Robust Objective Functions with Application to Face Model Fitting, 

[C22] Wimmer, Matthias, Radig and Bernd, 
Initial Pose Estimation for 3D Models Using Learned Objective Functions, 

[C23] Wimmer, Matthias, Radig and Bernd, 
Automatically Learning the Objective Function for Model Fitting, 

[C24] Wimmer, Matthias, Radig, Bernd, Mayer and Christoph, 
SIPBILD Mimik- und Gestikerkennung in der Mensch-Maschine-Schnittstelle, 

[C25] Wimmer, Matthias, Stulp, Freek, Radig and Bernd, 
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.

[C26] Wimmer, Matthias, Zucker, Ursula, Radig and Bernd, 
Human Capabilities on Video-based Facial Expression Recognition, 

[PhD1] Stulp and Freek, 
Tailoring Robot Actions to Task Contexts using Action Models, 

[PhD2] Wimmer and Matthias, 
Model-based Image Interpretation with Application to Facial Expression Recognition, 
[J1] Rusu and Radu Bogdan,
Acquiring Models of Everyday Activities for Robotic Control in 'Current PhD Research in Pervasive Computing',
Ferscha, A., Langheinrich, M., Schmidt and A.(Eds.), Technical Reports - University of Munich, Department of Computer Science, Media Informatics Group, LMU-MI-2005-3: March 2006.

[J2] Wimmer, Matthias, Hmmerle and Simone,
Bitte recht freundlich,

[J3] Wimmer, Matthias, Radig and Bernd,
Adaptive Skin Color Classifier,

[C1] Beetz, Michael, Bandouch, Jan, Gedikli, Suat, Hoyningen-Huene, Nico von, Kirchlechner, Bernhard, Maldonado and Alexis,
Camera-based Observation of Football Games for Analyzing Multi-agent Activities,

[C2] Geipel, Markus, Beetz and Michael,
Learning to shoot goals, Analysing the Learning Process and the Resulting Policies,
Lakemeyer, Gerhard, Sklar, Elizabeth, Sorenti, Domenico, Takahashi and Tomoichi(Eds.),

[C3] Isik, Michael, Stulp, Freek, Mayer, Gerd, Utz and Hans,
Coordination without Negotiation in Teams of Heterogeneous Robots,
Proceedings of the RoboCup Symposium, Bremen, Germany, 355362, 2006.

[C4] Kranz, Matthias, Rusu, Radu Bogdan, Maldonado, Alexis, Beetz, Michael, Schmidt and Albrecht,
A Player/Stage System for Context-Aware Intelligent Environments,

[C5] Miller, Armin, Beetz and Michael,
Designing and Implementing a Plan Library for a Simulated Household Robot,

[C6] Rusu, Radu Bogdan, Maldonado, Alexis, Beetz, Michael, Kranz, Matthias, Msenlechner, Lorenz, Holleis, Paul, Schmidt and Albrecht,
Player/Stage as Middleware for Ubiquitous Computing,
[C7] Stulp, Freek, Beetz and Michael,
Action Awareness Enabling Agents to Optimize, Transform, and Coordinate Plans,

[C8] Stulp, Freek, Isik, Michael, Beetz and Michael,
Implicit Coordination in Robotic Teams using Learned Prediction Models,

[C9] Stulp, Freek, Pfüger, Mark, Beetz and Michael,
Feature Space Generation using Equation Discovery,
Proceedings of the 29th German Conference on Artificial Intelligence (KI), 2006.

[C10] Wimmer, Matthias, Radig, Bernd, Beetz and Michael,
A Person and Context Specific Approach for Skin Color Classification,

[C11] Wimmer, Matthias, Stulp, Freek, Tschechne, Stephan, Radig and Bernd,
Learning Robust Objective Functions for Model Fitting in Image Understanding Applications,

[J1] Beetz, Michael, Grosskreutz and Henrik,
Probabilistic Hybrid Action Models for Predicting Concurrent Percept-driven Robot Behavior,

[J2] Beetz, Michael, Kirchlechner, Bernhard, Lames and Martin,
Computerized Real-Time Analysis of Football Games,

[B1] Stulp, Freek, Beetz and Michael,

[B2] Stulp, Freek, Beetz and Michael,
Tailoring Action Parameterizations to Their Task Contexts, 2005.

[BC1] Beetz and Michael,
Towards Comprehensive Computational Models for Plan-Based Control of Autonomous Robots,
[C1] Hmmerle, Simone, Wimmer, Matthias, Radig, Bernd, Beetz and Michael,
Sensor-based Situated, Individualized, and Personalized Interaction in Smart
Environments,
Cremers, Armin B., Manthey, Rainer, Martini, Peter, Steinhage and Volker(Eds.), INFOR-
MATIK 2005 - Informatik LIVE! Band 1, Beitrge der 35. Jahrestagung der Gesellschaft

[C2] Kirsch and Alexandra,
Towards High-performance Robot Plans with Grounded Action Models: Integrating Learning Mechanisms into Robot Control Languages,

[C3] Kirsch, Alexandra, Beetz and Michael,
Combining Learning and Programming for High-Performance Robot Control-
ers,

[C4] Kirsch, Alexandra, Schweitzer, Michael, Beetz and Michael,
Making Robot Learning Controllable: A Case Study in Robot Navigation,

[C5] Stulp, Freek, Beetz and Michael,
Optimized Execution of Action Chains Using Learned Performance Models of
Abstract Actions,
Proceedings of the Nineteenth International Joint Conference on Artificial Intelligence
(IJCAI), 2005.

[C6] Wimmer, Matthias, Radig and Bernd,
Adaptive Skin Color Classifier,
al and Ashraf Aboshosha et(Ed.), Proceedings of the first International Conference on
Graphics, Vision and Image Processing, Cairo, Egypt, ICGST, Vol. I, 324-327, December
2005.

[J1] Beetz, Michael, Schmitt, Thorsten, Hanek, Robert, Buck, Sebastian, Stulp, Freek, Schrter,
Derik, Radig and Bernd,
The AGILO Robot Soccer Team Experience-based Learning and Probabilistic
Reasoning in Autonomous Robot Control,

[J2] Hanek, Robert, Beetz and Michael,
The Contracting Curve Density Algorithm: Fitting Parametric Curve Models
to Images Using Local Self-adapting Separation Criteria,

[C1] Beetz, M., Fischer, F., Flossmann, S., Kirchlechner, B., Unseld, A., Holzer and C.,
Watching Football with the Eyes of Experts: Integrated Intelligent Systems
for the Automatic Analysis of (Simulated) Football Games,
Publications

[C2] Beetz, Michael, Flossmann, Sven, Stammmeier and Thomas,
Motion and Episode Models for (Simulated) Football Games: Acquisition, Representation, and Use,

[C3] Beetz, M., Kirchlechner, B., Fischer and F.,
Interpretation and Processing of Position Data for the Empirical Study of the Behavior of Simulation League Robocup Teams,

[C4] Beetz, Michael, Kirsch, Alexandra, Müller and Armin,
RPL-LEARN: Extending an Autonomous Robot Control Language to Perform Experience-based Learning,

[C5] Fischer, Stefan, Dring, Sven, Wimmer, Matthias, Krummheuer and Antonia,
Experiences with an Emotional Sales Agent,

[C6] Müller, Armin, Kirsch, Alexandra, Beetz and Michael,
Object-oriented Model-based Extensions of Robot Control Languages,
27th German Conference on Artificial Intelligence, 2004.

[C7] Schrter, Derik, Beetz and Michael,
Acquiring Models of Rectangular Objects for Robot Maps,

[C8] Schrter, Derik, Beetz and Michael,
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.

[C9] Schrter, Derik, Weber, T., Beetz, Michael, Radig and Bernd,
Detection and Classification of Gateways for the Acquisition of Structured Robot Maps,

[C10] Stulp, Freek, Gedikli, Suat, Beetz and Michael,
Evaluating Multi-Agent Robotic Systems Using Ground Truth,

[C11] Stulp, Freek, Kirsch, Alexandra, Gedikli, Suat, Beetz and Michael,
AGILO RoboCuppers 2004,
Publications

[C12] Utz, Hans, Stulp, Freek, Mhlenfeld and Arndt,
Sharing Belief in Teams of Heterogeneous Robots,
Nardi, Daniele, Riedmiller, Martin, Sammut and Claude(Eds.), RoboCup-2004: The Eighth RoboCup Competitions and Conferences, Lisbon, Portugal, Springer Verlag, 508-515, 2004.

[PhD1] Hanek and Robert,
Fitting Parametric Curve Models to Images Using Local Self-adapting Separation Criteria,
Department of Informatics, Technische Universitt Mnchen, 2004.

[PhD2] Schmitt and Thorsten,
Vision-based Probabilistic State Estimation for Cooperating autonomous Robots,
Department of Informatics, Technische Universitt Mnchen, 2004.

[J1] Hanek, Robert, Schmitt, Thorsten, Buck, Sebastian, Beetz and Michael,
Towards RoboCup without color labeling,

[C1] Beetz, Michael, Gedikli, Suat, Hanek, Robert, Schmitt, Thorsten, Stulp and Freek,
AGILO RoboCuppers 2003: Computational Principles and Research Directions,

[C2] Beetz, Michael, Stulp, Freek, Kirsch, Alexandra, Miller, Armin, Buck and Sebastian,
Autonomous Robot Controllers Capable of Acquiring Repertoires of Complex Skills,

[C3] Schmitt, Thorsten, Hanek, Robert, Beetz and Michael,
Designing Probabilistic State Estimators for Autonomous Robot Control,

[C4] Schmitt, Thorsten, Hanek, Robert, Beetz and Michael,
Developing Comprehensive State Estimators for Robot Soccer,

[PhD1] Buck and Sebastian,
Experience-Based Control and Coordination of Autonomous Mobile Systems in Dynamic Environments,
Department of Informatics, Technische Universitt Mnchen, 2003.

[J1] Belker, Thorsten, Beetz, Michael, Cremers and Armin,
Learning Action Models for the Improved Execution of Navigation Plans,

[J2] Meyer, M, Desbrun, M, Schrder, P, Barr and A.H.,
Discrete differential-geometry operators for triangulated 2-manifolds,
Visualization and mathematics, 3(7): 3457, 2002.


Publications

[C6] Buck, Sebastian, Beetz, Michael, Schmitt and Thorsten,
Reliable Multi Robot Coordination Using Minimal Communication and Neural Prediction,

[C7] Buck, Sebastian, Beetz, Michael, Schmitt and Thorsten,
Approximating the Value Function for Continuous Space Reinforcement Learning in Robot Control,

[C8] Buck, Sebastian, Stulp, Freek, Beetz, Michael, Schmitt and Thorsten,
Machine Control Using Radial Basis Value Functions and Inverse State Projection,

[C9] Hanek, Robert, Schmitt, Thorsten, Buck, Sebastian, Beetz and Michael,
Fast Image-based Object Localization in Natural Scenes,

[C10] Hanek, Robert, Schmitt, Thorsten, Buck, Sebastian, Beetz and Michael,
Towards RoboCup without Color Labeling,

[C11] Schmitt, Thorsten, Beetz, Michael, Hanek, Robert, Buck and Sebastian,
Watch their Moves: Applying Probabilistic Multiple Object Tracking to Autonomous Robot Soccer,
The Eighteenth National Conference on Artificial Intelligence, Edmonton, Canada, 2002.

[C12] Schrter, Derik, Beetz, Michael, Gutmann and J.-S.,
RG Mapping: Learning Compact and Structured 2D Line Maps of Indoor Environments,
11th IEEE International Workshop on Robot and Human Interactive Communication (Roman), Berlin/Germany, 2002.

[PhD1] Hansen and Christoph,
Modellgetriebene Verfolgung formvariabler Objekte in Videobildfolgen,
Department of Informatics, Technische Universitt Mnchen, 2002.

[J1] Beetz and Michael,
Plan Management for Robotic Agents,

[J2] Beetz and Michael,
Structured Reactive Controllers,


[C10] Schmitt, Thorsten, Hanek, Robert, Buck, Sebastian, Beetz and Michael, 
Cooperative Probabilistic State Estimation for Vision-based Autonomous Soccer Robots, 

[C11] Schumacher, Jürgen, Beetz and Michael, 
Ein agentenbasiertes Verfahren zur effizienten Beantwortung von Liefertermianfragen in einer Supply-Chain, 

[J1] Beetz, Michael, Arbuckle, Tom, Belker, Thorsten, Bennewitz, Maren, Cremers, Armin, Hnnel, Dirk, Schulz and Dirk, 
Enabling Autonomous Robots to Perform Complex Tasks, 
KI - Künstliche Intelligenz; Special Issue on Autonomous Robots, 2000.

[J2] Thrun, Sebastian, Beetz, Michael, Bennewitz, Maren, Cremers, Armin, Dellaert, Frank, Fox, Dieter, Hnnel, Dirk, Rosenberg, Charles, Roy, Nicholas, Schulte, Jamieson, Schulz and Dirk, 
Probabilistic Algorithms and the Interactive Museum Tour-Guide Robot Minerva, 

[B1] Beetz and Michael, 
Concurrent Reactive Plans: Anticipating and Forestalling Execution Failures, 

[C1] Beetz and Michael, 
Runtime Plan Adaptation in Structured Reactive Controllers, 

[C2] Beetz, Michael, Belker and Thorsten, 
Learning Structured Reactive Navigation Plans from Executing MDP Navigation Policies, 

[C3] Beetz, Michael, Belker and Thorsten, 
Environment and Task Adaptation for Robotic Agents, 

[C4] Beetz, Michael, Grosskreutz and Henrik, 
Probabilistic Hybrid Action Models for Predicting Concurrent Percept-driven Robot Behavior, 


[C2] Arbuckle, Tom, Beetz and Michael,  
Extensible, Runtime-configurable Image Processing on Robots the RECIPE system,  

[C3] Bandlow, Thorsten, Klupsch, Michael, Hanek, Robert, Schmitt and Thorsten,  
Agilo RoboCuppers: RoboCup Team Description,  

[C4] Bandlow, Thorsten, Klupsch, Michael, Hanek, Robert, Schmitt and Thorsten,  
Fast Image Segmentation, Object Recognition and Localization in a RoboCup Scenario,  

[C5] Beetz and Michael,  
Structured Reactive Controllers A computational Model of Everyday Activity,  
Etzioni, O., Miller, J., Bradshaw and J.(Eds.), Proceedings of the Third International Conference on Autonomous Agents, 228235, 1999.

[C6] Beetz, Michael, Belker and Thorsten,  
Experience- and Model-based Transformational Learning of Symbolic Behavior Specifications,  

[C7] Beetz, Michael, Bennewitz, Maren, Grosskreutz and Henrik,  
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.

[C8] Beetz, Michael, Giesenschlag, Markus, Englert, Roman, Glch, Eberhard, Cremers and Armin,  
Semi-automatic Acquisition of Symbolically-annotated 3D Models of Office Environments,  

[J1] Beetz, Michael, Burgard, Wolfram, Fox, Dieter, Cremers and Armin,  
Integrating Active Localization into High-level Control Systems,  

[C1] Arbuckle, Tom, Beetz and Michael,  
RECIPE - A System for Building Extensible, Run-time Configurable, Image Processing Systems,  

[C2] Beetz, Michael, Arbuckle, Tom, Cremers, Armin, Mann and Markus,  
Transparent, Flexible, and Resource-adaptive Image Processing for Autonomous Service Robots,  
Publications

[C3] Beetz, Michael, Bennewitz and Maren,
Planning, Scheduling, and Plan Execution for Autonomous Robot Office Couriers,

[C4] Beetz, M., Grosskreutz and H.,
Causal Models of Mobile Service Robot Behavior,

[C5] Beetz, Michael, Peters and Hanno,
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.

[C6] Klupsch and Michael,
Object-Oriented Representation of Time-Varying Data Sequences in Multiagent Systems,

[C7] Klupsch, Michael, Lckenhaus, Maximilian, Zierl, Christoph, Laptev, Ivan, Bandlow, Thorsten, Grimme, Marc, Kellere, Ignaz, Schwarzer and Fabian,
Agilo RoboCuppers: RoboCup Team Description,

[C1] Beetz, M., McDermott and D.,
Expressing Transformations of Structured Reactive Plans,

[C2] Beetz, M., McDermott and D.,
Fast Probabilistic Plan Debugging,

[PhD1] Lanser and Stefan,
Modellbasierte Lokalisation gesttzt auf monokulare Videobilder,
Publications

[C1] Beetz, M., McDermott and D.,
Local Planning of Ongoing Activities,

[C2] Beetz, M., McDermott and D.,
Executing Structured Reactive Plans,

[PhD1] Beetz and Michael,
Anticipating and Forestalling Execution Failures in Structured Reactive Plans,
Yale University, 1996.

[C1] Beetz, M., McDermott and D.,
Improving Robot Plans During Their Execution,

[C1] Beetz, M., McDermott and D.,
Declarative Goals in Reactive Plans,

[C1] Bertelsmeier, R., Radig and Bernd,
Kontextunterstützte Analyse von Szenen mit bewegten Objekten.,