Cop: Cognitive Perception

List of Publications


[C4] 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.

[C5] 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.


[C3] Shulei Zhu, Dejan Pangercic and Michael Beetz, 
**Contracting Curve Density Algorithm for Applications in Personal Robotics,**

[C4] Michael Beetz, Ulrich Klank, Ingo Kresse, Alexis Maldonado, Lorenz Mösenlechner, Dejan Pangercic, Thomas Rühr and Moritz Tenorth, 
**Robotic Roommates Making Pancakes,**

[C5] Ingo Kresse, Ulrich Klank and Michael Beetz, 
**Multimodal Autonomous Tool Analyses and Appropriate Application,**

[C6] Dejan Pangercic, Vladimir Haltakov and Michael Beetz, 
**Fast and Robust Object Detection in Household Environments Using Vocabulary Trees with SIFT Descriptors,**

[C7] Asako Kanezaki, Zoltan-Csaba Marton, Dejan Pangercic, Tatsuya Harada, Yasuo Kuniyoshi and Michael Beetz, 
**Voxelized Shape and Color Histograms for RGB-D,**

[C8] Zoltan-Csaba Marton, Dejan Pangercic and Michael Beetz, 
**Efficient Surface and Feature Estimation in RGBD,**

[C9] William R. Murray and Dominik Jain, 
**Modeling Cognitive Frames for Situations with Markov Logic Networks,**

[BC1] Nicolai v. Hoyningen-Huene and Michael Beetz, 
**Importance Sampling as One Solution to the Data Association Problem in Multi-target Tracking,**
[C1] Zoltan-Csaba Marton, Dejan Pangercic, Nico Blodow, Jonathan Kleinehellefort and Michael Beetz,
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[C2] Dejan Pangercic, Moritz Tenorth, Dominik Jain and Michael Beetz,
*Combining Perception and Knowledge Processing for Everyday Manipulation*,

[C3] Zoltan-Csaba Marton, Dejan Pangercic, Radu Bogdan Rusu, Andreas Holzbach and Michael Beetz,
*Hierarchical Object Geometric Categorization and Appearance Classification for Mobile Manipulation*,

[C4] Nico Blodow, Dominik Jain, Zoltan-Csaba Marton and Michael Beetz,
*Perception and Probabilistic Anchoring for Dynamic World State Logging*,

[C5] 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.

[C1] Ulrich Klank, Dejan Pangercic, Radu Bogdan Rusu and Michael Beetz,
*Real-time CAD Model Matching for Mobile Manipulation and Grasping*,

[C2] 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.

[C3] Ulrich Klank, Muhammad Zeeshan Zia and Michael Beetz,
*3D Model Selection from an Internet Database for Robotic Vision*,

[C4] 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.

[C5] Li Sun, Ulrich Klank and Michael Beetz,
*EYEWATCHME - 3D Hand and object tracking for inside out activity analysis*,

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.


[PhD1] Armin Müller,
Transformational Planning for Autonomous Household Robots using Libraries of Robust and Flexible Plans,
Technische Universität München, 2008.

[C1] Armin Müller and Michael Beetz,
Towards a Plan Library for Household Robots,

[C2] Radu Bogdan Rusu, Nico Blodow, Zoltan-Csaba Marton, Alina Soos and Michael Beetz,
Towards 3D Object Maps for Autonomous Household Robots,

[J1] Robert Hanek and Michael Beetz,
The Contracting Curve Density Algorithm: Fitting Parametric Curve Models to Images Using Local Self-adapting Separation Criteria,