Zoltan-Csaba Marton

List of Publications

[C1] Michael Beetz, Ferenc Balint-Benczedi, Nico Blodow, Daniel Nyga, Thiemo Wiedemeyer and Zoltan-Csaba Marton,
RoboSherlock: Unstructured Information Processing for Robot Perception,

[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,

[C1] Karol Hausman, Ferenc Balint-Benczedi, Dejan Pangercic, Zoltan-Csaba Marton, Ryohei Ueda, Kei Okada and Michael Beetz,
Tracking-based Interactive Segmentation of Textureless Objects,

[C2] Kriegel, Simon, Brucker, Manuel, Marton, Zoltan-Csaba, Bodenmuller, Tim, Suppa and Michael,
Combining object modeling and recognition for active scene exploration,

[C3] 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,

[C4] Nissler, Christian, Marton, Zoltan-Csaba, Suppa and Michael,
Sample consensus fitting of bivariate polynomials for initializing EM-based modeling of smooth 3D surfaces,

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

[J2] 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] Karol Hausman, Christian Bersch, Dejan Pangercic, Sarah Osentoski, Zoltan-Csaba Marton and Michael Beetz,  
Segmentation of Cluttered Scenes through Interactive Perception,  

[C2] Ferenc Balint-Benczedi, Zoltan-Csaba Marton and Michael Beetz,  
Efficient Part-Graph Hashes for Object Categorization,  
5th International Conference on Cognitive Systems (CogSys), 2012.

[C3] 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.

[C4] 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,  

[C5] 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.

[C6] 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.

[C7] 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.

[J1] 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,  

[J2] Zoltan Csaba Marton, Dejan Pangercic, Nico Blodow and Michael Beetz,  
Combined 2D-3D Categorization and Classification for Multimodal Perception Systems,  
[C1] Nico Blodow, Zoltan-Csaba Marton, Dejan Pangercic, Thomas Rühr, Moritz Tenorth and Michael Beetz, 
*Inferring Generalized Pick-and-Place Tasks from Pointing Gestures*, 

[C2] 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*, 

[C3] 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.

[C4] Asako Kanezaki, Zoltan-Csaba Marton, Dejan Pangercic, Tatsuya Harada, Yasuo Kuniyoshi and Michael Beetz, 
*Voxelized Shape and Color Histograms for RGB-D*, 

[C5] Zoltan-Csaba Marton, Dejan Pangercic and Michael Beetz, 
*Efficient Surface and Feature Estimation in RGBD*, 
[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] 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**, 

[C2] 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**, 

[C3] 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**, 

[C4] Zoltan Csaba Marton, Radu Bogdan Rusu and Michael Beetz, 
**On Fast Surface Reconstruction Methods for Large and Noisy Point Clouds**, 

[C5] 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.

[C6] Nico Blodow, Radu Bogdan Rusu, Zoltan Csaba Marton and Michael Beetz, 
**Partial View Modeling and Validation in 3D Laser Scans for Grasping**, 

[C7] 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**, 
Zoltan-Csaba Marton

List of Publications

[J1] Radu Bogdan Rusu, Zoltan Csaba Marton, Nico Blodow, Mihai Dolha and Michael Beetz,
Towards 3D Point Cloud Based Object Maps for Household Environments,

[C1] Zoltan Csaba Marton, Nico Blodow, Mihai Dolha, Moritz Tenorth, Radu Bogdan Rusu and Michael Beetz,
Autonomous Mapping of Kitchen Environments and Applications,

[C2] Radu Bogdan Rusu, Zoltan Csaba Marton, Nico Blodow and Michael Beetz,
Interpretation of Urban Scenes based on Geometric Features,

[C3] Radu Bogdan Rusu, Zoltan Csaba Marton, Nico Blodow and Michael Beetz,
Learning Informative Point Classes for the Acquisition of Object Model Maps,

[C4] 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), Munich, Germany, 1-8, 2008.

[C5] 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), Munich, Germany, 2008.

[C6] Radu Bogdan Rusu, Zoltan Csaba Marton, Nico Blodow and Michael Beetz,
Persistent Point Feature Histograms for 3D Point Clouds,

[C7] Radu Bogdan Rusu, Zoltan Csaba Marton, Nico Blodow, Mihai Emanuel Dolha and Michael Beetz,
Functional Object Mapping of Kitchen Environments,

[C8] Radu Bogdan Rusu, Nico Blodow, Zoltan Csaba Marton and Michael Beetz,
Aligning Point Cloud Views using Persistent Feature Histograms,
[C1] Radu Bogdan Rusu, Nico Blodow, Zoltan-Csaba Marton, Alina Soos and Michael Beetz, 
Towards 3D Object Maps for Autonomous Household Robots, 