

- [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.
- [PhD1] Nico Blodow, **Managing Belief States for Service Robots - Dynamic Scene Perception and Spatio-temporal Memory**, Technische Universität München, 2014.
- [J1] 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.
- [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.
- [J1] 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] 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.
- [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,
Proceedings of the IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), San Francisco, CA, USA, September, 25–30 2011.
- [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] 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.
- [C1] 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.
- [C2] 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.
- [C3] 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.
- [C1] 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.
- [C2] 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.

- [C3] 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.
- [C4] 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.
- [C5] 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.
- [C6] 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.
- [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.
- [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, 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.
- [C3] 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.
- [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), Muenchen, Germany, 1-8, 2008.

- [C5] Radu Bogdan Rusu, Jan Bandoch, 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.
- [C6] 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.
- [C7] 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.
- [C8] 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.
- [C1] 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.