


ProbCog: Probabilistic Cognition for Technical Systems

List of Publications

[J1] Michael Beetz, Moritz Tenorth, Dominik Jain and Jan Bandouch,
Towards Automated Models of Activities of Daily Life,

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

[J3] Moritz Tenorth, Dominik Jain and Michael Beetz,
Knowledge Representation for Cognitive Robots,

[C1] Dominik Jain, Andreas Barthels and Michael Beetz,
Adaptive Markov Logic Networks: Learning Statistical Relational Models with
Dynamic Parameters,

[C2] 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,

[C3] 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,

[C4] 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.

[C5] 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.

[C6] 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.

[R1] Moritz Tenorth and Michael Beetz,
Deliverable D5.2: The RoboEarth Language – Language Specification,
ProbCog: Probabilistic Cognition for Technical Systems

List of Publications

[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,
IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), St. Louis, 
MO, USA, 4777-4784, October 11-15 2009.

[C2] Dominik Jain, Lorenz Mösenlechner and Michael Beetz, 
Equipping Robot Control Programs with First-Order Probabilistic Reasoning 
Capabilities, 

[C3] 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 

[C4] 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 conjunc-

[R1] Dominik Jain, Stefan Waldherr and Michael Beetz, 
Bayesian Logic Networks, 
IAS Group, Fakultät für Informatik, Technische Universität München, 2009.

[C1] 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.

[C2] 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.

[C1] Dominik Jain, Bernhard Kirchlechner and Michael Beetz, 
Extending Markov Logic to Model Probability Distributions in Relational Do-
 mains, 
KI 2007: Advances in Artificial Intelligence, 30th Annual German Conference on AI, 