ProbCog: Probabilistic Cognition for Technical Systems

List of Publications

[C1] Moritz Tenorth, Fernando De la Torre and Michael Beetz,
Learning Probability Distributions over Partially-Ordered Human Everyday Activities,

[C1] Martin Schuster, Dominik Jain, Moritz Tenorth and Michael Beetz,
Learning Organizational Principles in Human Environments,

[PhD1] Dominik Jain,

[C1] Dominik Jain, Klaus von Gleissenthall and Michael Beetz,
Bayesian Logic Networks and the Search for Samples with Backward Simulation and Abstract Constraint Learning,

[C2] Paul Maier, Dominik Jain and Martin Sachenbacher,
Compiling AI Engineering Models for Probabilistic Inference,

[C3] Dominik Jain,
Knowledge Engineering with Markov Logic Networks: A Review,
DKB 2011: Proceedings of the Third Workshop on Dynamics of Knowledge and Belief, 2011.

[C4] William R. Murray and Dominik Jain,
Modeling Cognitive Frames for Situations with Markov Logic Networks,

[C5] Maier, Paul, Jain, Dominik, Sachenbacher and Martin,
Diagnostic Hypothesis Enumeration vs. Probabilistic Inference for Hierarchical Automata Models,
[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, 

[C6] Moritz Tenorth, Lars Kunze, Dominik Jain and Michael Beetz, 
KNOWROB-MAP – Knowledge-Linked Semantic Object Maps, 

[R1] Moritz Tenorth and Michael Beetz, 
Deliverable D5.2: The RoboEarth Language – Language Specification, 
[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] 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 Better Living, Pittsburgh, Pennsylvania USA, 2009.

[C4] Dominik Jain, Paul Maier and Gregor Wylezich, Markov Logic as a Modelling Language for Weighted Constraint Satisfaction Problems,

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

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,

[C1] Dominik Jain, Bernhard Kirchlechner and Michael Beetz, Extending Markov Logic to Model Probability Distributions in Relational Domains,