[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] Martin Schuster, Dominik Jain, Moritz Tenorth and Michael Beetz,
Learning Organizational Principles in Human Environments,
IEEE International Conference on Robotics and Automation (ICRA), St. Paul, MN, USA,

[PhD1] Dominik Jain,
Probabilistic Cognition for Technical Systems: Statistical Relational Models for High-Level Knowledge Representation, Learning and Reasoning,
Technische Universität München, 2012.

[C1] Dominik Jain, Klaus von Gleissenthall and Michael Beetz,
Bayesian Logic Networks and the Search for Samples with Backward Simulation and Abstract Constraint Learning,
KI 2011: Advances in Artificial Intelligence, 34th Annual German Conference on AI,
Springer, Lecture Notes in Computer Science, Vol. 7006, 144-156, October 4-7 2011.

[C2] Paul Maier, Dominik Jain and Martin Sachenbacher,
Compiling AI Engineering Models for Probabilistic Inference,
KI 2011: Advances in Artificial Intelligence, 34th Annual German Conference on AI,

[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,
Proceedings of the 8th International NLPCS Workshop: Human-Machine Interaction in Translation, Copenhagen Studies in Language 41,
Samfundslitteratur, 167-178, August 11 2011.

[C5] Maier, Paul, Jain, Dominik, Sachenbacher and Martin,
Diagnostic Hypothesis Enumeration vs. Probabilistic Inference for Hierarchical Automata Models,
Proceedings of the 22nd International Workshop on Principles of Diagnosis (DX-2011),
Murnau, Germany, 2011.
Dominik Jain  
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,**  

[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,**  

[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,**  
Dominik Jain  List of Publications

[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 Domains,  
KI 2007: Advances in Artificial Intelligence, 30th Annual German Conference on AI,  