

List of publications: Morten Mørup

Journal Publications

1. S. M. Arnfred, A. Raballo, M. Mørup, J. Parnas, Self-Disorder and Brain Processing of Proprioception in Schizophrenia Spectrum Patients: A Re-Analysis, *Psychopathology*, vol. 48, pp. 6064, 2015.
2. T. Herlau, M. N. Schmidt, M. Mørup, Infinite-degree-corrected stochastic block model, *Physical Review E*, vol 90(3), 032819, 2014
3. L. Frølich, T. S. Andersen, M. Mørup, Classification of independent components of EEG into multiple artifact classes, *Psychophysiology*, 2014
4. K. W. Andersen, K. H. Madsen, H. R. Siebner, M. N. Schmidt, M. Mørup, L. K. Hansen, Non-parametric Bayesian graph models reveal community structure in resting state fMRI, *NeuroImage*, vol. 100, pp. 301-315, 2014.
5. F. K. Glückstad, T. Herlau, M. N. Schmidt, M. Mørup, Cross-categorization of legal concepts across boundaries of legal systems: in consideration of inferential links, *Artificial Intelligence and Law*, vol. 22, pp. 61–108, 2014.
6. N. Wangdong, L. Nørgaard, M. Mørup, Non-linear calibration models for NIR spectroscopy, *Analytica Chimica Acta*, vol. 813, pp. 1-14, 2014.
7. J. C. Thøgersen, M. Mørup, S. Damkiær, S. Molin, L. Jelsbak, Archetypal analysis of diverse *Pseudomonas aeruginosa* transcriptomes reveals adaptation in cystic fibrosis airways, *BMC Bioinformatics*, vol. 14(279), 2013.
8. M. N. Schmidt, M. Mørup, Non-parametric Bayesian modeling of complex networks, *IEEE Signal Processing Magazine*, vol 30(3), pp. 110-128, 2013.
9. M. Mørup, M. N. Schmidt, Bayesian Community Detection, *Neural Computation* vol. 24(9), pp. 2434-56, 2012.
This publication comes with an errata: M. Mørup, M. N. Schmidt. Errata to Bayesian Community Detection, *Neural computation* 26(6) pp. 1236-1237, 2014.
10. M. Mørup, L. K. Hansen, Archetypal Analysis for Machine Learning and Data Mining, *NeuroComputing* vol. 80, pp. 54-63, 2012.
11. M. Mørup, Applications of tensor (multi-way array) factorizations and decompositions in data mining, *Wiley DMKD* vol. 1(1), pp. 24-40, 2011.
12. C. Stahlhut, M. Mørup, O. Winther, L. K. Hansen, Simultaneous EEG Source and Forward Model Reconstruction (SOFOMORE) using a Hierarchical Bayesian Approach, *Journal of Signal Processing Systems*, pp. 1-14, 2010.
13. E. Acar, D. M. Dunlavy, T. G. Kolda, M. Mørup, Scalable tensor factorizations for incomplete data, in press *Chemometrics and Intelligent Laboratory Systems* 2010.
14. S. M. Arnfred, M. Mørup, J. Thalbitzera, L. Janssona, J. Parnas, Attenuation of beta and gamma oscillations in schizophrenia spectrum patients following hand posture perturbation, *Psychiatric Research*, vol. 185(1-2), pp. 215-224, 2010.
15. I. Griskova, M. Mørup, Josef Parnas, Osvaldas Ruksenas, Sidse M. Arnfred, Two discrete components of the 20 Hz steady-state response are distinguished through the modulation of activation level. *Clinical Neurophysiology*, vol. 120, pp. 904-909, 2009
16. M. Mørup, L.K. Hansen, Automatic Relevance Determination for multi-way models, *Journal of Chemometrics*, vol. 23(7-8), pp. 352-363, 2009
17. M. Mørup, L.K. Hansen, S.M. Arnfred, L.-H. Lim, K.M. Madsen, Shift Invariant Multilinear Decomposition of Neuroimaging Data. *NeuroImage* vol. 42(4), pp.1439-50, 2008
18. M. Mørup, L. K. Hansen, S. M. Arnfred, Algorithms for Sparse Nonnegative Tucker Decomposition. *Neural Computation*, vol. 20 no. 8, pp. 2112-2131, 2008
19. S. M. Arnfred, L. K. Hansen, J. Parnas, M. Mørup, Regularity increases middle latency evoked and late induced beta brain response following proprioceptive stimulation. *Brain Research*, vol. 1218, pp. 114-131, 2008
20. I. Griskova, M. Mørup, J. Parnas, O. Ruksenas, O., S.M. Arnfred, The amplitude and phase precision of 40 Hz auditory steady-state response depend on the level of arousal. *Experimental Brain Research*, vol. 183(1), pp. 133-138, 2007
21. M. Mørup, L.K. Hansen, S.M. Arnfred, ERPWAVELAB A toolbox for multi-channel analysis of time-frequency transformed event related potentials. *Journal of Neuroscience Methods*, vol. 161, pp. 361-368, 2007
22. S.M. Arnfred, L.K. Hansen, L. K., J. Parnas, M. Mørup, Proprioceptive Evoked Gamma Oscillations. *Brain Research*, vol. 1147, pp. 167-174, 2007
23. M. Mørup, L. K. Hansen, C. S. Hermann, J. Parnas, S. M. Arnfred, Parallel Factor Analysis as an exploratory tool for wavelet transformed event-related EEG. *NeuroImage*, vol. 29(3), pp. 938-947, 2006
24. F. Calamante, M. Mørup, L. K. Hansen, Defining a local arterial input function for perfusion MRI using independent component analysis, *Magnetic Resonance in Medicine*, vol. 2(4), pp. 789-797, 2004

Conference and Workshop Proceedings

1. M. Mørup, F. K. Glückstad, T. Herlau, M.N.Schmidt, Nonparametric Statistical Structuring of Knowledge Systems Using Binary Feature Matches. *Machine Learning for Signal Processing (MLSP)*, 2014 IEEE Workshop on.

2. S. F. V. Nielsen, M. Mørup, Non-negative Tensor Factorization with Missing Data for the Modeling of Gene Expressions in the Human Brain. *Machine Learning for Signal Processing (MLSP)*, 2014 IEEE Workshop on.
3. M. N. Schmidt, T. Herlau, M. Mørup, Discovering Hierarchical Structure In Normal Relational Data. 4th International Workshop on Cognitive Information Processing, 2014.
4. K. S. Ambrosen, K. J. Albers, T. Dyrby, M. N. Schmidt and M. Mørup. Nonparametric Bayesian Clustering of Structural Whole Brain Connectivity in Full Image Resolution. 4th International Workshop on Pattern Recognition in NeuroImaging (PRNI2014), 2014
5. K. J. Albers, A. L. A. Moth, M. Mørup, M. N. Schmidt, Large Scale Inference In The Infinite Relational Model: Gibbs Sampling Is Not Enough, *IEEE Machine Learning for Signal Processing (MLSP)*, 2013.
6. F. K. Glückstad, T. Herlau, M. N. Schmidt, and M. Mørup. Analysis of Conceptualization Patterns across Groups of People. In: *Technologies and Applications of Artificial Intelligence, Conference on (TAAI)*, 2013.
7. F. K. Glückstad, T. Herlau, M. N. Schmidt, and M. Mørup. Analysis of Subjective Conceptualizations Towards Collective Conceptual Modelling. In: *Japanese Society for Artificial Intelligence, Conference of the (JSAI)*, 2013.
8. F. K. Glückstad, T. Herlau, M. N. Schmidt, and M. Mørup. Unsupervised knowledge structuring. In: *Signal Image Technology and Internet based Systems, International Conference on (SITIS)*. 2013.
9. T. Herlau, M. Mørup, M. N. Schmidt, Modeling Temporal Evolution and Multiscale Structure in Networks, *International Conference on Machine Learning (ICML)*, 2013
10. K. S. Ambrosen, T. Herlau, T. Dyrby, M. N. Schmidt and M. Mørup. Comparing Structural Brain Connectivity by the Infinite Relational Model, 3rd International Workshop on Pattern Recognition in NeuroImaging (PRNI2013)
11. Larsen, J. E., Sapiezynski, P., Stopczynski, A., Mrup, M., Theodorsen, R., Crowds, bluetooth, and rock'n'roll: understanding music festival participant behavior, *PDM '13 Proceedings of the 1st ACM international workshop on Personal data meets distributed multimedia*, pp. 11-18, 2013
12. K. W. Andersen, K. H. Madsen, H. Siebner, L. K. Hansen, M. Mørup, Identification of Functional Clusters in the Striatum Using Infinite Relational Modeling, *Machine Learning and Interpretation in Neuroimaging, Lecture Notes in Computer Science*, pp 226-233, 2012
13. T. Herlau, M. Mørup, M. N. Schmidt, L. K. Hansen, Modelling Dense Relational Data, *Machine Learning for Signal Processing (MLSP)*, 2012 IEEE Workshop on
14. K. W. Andersen, M. Mørup, H. Siebner, K. H. Madsen, L. K. Hansen, Identifying Modular Relations In Complex Brain Networks, *Machine Learning for Signal Processing (MLSP)*, 2012 IEEE Workshop on
15. D. K. Wind, M. Mørup, Link Prediction In Weighted Networks, *Machine Learning for Signal Processing (MLSP)*, 2012 IEEE Workshop on
16. F. K. Glückstad, M. Mørup, Application of the Infinite Relational Model combined with the Bayesian Model of Generalization for Effective Cross-Cultural Knowledge Transfer, *Proceedings of the 26th Annual Conference of the Japanese Society for Artificial Intelligence*, 2012
17. F. K. Glückstad, M. Mørup, Feature-based Ontology Mapping from an Information Receivers Viewpoint *Proceedings of the 9th International Workshop on Natural Language Processing and Cognitive Science, NLPSC 2012*, pp. 34-43
18. F. K. Glückstad, M. Mørup, Flexible or Strict Taxonomic Organization? Impact on Culturally-specific Knowledge Transfer. *Proceedings of the 10th Terminology and Knowledge Engineering Conference: New Frontiers in the Constructive Symbiosis of Terminology and Knowledge Engineering*, 2012, pp. 65-80
19. T. Herlau, M. Mørup, M. N. Schmidt, L. K. Hansen, Detecting Hierarchical Structure in Networks, *Cognitive Information Processing*, 2012
20. R. Tomioka, M. Mørup, A Bayesian Analysis of the Radioactive Releases of Fukushima, in press *AISTATS 2012*.
21. M. Mørup, M.N. Schmidt, Transformation Invariant Sparse Coding, Accepted for publication, *Machine Learning for Signal Processing (MLSP)*, 2011 IEEE Workshop on
22. T.J. Hansen, M. Mørup, L.K. Hansen, Non-Parametric Co-Clustering Of Large Scale Sparse Bipartite Networks On The GPU, *Machine Learning for Signal Processing (MLSP)*, 2011 IEEE Workshop on
23. M. Mørup, K. H. Madsen, L. K. Hansen, Modeling Latency and Shape Changes in Trial Based Neuroimaging Data, *Signals, Systems and Computers (ASILOMAR)*, 2011 Conference Record of the Forty Fifth Asilomar Conference on, pp. 439-443, 2011
24. M. Mørup, K. H. Madsen, L. K. Hansen, Frequency Constrained ShifCP Modeling of Neuroimaging Data, *Signals, Systems and Computers (ASILOMAR)*, 2011 Conference Record of the Forty Fifth Asilomar Conference on, pp. 127-131, 2011
25. M. Mørup, K. H. Madsen, A. M. Dogonowski, H. Siebner, L. K. Hansen, Infinite Relational Modeling of Functional Connectivity in Resting State fMRI, *Neural Information Processing Systems 23*, pp. 1750-1758, 2010
26. T. J. Hansen, M. Mørup, L.K. Hansen, Large Scale GPU Based Inference for the Infinite Relational Model. *NIPS workshop on Low-rank Methods for Large-scale Machine Learning*, 2010.
27. M. Mørup, M. N. Schmidt, L. K. Hansen, Infinite Multiple Membership Relational Modeling for Complex Networks, first presented at *NIPS Workshop on Networks Across Disciplines in Theory and Application*, 2010. Accepted for publication, *Machine Learning for Signal Processing (MLSP)*, 2011 IEEE Workshop on

28. M. N. Schmidt, M. Mørup, Infinite non-negative matrix factorization, European Signal Processing Conference (EUSIPCO), pp. 905-909, 2010
29. M. Mørup, L. K. Hansen, Archetypal Analysis for Machine Learning, Machine Learning for Signal Processing (MLSP), 2010 IEEE Workshop on, pp. 172-177, 2010
30. M. K. Petersen, M. Mørup, L. K. Hansen, Latent Semantics As Cognitive Components, Cognitive Information Processing (CIP), 2nd International Workshop on, pp. 434-439, 2010
31. E. Acar, D. Dunlavy, T. G. Kolda, M. Mørup, Scalable Tensor Factorizations with Missing Data, Proceedings of the 2010 SIAM International Conference on Data Mining, pp. 701-712, 2010
32. M. K. Petersen, M. Mørup, L. K. Hansen, Sparse but emotional decomposition of lyrics, 3rd International Workshop on Learning Semantics of Audio Signals (LSAS), 2009
33. C. Stahllhut, M. Mørup, O. Winther, L. K. Hansen, Hierarchical Bayesian Model for simultaneous EEG Source and Forward Model Reconstruction (SOFOMORE). Machine Learning for Signal Processing, 2009 IEEE Workshop on, pp. 1-6, 2010
34. C. Stahllhut, M. Mørup, O. Winther, L. K. Hansen : Sofomore: Combined EEG Source and Forward Model Reconstruction, IEEE International Symposium on Biomedical Imaging, pp. 450-453, 2009
35. M. Mørup, L. K. Hansen, Tuning Pruning in Sparse Non-negative Matrix Factorization. European Signal Processing Conference (EUSIPCO-2009), pp. 1923-1927, 2009
36. V. Potluru, S. Plis, M. Mørup, V. Calhoun, T. Lane, Efficient Multiplicative updates for Support Vector Machines. SIAM International Conference on Data Mining (SDM09), pp. 1220-1231, 2009
37. M. Mørup, L.K. Hansen, Sparse Coding and Automatic Relevance Determination for Multi-way models. Signal Processing with Adaptive Sparse Structured Representations (Spars09), 2009
38. M. Mørup, K.H. Madsen, L.K. Hansen, Approximate L0 constrained Non-negative Matrix and Tensor Factorization. IEEE International Symposium on Circuits and Systems (ISCAS), special session on Non-negative Matrix and Tensor Factorization and Related Problems, pp. 1328 -
39. P. M. Rasmussen, M. Mørup, L. K. Hansen, S. M. Arnfred, Model Order Estimation for Independent Component Analysis of Epochen EEG Signals. Biosignals 2008, International Conference on Bio-inspired Systems and Signal Processing, 2008
40. M. Mørup, L. H. Clemmensen, Multiplicative updates for the LASSO. Machine Learning for Signal Processing, 2007 IEEE Workshop on, pp. 33-38, 2007
41. M. Mørup, K. H. Madsen, L. K. Hansen, Shifted Non-negative Matrix Factorization. Machine Learning for Signal Processing, 2007 IEEE Workshop on, pp. 139-144, 2007
42. M. Mørup, K. H. Madsen, L. K. Hansen, Shifted Independent Component Analysis. Independent Component Analysis and Signal Separation, Lecture Notes in Computer Science 4666, pp. 89-96, 2007
43. M. N. Schmidt, M. Mørup, Nonnegative Matrix Factor 2-D Deconvolution for Blind Single Channel Source Separation. Independent Component Analysis and Blind Signal Separation 3889 pp. 700-707, 2006

Editorials

1. A. Cichocki, M. Mørup, P. Smaragdis, W. Wang, and R. Zdunek, Editorial. Advances in Nonnegative Matrix and Tensor Factorization, Computational Intelligence and Neuroscience, 2008

Abstracts and Workshop Contributions without Proceedings

1. M. Mørup, M. N. Schmidt, Efficient Inference in the Infinite Multiple Membership Relational Model. NIPS Workshop on Bayesian Nonparametrics: Hope or Hype?, 2011.
2. M.N.Schmidt, M. Mørup, T. Herlau, Hierarchical models of complex networks. NIPS Workshop on Bayesian Nonparametrics: Hope or Hype?, 2011.
3. K. W. Jørgensen, K. H. Madsen, H. Siebner, L. K. Hansen, M. Mørup, Identification of functional clusters in the striatum using infinite relational modeling. NIPS Workshop on Machine Learning in NeuroImaging, MLINI 2011.
4. T. J. Hansen, M. Mørup, L.K. Hansen, Large Scale GPU Based Inference for the Infinite Relational Model. NIPS workshop on Low-rank Methods for Large-scale Machine Learning, 2010.
5. M. Mørup, M. N. Schmidt, L. K. Hansen, Infinite Multiple Membership Relational Modeling for Complex Networks, NIPS workshop on Networks Across Disciplines: Theory and Applications, 2010.
6. M. N. Schmidt, M. Mørup, Reversible jump MCMC for Bayesian NMF, NIPS workshop on Monte Carlo Methods for Bayesian Inference in Modern Day Applications, 2010.
7. M. Mørup, K. H. Madsen, L. K. Hansen, Latent Causal Modelling of Neuroimaging Data, NIPS Workshop on Connectivity Inference in Neuroimaging, 2009.
8. M. Mørup, L. K. Hansen, Learning Latent Structure in Complex Networks, NIPS workshop on Analyzing Networks and Learning with Graphs, 2009.

9. C. Stahlhut, M. Mørup, O. Winther, L. K. Hansen, Evaluation of the Influence of Uncertain Forward Models on the EEG Source Reconstruction Problem, Human Brain Mapping, 2009.
10. M. Mørup, L. K. Hansen, S. M. Arnfred, Parallel Factor Analysis as an exploratory tool for wavelet transformed event related EEG, Human Brain Mapping, 2005.

In the media

1. Forskere vil lave Google Street View i hjernen, Videnskab.dk, 25. juni 2013
2. Fremtidens hjerneatlas, Videnskabens Verden 25. juni 2013 kl. 14:03 på P1

Patents

1. WO/2013/186216: A method, computer program and system for inferring and structuring relations between cultural specific concepts in two cultures. (Discontinued)