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Publications

1. Edited scientific volumes and conference proceedings

- 1.1. J. Rissanen, J. Leppä-Aho, T. Roos, and P. Myllymäki (eds). Proceedings of the Ninth Workshop on Information Theoretic Methods in Science and Engineering (WITMSE-2016). University of Helsinki, Department of Computer Science (Series of Publications B; vol. B-2016-2)
- 1.2. J. Rissanen, P. Harremoës, S. Forchhammer, P. Myllymäki, and T. Roos (eds.), Proceedings of the Eight Workshop on Information Theoretic Methods in Science and Engineering (WITMSE-2015). Copenhagen, August 2015.
- 1.3. J. Rissanen, P. Myllymäki, T. Roos, and N. Santhanam (eds.), Proceedings of the Seventh Workshop on Information Theoretic Methods in Science and Engineering (WITMSE-2014). Honolulu, July 2014.
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- 1.5. S. de Rooij, W. Kotłowski, J. Rissanen, P. Myllymäki, T. Roos, and K. Yamanishi (eds.), Proceedings of the Fifth Workshop on Information Theoretic Methods in Science and Engineering (WITMSE-2012). Amsterdam, August 2012.
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- 1.7. P. Myllymäki, T. Roos and T. Jaakkola (eds.), Proceedings of the Fifth European Workshop on Probabilistic Graphical Models (PGM'2010), Helsinki, September 2010. HIIT Publications 2010-2.
- 1.8. K. Yamanishi, I. Kontoyiannis, E. Liski, P. Myllymäki, J. Rissanen and I. Tabus (eds.), Proceedings of the Third Workshop on Information Theoretic Methods in Science and Engineering (WITMSE-2010). TICSP series 55, Tampere International Center for Signal Processing, 2010.
- 1.9. J. Heikkonen, I. Kontoyiannis, E. Liski, P. Myllymäki, J. Rissanen and I. Tabus (eds.), Proceedings of the Second Workshop on Information Theoretic Methods in Science and Engineering (WITMSE-2009). TICSP series 49, Tampere International Center for Signal Processing, 2009.

- 1.10. D. McAllester and P. Myllymäki (eds.), Proceedings of the 24th Conference on Uncertainty in Artificial Intelligence (UAI 2008), July 2008, Helsinki, Finland. AUAI Press, 2008.
- 1.11. J. Heikkonen, I. Kontogiannis, E. Liski, P. Myllymäki, J. Rissanen and I. Tabus (eds.), Proceedings of the First Workshop on Information Theoretic Methods in Science and Engineering (WITMSE-2008). TICSP Series #43, Tampere International Center for Signal Processing, 2008.
- 1.12. P. Grünwald, P. Myllymäki, I. Tabus, M. Weinberger and B. Yu (eds.), *Festschrift in Honour of Jorma Rissanen*. TICSP Series #38, Tampere International Center for Signal Processing, 2008. Presented at the 2008 IEEE Information Theory Workshop.

2. Book chapters (edited and refereed)

- 2.1. P. Myllymäki, T. Roos, T. Silander, P. Kontkanen and H. Tirri, Factorized NML Models. Chapter 11 in *Festschrift in Honour of Jorma Rissanen*, edited by P. Grünwald, P. Myllymäki, I. Tabus, M. Weinberger and B. Yu. TICSP Series #38, 2008.
- 2.2. P. Kontkanen, P. Myllymäki, W. Buntine, J. Rissanen, H. Tirri, An MDL Framework for Data Clustering. In *Advances in Minimum Description Length: Theory and Applications*, edited by P. Grünwald, I.J. Myung and M. Pitt. The MIT Press, 2005.
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- 2.4. P. Kontkanen, P. Myllymäki, T. Silander, and H. Tirri, On the Accuracy of Stochastic Complexity Approximations. Chapter 9 in *Causal Models and Intelligent Data Management*, edited by A. Gammerman. Springer-Verlag, 1999.
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- 2.6. P. Myllymäki and H. Tirri, Massively Parallel Case-Based Reasoning with Probabilistic Similarity Metrics. Pp. 144-154 in *Topics in Case-Based Reasoning*, edited by S. Wess, K.-D. Althoff and M. Richter. Lecture Notes in Artificial Intelligence, Volume 837. Springer Verlag, 1994.

3. Articles in refereed international journals

- 3.1. Grünwald, P., Myllymäki, P., Roos, T. & Tabus, I., In Memoriam: Jorma J. Rissanen, 1932–2020. IEEE Information Theory Society Newsletter 70 (2020), 3 (September).

- 3.2. T. Ruotsalo, J. Peltonen, M. Eugster, D. Glowacka, P. Floréen, P., Myllymäki, G., Jacucci, and S. Kaski, Interactive Intent Modeling for Exploratory Search. *ACM Transactions on Information Systems* 36 (2018) 4 (October), 1-46.
- 3.3. B.Malone, K.Kangas, M.Järvisalo, M.Koivisto, and P.Myllymäki, Empirical Hardness of Finding Optimal Bayesian Network Structures: Algorithm Selection and Runtime Prediction. *Machine Learning* 107 (2018), 1, 247-283.
- 3.4. N.Jahnsson, B.Malone, and P.Myllymäki, Duplicate Detection for Bayesian Network Structure Learning. *New Generation Computing* 35 (2017), 1, 47-67.
- 3.5. R. Eggeling, T. Roos, P. Myllymäki, P. And I. Grosse, Inferring intra-motif dependencies of DNA binding sites from ChIP-seq data. *BMC Bioinformatics* 16, 2015.
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- 3.7. E.Khoramshahi, E.Honkavaara, J. Hyypä, P.Myllymäki, Passive Localization of a Robot Using Multiple-View Geometry. *International Journal of Robotics Applications and Technologies* 2 (2014), 20-36.
- 3.8. T. Roos, P. Myllymäki, and T. Jaakkola, Editorial: Special issue on the Fifth European Workshop on Probabilistic Graphical Models. *International Journal of Approximate Reasoning* 59 (2012) 9, 1303-1304.
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- 3.10. J. Perkiö, A. Tuominen, T. Vähäkangas and P. Myllymäki, Image Similarity: From Syntax to Weak Semantics. *Multimedia Tools and Applications*, DOI: 10.1007/s11042-010-0562-7, July 14, 2010.
- 3.11. T. Silander, T. Roos, and P. Myllymäki, Learning Locally Minimax Optimal Bayesian Networks. *International Journal of Approximate Reasoning* 51 (2010) 5 (June), 544-557.
- 3.12. J. Rissanen, T. Roos, and P. Myllymäki, Model Selection by Sequentially Normalized Least Squares. *Journal of Multivariate Analysis* 101 (2010) 4 (April), 839-849.
- 3.13. T. Roos, J. Rissanen and P. Myllymäki, MDL Denoising Revisited. *IEEE Trans. Signal Processing* 57 (2009) 9 (September), 3347-3360.
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- 3.15. J. Rissanen, P. Grünwald, J. Heikkonen, P. Myllymäki, T. Roos, J. Rousu, Information Theoretic Methods for Bioinformatics, guest editorial for a special issue of the *EURASIP Journal on Bioinformatics and Systems Biology*, Volume 2007 (2007).

- 3.16. H. Wettig, P. Kontkanen and P. Myllymäki, Calculating the Normalized Maximum Likelihood Distribution for Bayesian Forests. *IADIS International Journal on Computer Science and Information Systems* 2 (2007) 2 (October).
- 3.17. P. Kontkanen and P. Myllymäki, A linear-time algorithm for computing the multinomial stochastic complexity. *Information Processing Letters* 103 (2007) 6 (September), 227-233.
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- 3.24. P.Myllymäki, Massively Parallel Probabilistic Reasoning with Boltzmann Machines. *Applied Intelligence* 11, 31-44 (1999).
- 3.25. P. Floréen, P. Myllymäki, P. Orponen, and H. Tirri, Compiling object declarations into connectionist networks. *AI Communications* 3 (1990) 4 (December), 172-183.

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- 4.1. C. Rajani, A., Klami, A., Salmi, T., Rauhala, E., Haeggström, E. & P. Myllymäki, Detecting Industrial Fouling by Monotonicity during Ultrasonic Cleaning. In Proceedings of the 2018 IEEE 28th International Workshop on Machine Learning for Signal Processing (MLSP).
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- 4.6. Kerstin Bunte, Matti Järvisalo, Jeremias Berg, Petri Myllymäki, Jaakko Peltonen, and Samuel Kaski. Optimal Neighborhood Preserving Visualization by Maximum Satisfiability. In Carla E. Brodley and Peter Stone, editors, *Proceedings of the 28th AAAI Conference on Artificial Intelligence (AAAI 2014)*, pages 1694-1700. AAAI Press, 2014.
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- 4.11. A. Oulasvirta, A. Pihlajamaa, J. Perkiö, T. Vähäkangas, D. Ray, N. Vainio, P. Myllymäki, T. Hasu, Long-term Effects of Ubiquitous Surveillance at Home. In *Proceedings of the 14th International Conference on Ubiquitous Computing (UbiComp)*, September, 2012.
- 4.12. S. Bhattacharya, P. Floréen, A. Forsblom, S. Hemminki, P. Myllymäki, P. Nurmi, T. Pulkkinen, A. Salovaara, Ma\$iv€ - An Intelligent Mobile Grocery Assistant. In *Proceedings of the 8th International Conference on Intelligent Environments (IE'12, June 2012, Guanajuato, Mexico)*.
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