# Måns Magnusson

## **Publications**

#### SUBMITTED AND ARXIVED

- Tuomas Sivula, Måns Magnusson, and Aki Vehtari. Uncertainty in bayesian leave-one-out cross-validation based model comparison.
- Johan Jonasson and Måns Magnusson. Rapid mixing in unimodal landscapes and efficient simulated annealing for multimodal distributions.
- Väinö Yrjänäinen and Måns Magnusson. Probabilistic word embeddings with laplacian priors.
- Miriam Hurtado Bodell, Måns Magnusson, and Sophie Mützel. From documents to data: A framework for total corpus quality. a.
- Miriam Hurtado Bodell, Måns Magnusson, and Marc Keuschnigg. Turning points in the swedish understanding of immigration, 1945–2019. b.
- Oscar Oelrich, Shutong Ding, Aki Vehtari, Måns Magnusson, and Mattias Villani. When is Bayesian model inference overconfident?
- Måns Magnusson, Richard Ohrvall, Katarina Barrling, and David Mimno. Voices from the far right: a text analysis of Swedish parliamentary debates.

### Published (Peer reviewed)

- Tuomas Sivula, Måns Magnusson, and Aki Vehtari. Unbiased estimator for the variance of the leave-one-out cross-validation estimator for a Bayesian normal model with fixed variance. *Communications in Statistics Theory and Methods*, 2022.
- Alexandra Borg Erik Edoff Fredrik Norén, Johan Jarlbrink and Måns Magnusson. The transformation of 'the political' in post-war Sweden. In *Digitised Newspapers A New Eldorado for Historians?* De Gruyter Oldenbourg, 2022.
- Alexander Terenin, Måns Magnusson, and Leif Jonsson. Sparse parallel training of hierarchical Dirichlet process topic models. *EMNLP*, 2020.
- Akash Kumar Dhaka, Alejandro Catalina, Michael Riis Andersen, Måns Magnusson, and Aki Vehtari. Robust, accurate stochastic optimization for variational inference. *NeurIPS*, 2020.
- Måns Magnusson, Michael Riis Andersen, Johan Jonasson, and Aki Vehtari. Leave-one-out cross-validation for model comparison in large data. *AISTATS*, 2020.
- Miriam Hurtado Bodell, Martin Arvidsson, and Måns Magnusson. Interpretable word embeddings via informative priors. *EMNLP*, 2019.
- Måns Magnusson, Michael Riis Andersen, Johan Jonasson, and Aki Vehtari. Bayesian leave-one-out cross-validation for large data. In *International Conference on Machine Learning*, 2019a.
- Måns Magnusson, Leif Jonsson, and Mattias Villani. DOLDA-a regularized supervised topic model for high-dimensional multi-class regression. *Computational Statistics*, 2019b.

- Måns Magnusson, Micheal Andersen, and Aki Vehtari. Bayesian leave-one-out cross-validation for large data sets. In *Symposium on Advances in Approximate Bayesian Inference*, 2018a.
- Alexander Terenin, Måns Magnusson, Leif Jonsson, and David Draper. Pólya urn latent dirichlet allocation: a sparse massively parallel sampler. *Transactions on Pattern Analysis and Machine Intelligence*, 2018.
- Måns Magnusson, Leif Jonsson, Mattias Villani, and David Broman. Sparse partially collapsed MCMC for parallel inference in topic models. *Journal of Computational and Graphical Statistics*, 27(2):449–463, 2018b.
- Alexandra Schofield, Måns Magnusson, Laure Thompson, and David Mimno. Understanding text pre-processing for latent dirichlet allocation. *ACL Workshop for Women in NLP (WiNLP)*, 2017a.
- Alexandra Schofield, Måns Magnusson, and David Mimno. Pulling out the stops: Rethinking stopword removal for topic models. *EACL 2017*, page 432, 2017b.
- Leif Jonsson, David Broman, Måns Magnusson, Kristian Sandahl, Mattias Villani, and Sigrid Eldh. Automatic localization of bugs to faulty components in large scale software systems using bayesian classification. In *Software Quality, Reliability and Security (QRS)*, 2016 IEEE International Conference on, pages 423–430. IEEE, 2016.
- Måns Magnusson, Jens Finnäs, and Leonard Wallentin. Finding the news lead in the data haystack: automated local data journalism using crime data. In *Computation+ Journalism Symposium*, *Palo Alto*, *CA*, 2016.
- Frida I Hansdotter, Måns Magnusson, Sharon Kühlmann-Berenzon, Anette Hulth, Kristian Sundström, Kjell-Olof Hedlund, and Yvonne Andersson. The incidence of acute gastrointestinal illness in Sweden. *Scandinavian Journal of Social Medicine*, 43(5):540–547, 2015.
- Jiaqi Huang, Måns Magnusson, Anna Törner, Weimin Ye, and Ann-Sofi Duberg. Risk of pancreatic cancer among individuals with hepatitis C or hepatitis B virus infection: a nationwide study in Sweden. *British journal of cancer*, 109(11):2917–2923, 2013.
- K Widgren, M Magnusson, P Hagstam, Micael Widerström, Åke Örtqvist, IM Einemo, P Follin, A Lindblom, S Mäkitalo, O Wik, et al. Prevailing effectiveness of the 2009 influenza A (H1N1) pdmo9 vaccine during the 2010/11 season in Sweden. *Euro Surveillance*, 18(15):20447, 2013.
- Johan Lindh, Måns Magnusson, Maria Grünewald, and Anette Hulth. Head lice surveillance on a deregulated OTC-sales market: A study using web query data. *PloS one*, 7(11):e48666, 2012.

## PhD Thesis

Måns Magnusson. Scalable and Efficient Probabilistic Topic Model Inference for Textual Data. PhD thesis, Linköping University, The Division of Statistics and Machine Learning, Faculty of Arts and Sciences, 2018.