Better predictions when models are wrong or underspecified
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Thijs van Ommen

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This dissertation is based on the following publications and manuscripts:

- Chapter 2 is based on

  T. van Ommen. Combining predictions from linear models when training and test inputs differ. In *Proceedings of the Thirtieth Conference on Uncertainty in Artificial Intelligence (UAI 2014)*, pages 653–662, 2014.

- Chapters 3, 4 and 5 are based on the technical report

  P. D. Grünwald and T. van Ommen. Inconsistency of Bayesian inference for misspecified linear models, and a proposal for repairing it. *arXiv preprint arXiv:1412.3730*, 2014.

- Chapters 6 and 7 are joint, as yet unpublished, work with T. Feenstra, P. D. Grünwald and W. M. Koolen. Chapter 6 is a significant extension of

  T. E. Feenstra. Conditional prediction without a coarsening at random condition. Master's thesis, Leiden University, 2012. Thesis adviser: P. D. Grünwald.

- Chapter 8 is based on work that is not currently available elsewhere.

Contents

List of Figures