

Foreword

As in previous years, the goal of the Bayesian Modelling Applications workshop is to provide a focused, informal forum for fruitful exchanges among theorists, practitioners and tool developers. Discussions may cover research questions and insights, methodologies, techniques, and experiences with applications of Bayesian models to any particular problem domain. This year we address the special theme

How biased are our numbers ?

We have composed an interesting program of selected contributions that focus on issues relating to (probability) biases in applications of Bayesian networks. For example, in constructing a Bayesian model, the probabilistic information required for establishing its numerical parameters can be obtained from data, human experts, a mix of these, or from yet other sources, all of which are known to be biased. How can the biases in the sources of probabilistic information be identified? How can the degree of bias, and its effect on the resulting model and its behaviour, be established? Is it possible to correct for these biases? Do the dedicated elicitation techniques that are being designed for the purpose of eliciting probabilities from human experts forestall, for example, biases and over-commitments of the resulting model? Are these techniques efficient, easy to use, and scale up to building large models? In verifying the probability assessments and behaviour of the model under construction, biases in the numbers and in the interpretation of these numbers can be expected. What type of bias can be expected, and how can it be identified? What kind of probabilistic information, possibly computed from the model under construction, do you feed back to, for example, a human expert? How do you communicate such information? Is it interpreted as intended?

This year, the workshop includes a session partially dedicated to an inference evaluation, held prior to the workshops/conferences. We are looking forward to yet another fruitful edition of the Applications workshop, hoping it will provide for identifying useful insights, techniques and future challenges for all research communities concerned with reasoning under uncertainty.

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Workshop committee:

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