

Preface

We were pleased to present this CEUR-WS volume, the Proceedings of the 8th Bayesian Modeling Applications Workshop (BMAW-11), held in Barcelona, Spain on July 14, 2011, as a workshop of the Twenty-seventh Conference on Uncertainty in Artificial Intelligence (UAI 2011).

Bayesian networks are now a powerful, well-established technology for reasoning under uncertainty, supported by a wide range of mature academic and commercial software tools. They are now being applied in many domains, including environmental and ecological modelling, bioinformatics, medical decision support, many types of engineering, robotics, military, financial and economic modelling, education, forensics, emergency response, surveillance, and so on. This workshop, the eight in the series of workshops focusing on real-world applications of Bayesian networks, provides a focused, informal forum for discussion and interchange between researchers, practitioners and tool developers.

This year we encouraged the submission of papers addressing our workshop theme

Knowledge Engineering

which we use as a general term that includes expert elicitation, learning from data, taking existing models from the literature, and any hybrids of these. Authors have been encouraged to describe the knowledge engineering process used to build their application, along with the pitfalls encountered and lessons learned.

Papers in the workshop also address the practical issues involved in developing such real-world applications, such as knowledge engineering methodologies, elicitation techniques, evaluation, and integration methods, with some describing software tools developed to support these activities. Some papers describe stand-alone Bayesian networks, while others describe applications where the Bayesian networks are embedded in a larger software system.

This year all submissions were full length papers peer-reviewed by at least two reviewers. We were very pleased with the quality and number of the 25 submissions received, with 16 papers accepted and appearing in these proceedings (12 accepted for oral presentation, 4 for poster presentation). Authors have been encouraged to present demonstrations during the poster and demo session. In addition, this year the workshop includes a panel session on the topic “The challenges for developing and deploying applications in the real-world”.

We are grateful to all the program committee members for their outstanding work in refereeing the papers within a very tight schedule, plus their assistance with organisational matters. We also appreciate the generous financial and organizational support of the main UAI conference. In particular, we thank the UAI 2011 conference general chair, Peter Grünwald, the program co-chairs Avi Pfeffer and Fabio Cozman, and the local arrangements chair Lluís Godó.

Ann Nicholson
Workshop Chair
July 2011