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Bayesian and grAphical Models for Biomedical Imaging

First International Workshop, BAMBI 2014
Cambridge, MA, USA, September 18, 2014
Revised Selected Papers



Springer

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Preface

BAMBI 2014 was the First International Workshop on Bayesian and graphical Models for Biomedical Imaging. It was held at the MIT/Harvard Medical School, Cambridge, MA, USA, on September 18, 2014. This goal of this event was to highlight the potential of using Bayesian or random field graphical models for advancing scientific research in biomedical image analysis.

The BAMBI 2014 proceedings published in the *Lecture Notes in Computer Science* series contain state-of-the-art original and highly methodological research selected through a rigorous peer-review process. Every full paper (10 to 12 pages long in the proceedings format) went through a double-blind review process by at least three members of the international Program Committee composed of 21 renowned scientists in the field of Bayesian image analysis. The result of this selection process was a set of 11 articles, nine of which were selected for oral presentation, and all of which were presented as posters, in a single-track single-day event.

The scientific program was augmented by our three invited speakers, Koen Van Leemput (Athinoula A. Martinos Center for Biomedical Imaging Massachusetts General Hospital, Harvard Medical School, USA and the Department of Applied Mathematics and Computer Science, Technical University of Denmark), Mike Miller (Center for Imaging Science, John Hopkins University, USA), and Ramin Zabih (Cornell University, USA). All three presented exciting advances during their keynote lectures, covering a large scope of methodologies and applications in Bayesian and graphical models.

We warmly thank the members of our Program Committee and all the participants of the event who made this workshop an exciting venue to share the latest methodological advances in this expanding research area.

September 2014

M. Jorge Cardoso
Ivor Simpson
Tal Arbel
Doina Precup
Annemie Ribbens

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