ECML-PKDD 2012

European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases

September 24th - 28th, 2012, Bristol, United Kingdom

Meta-Reviews For Paper

Track	1. Research track
Paper ID	500
Title	Log-Linear Inference Models for Bayes Nets Applied to Relational Data

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Masked Meta-Reviewer ID: Meta_Reviewer_1

Meta-Reviews:

Question	
Brief motivation of your recommendation to the PC chairs. Please refer to the 3 overriding criteria of acceptance from the CfP in particular (reproduced above). Papers that excel on one of these criteria should be given preference over papers that are average in all.	The paper proposes log-linear relational models derived from Bayesian networks, where the weights are log-conditional probabilities. The reviewers agree that the paper definitely has promise. The presentation is good and the approach presented is sound. However, the reviews and in particular the discussion also indentified some difficulties. While the idea of log-linear relational models derived from relational Bayesian networks is certainly interesting since it starts to explore the space between directed and undirected relational probabilistic models, this idea has been essentially

	already published , see e.g. [2,10,13] as also indicated by the authors (page 8, beginning of Section 5). So the main contribution left is the idea of using frequencies instead of counts. Here, however, there is no clear winner, see Tables 2&3. Only for the MovieLens dataset there seems to be a significant difference. Otherwise using counts or frequencies are essentially on par. Unfortunately, no significance test results are provided. To summarize: - low originality - for frequencies vs. counts, there is not clear winner