Label Ranking with Partial Abstention based on Thresholded Probabilistic Models
Supplementary Material

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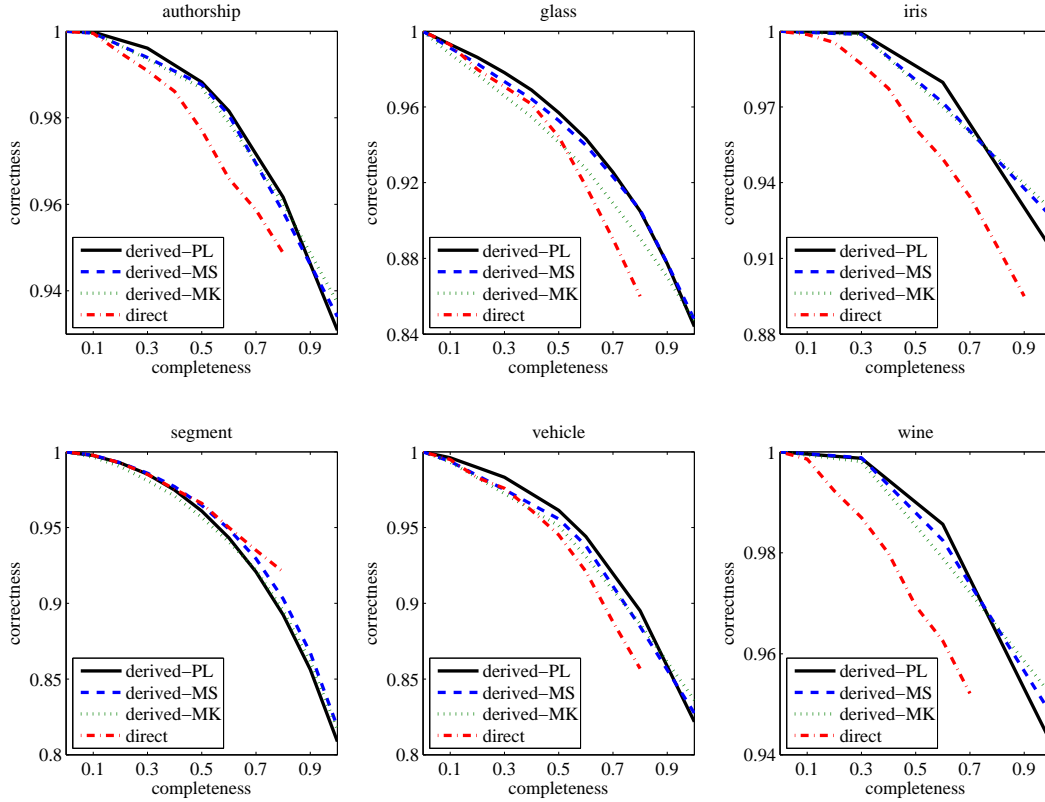welker@mathematik.uni-marburg.de

Figure 1: Tradeoff between completeness and correctness for label ranking benchmark data sets: Existing pairwise method (direct) versus the probabilistic approach based on the PL model and Mallows model with Spearman's rho (MS) and Kendall (MK) as distance function.

The test results on a number of other label ranking benchmark data sets[1] are summarized in Figure 1. These data sets are also used in other papers on label ranking; see [1, 2] for details. Compared to the SUSHI data, most of the corresponding completeness/correctness curves have a more concave shape, indicating that the problems are less difficult from a prediction point of view (indeed, the accuracy is on average higher than for SUSHI). Apart from that, however, the results are qualitatively quite similar and, with regard to the comparison between the methods, convey the same picture.

References

[1] W. Cheng, J. Hühn, and E. Hüllermeier. Decision tree and instance-based learning for label ranking. In *Proc. ICML–2009*, pages 161–168, Montreal, Canada, 2009. Omnipress.

[2] E. Hüllermeier, J. Fürnkranz, W. Cheng, and K. Brinker. Label ranking by learning pairwise preferences. *Artificial Intelligence*, 172:1897–1917, 2008.

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[1]Available online at `www.uni-marburg.de/fb12/kebi/research`