



## Recommending Given Names

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All over the world, future parents are facing the task of finding a suitable given name for their child. This choice is influenced by different factors, such as the social context, language, cultural background and especially personal taste. Although this task is omnipresent, little research has been conducted on the analysis and application of interrelations among given names from a data mining perspective.

The present work tackles the problem of recommending given names, by firstly mining for inter-name relatedness in data from the Social Web. Based on these results, the name search engine "Nameling" was built, which attracted more than 35,000 users within less than six months, underpinning the relevance of the underlying recommendation task. The accruing usage data is then used for evaluating different state-of-the-art recommendation systems, as well our new NameRank algorithm which we adopted from our previous work on folksonomies and which yields the best results, considering the trade-off between prediction accuracy and runtime performance as well as its ability to generate personalized recommendations. We also show, how the gathered inter-name relationships can be used for meaningful result diversification of PageRank-based recommendation systems.

As all of the considered usage data is made publicly available, the present work establishes baseline results, encouraging other researchers to implement advanced recommendation systems for given names.

Comments: Baseline results for the ECML PKDD Discovery Challenge 2013

Subjects: **Information Retrieval (cs.IR)**; Social and Information Networks (cs.SI); Physics and Society (physics.soc-ph)

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