Abstract

A trust-based matrix factorization method for recommendations merge several information sources into the recommendation model in order to diminish the data sparsity and cold start problems and their abasement of recommendation performance. An analysis of social trust data propose that not only the explicit trust influence the ratings but also the implicit influence should be taken into consideration in a recommendation model. The method therefore builds on top of the futuristic recommendation algorithm, SVD++ by further incorporating both the explicit and implicit influence of trusted and trusting users on the forecast of items for a current user. The proposed method extends SVD++ with social trust information.
A Trust-Based Matrix Factorization Method for Recommendations

References

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Index Terms

Computer Science
Algorithm

Keywords
Recommender Systems  Social Trust  Matrix Factorization  Implicit Trust
Collaborative Filtering