

An Analysis of the Bid Behavior of the 2005 JCDL Program Committee

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Categories and Subject Descriptors

H.3.7 [Digital Libraries]; K.4 [Computers and Society]

General Terms

Peer-Review Process

Keywords

Digital Libraries, Network Analysis

1. EXTENDED ABSTRACT

This poster will present an analysis of the bid behavior of the 2005 JCDL program committee [2]. For each paper, poster, and tutorial submitted for review to the 2005 JCDL, each program committee member was asked to state their expertise with regards to the subject domain of the submission. Therefore, for each submission, each referee selected one of the four categories:

1. expert in the domain of the submission and wants to review
2. expert in the domain of the submission
3. non-expert in the domain of the submission
4. conflict of interest between referee and the submission

When ignoring conflict of interest situations, the hypothesis of this study is that referee bidding is based solely on the subject domain of the submission and the area of expertise of the referee. In order to validate or falsify this hypothesis, submission similarity is determined according to a TFIDF [1] and cosine similarity calculation of the terms in their abstracts and then compared against the similarity of

submissions as determined by referee bidding. The correlation between these two calculations is positive, though not strong. Therefore, it is concluded that other aspects besides submission subject domain are influencing referee bidding. Next, if referees are bidding with respect to submission subject domain, then referees of similar domain expertise should be bidding in a similar manner. An analysis of the relative expertise of program committee members is computed using a relative-rank algorithm within a co-authorship network. The correlation between referee similarity as determined by their bidding behavior and referee similarity as determined by the relative-rank algorithm is positive, but not strong. Therefore, the hypothesis is again falsified because submission subject domain is not the only factor influencing referee bidding.

This poster will present the various statistical techniques used throughout this study with sufficient diagrams to ensure that the audience understands the methods and conclusions drawn from the study.

2. ACKNOWLEDGMENTS

The JCDL 2005 steering committee and program chairs provided this project the bid data from the 2005 JCDL.

3. REFERENCES

- [1] G. Salton. Term-weighting approaches in automatic text retrieval. *Information Processing and Management*, 24(5):513–523, 1998.
- [2] T. Sumner. Report on the fifth ACM/IEEE joint conference on digital libraries - cyberinfrastructure for research and education. *D-Lib Magazine*, 11(7/8), 2005.