Collaborative recommendation using feature biased random walk

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ABSTRACT

This paper present a novel methods to perform biased random walk on a graph using feature on node. This methods has been applied to collaborative recommendation of item where the distribution of item frequency follows a long tail curve. By tunning a parameters of the SOP, random walks will follows items in the graph that either favor or unfavor a feature. We compared this approach with state-of-the-art methods and show that recommendation remains competing while increasing the recall of unfrequent items.

Categories and Subject Descriptors

H.4 [**Information Systems Applications**]: Miscellaneous; D.2.8 [**Software Engineering**]: Metrics—*complexity measures, performance measures*

General Terms

Theory

Keywords

Collaborative recommendation, random walk