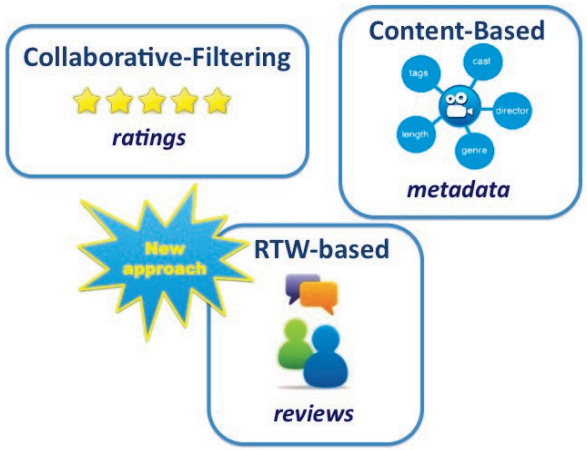
Product Recommender



The real-time web (RTW) is a web of opinions, comments, and personal viewpoints expressed in the form of micro-blogs providing abbreviated and highly personalized commentary in real-time. Today, Twitter is undoubtedly the king of the RTW. It boasts 190 million users and generates in the region of 65 million tweets per day.

This huge amount of data is very useful for recommender engines in recommending products that may appeal to users.

Our approach consists of a new way of recommendation knowledge based on the RTW. Using RTW data we can take advantage of user-generated content in the form of product reviews as a third source of recommendation complementing conventional approaches.

One of the advantages of using RTW is that it helps to mitigate the cold start problem which affects conventional recommenders where there is initially insufficient information about users or products/items.

Benefits

- Outperforms conventional techniques
- Taps into a new source of recommendation knowledge
- User/product data readily available
- Doesn't require metadata
- Mitigates the cold-start problem

Applications

- Any online recommendation movies/ apps/books/games/services
- Product recommendation based on Twitter data
- Better recommendation engine for existing commercial websites

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Potential applications

- Any online recommendation requirement e.g. movies/apps/ books/games/services …
- Recommending products based on Twitter data, especially due to the upcoming release of Twitter annotations, where tweets will explicitly contain information about products, reviews and offers.
- Could be integrated into existing commercial websites like Amazon or Last.fm to provide better recommendations

Benefits

Our Product Recommender uses the real-time web as a new source of recommendation knowledge which has advantages over traditional recommendation approaches.

Using the real-time web approach we can take advantage of micro-blogging services such as Twitter, which offers large volumes of publicly-available user comments.

This side-steps challenges with content -based approaches which require the generation of large amounts of metadata, and collaborative-filtering based approaches which need a large number of user ratings.

Initial results are very encouraging and the recommender engine has outperformed both collaborative-filtering and tag-based content-based approaches.

Technology status

- Lab prototype running
- Tested on recommending movies, books, apps, and games
- Very encouraging results

The research group is keen to engage with companies interested in further developing the technology

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