2nd International Workshop on News Recommendation and Analytics (NRA2014)

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Abstract. The 2nd International Workshop on News Recommendation and Analytics (NRA) brings together researchers on news analytics and stakeholders from the media industry. A particular focus is on news recommender systems, that tailor content from media houses and social sites to the preferences and context of individual readers. The workshop includes one invited speaker from the media industry and five academic papers addressing different aspects of news recommendation.

1 Preface

As the amount of data on the internet increases it is getting harder to find the information that people are looking for. Recommender systems are built to bring the most relevant information to users within the huge amount of data on the internet using the users' personal interests and preferences. Even though there is steady progress in recommender systems and also visible progress in news recommender systems, there are many challenges that need to be solved or improved for the systems to receive widespread acceptance. Compared to recommender systems in domains like music, movies and books, news recommender systems pose some particular challenges that call for new and deeper analyses of both users and content: The news domain is marked by (i) dynamic streams of news articles where different news sources on the internet publish hundreds of new articles every hour, (ii) willingness to read news articles that are independent from user interests like breaking news, (iii) unstable user interests that change much faster than in other domains (the taste of movies or food of a user takes years to change), (iv) recency issues that render old news stories less interesting than recent ones, and (v) unstructured subjective content that create content analysis problems and may turn recommendations unreliable. These issues also complicate the modelling and monitoring of user interests and preferences, since users are not giving explicit signals of their interests and information about

users need to be deduced from their observed attitude towards news. The news domains intrinsic complexities combined with the commercial interests of media companies is a good basis for innovative approaches to both news content analysis and news recommendation.

The news domain is characterized by a constant flow of unstructured, fragmentary, and unreliable news stories from numerous sources and different perspectives. Finding the right information, either in terms of individual news stories or aggregated knowledge from analyzing entire news streams, is a tremendous challenge that necessitates a wide range of technologies and a deep understanding of user preferences, news contents, and their relationships.

This workshop addresses primarily news recommender systems and news analytics, with a particular focus on user profiling and techniques for dealing with and extracting knowledge from large-scale news streams. The news streams may originate in large media companies, but may also come from social sites, where user models are needed to decide how user-generated content is to be taken into account. This workshop aims to create an interdisciplinary community that addresses design issues in news recommender systems and news analytics. It intends to bring together researchers, media companies, and practitioners around the topics of designing and evaluating novel news recommender systems and analytics in order to: (1) share research on news recommendation techniques and evaluation methodologies (2) explore key components in news analytics and solutions, and (3) identify emerging research topics in the news domain.

Topics of interests include but are not limited to:

- News semantics and ontologies
- News summarization, classification and sentiment analysis
- Recommender systems and news personalization
- Group recommendation for news
- User profiling and news context modeling
- News evolution and trends
- Large-scale news mining and analytics
- Evaluation methods
- News from social media
- Big Data technologies for news streams
- News recommendation and analytics on mobile platforms

2   Program Committee

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3 Accepted Papers

The workshop is composed of paper presentations and a key note speech on news analytics and recommendation in data driven journalism. It aims to create an interdisciplinary community that addresses design issues in news recommender systems and news analytics, and promote fruitful collaboration opportunities between researchers, media companies and practitioners.

- Keynote Speech - *Alexander Øhrn, Cxense*
- Data Sets and News Recommendation - *Özlem Özgöbek, Nafiseh Shabib and Jon Atle Gulla* [3]
- Using a Rich Context Model for a News Recommender System for Mobile Users - *Alisa Sotsenko, Marc Jansen and Marcelo Milrad* [1]
- Stories around You: Location-based Serendipitous Recommendation of News Articles - *Yonata Andrelo Asikin and Wolfgang Wörndl* [2]
- Method for Novelty Recommendation Using Topic Modelling - *Matúš Tomlein and Jozef Tvarožek*[4]
- Building Rich User Profiles for personalized news recommendations - *Youssef Meguebli, Mouna Kacimi, Bich-Lien Doan and Fabrice Popineau* [5]

4 Previous Workshops

The workshop on News Recommendation and Analytics is based on the previous International News Recommender Systems Workshop and Challenge [1] that was held in conjunction with the 7th ACM Recommender Systems Conference in 2013. With this workshop we have expanded the scope with news analytics, which is closely linked with news recommendation and should encourage more submissions.

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[1] http://recsys.acm.org/recsys13/nrs/

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