

4th International Workshop on News Recommendation and Analytics (INRA 2016)

<http://research.idi.ntnu.no/inra/2016>

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ABSTRACT

The 4th International Workshop on News Recommendation and Analytics (INRA 2016) is held in conjunction with UMAP 2016 Conference in Halifax, Canada. This workshop 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. The workshop includes a keynote speaker and an invited demo presentation in addition to 4 papers accepted in this workshop. This paper presents a brief summary of the INRA 2016.

Categories and Subject Descriptors

H.0 [Information Systems]: General

Keywords

Recommender systems; news recommendation; analytics

1. INTRODUCTION

The motivation for news recommender systems is the tremendous amount of news articles available online and the dynamic nature of news domain. For a user it is getting harder to reach the relevant news items according to her personal interests and preferences. News recommender systems aim to bring the most relevant news items to the users.

Each domain in recommender systems has different characteristics and requires different approaches to make successful recommendations. Compared to other recommender

system domains like books, music and movies, news recommender systems have particular challenges which requires a deeper analysis of both the user, content and their relationships. The news domain is characterized by a constant flow of unstructured, fragmentary, and unreliable news stories from numerous sources and different perspectives. Some important challenges of news domain are:

- Dynamic environment: Every hour hundreds of new articles is published by different sources,
- Faster changing user interests compared to other domains. User interests in movies, music or books change much slower than news,
- Willingness to read news articles that are independent from user interests like breaking news,
- Recency issues of news articles (people tend to read recent news, not the old ones),
- Unstructured subjective content that create content analysis problems and may turn recommendations unreliable.

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. As part of news recommendation and analytics, Big Data architectures and large-scale statistical and linguistic techniques are used to extract aggregated knowledge from large news streams and prepare for personalized access to news. Personalization and understanding the user behaviour/interests are also an important part of news recommendation. In order to be able to give better recommendations we also keep focus on constructing and maintaining the models of user preferences and interests within this workshop.

2. TOPICS OF INTEREST

Topics of interests for this workshop include but are not limited to:

- News semantics and ontologies,
- News summarization, classification and sentiment analysis,
- Recommender systems and news personalization,
- Real-time news recommendation,
- Robot journalism,
- 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 on mobile platforms.

3. WORKSHOP DETAILS

In INRA 2016 we have received 5 submissions, of which 4 were accepted for presentation. The submissions to our workshop includes good quality of works for user interface personalization, time issues in news recommender systems, user engagement and a signal based approach to news recommendation. This year we have the acceptance rate of 80%. In INRA 2016 we have a keynote speaker who has a quite relevant academic background to news recommender systems and analytics. Our workshop also includes a demo session with Sugestio¹ recommendation system which is developed in Ghent University. This system is a scalable and fault tolerant service to enrich content based websites with the power of personalization.

3.1 Keynote Speaker

Bei Yu is a Katchmar-Wilhelm Associate Professor of Information Studies at Syracuse University. Before joining SU she was a postdoctoral fellow at Kellogg School of Management, Northwestern University. She received her PhD in Library and Information Science in 2006 from the University of Illinois at Urbana-Champaign. She also holds Master's and Bachelor's degrees in Computer Science. Her research focuses on text mining, especially sentiment classification and opinion mining, for social science research and digital humanities. Bei Yu has given invited talks on the analysis of language, gender, and opinion differences in political speeches and documents. In 2009 she was the co-chair of the First International Workshop on Topic-Sentiment Analysis for Mass Opinion Measurement in Hong Kong, organized in conjunction with the 18th ACM Conference on Information and Knowledge Management.

¹<http://www.suggestio.com/>

3.2 Previous Workshops

4th International Workshop on News Recommendation and Analytics (INRA 2016) is based on the following previous workshops:

- International News Recommender Systems Workshop and Challenge (NRS)² held in conjunction with the 7th ACM Recommender Systems Conference in 2013. This workshop had a very limited scope, which restricted the number of submissions and led to an acceptance rate of 75%.
- International Workshop on News Recommendation and Analytics (NRA) 2014³ held in conjunction with 22nd Conference on User Modelling, Adaptation and Personalization (UMAP) in 2014. The workshop scope was extended with news analytics, which is closely lined with the field of news recommendation. The acceptance rate was 50%.
- 3rd International Workshop on News Recommendation and Analytics (INRA) 2015⁴ held in conjunction with ACM RecSys 2015 Conference in September 2015, Vienna, Austria. Acceptance rate was 66%.

4. ORGANIZERS

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²<http://recsys.acm.org/recsys13/nrs>

³<http://research.idi.ntnu.no/nra2014>

⁴<http://research.idi.ntnu.no/inra/2015>