

# 6th International Workshop on News Recommendation and Analytics (INRA 2018)

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## Abstract

Publishers inform citizens about important events. Digitalization overwhelms readers with information. Publishers employ recommender systems to tackle challenges related information access. This workshop series invites researchers, practitioners, and other stakeholders to exchange ideas about how to deal with news. INRA's sixth edition highlights aspects of news recommendation and analytics including innovative algorithms, trust, and misinformation, and privacy.

## 1 Scope and Goals

Media companies turn data into a valuable commodity. Further, industries, as well as political organizations, depend critically on high-quality information in order to operate effectively. Both groups of stakeholders must deal with the limited amount of time and effort that consumers are willing to devote to processing vast amounts of information. To connect consumers with content in the face of this challenge, automatic systems are used to filter information thus facilitating information access. In the case of news media, news recommender systems rely on sophisticated data analytics to capture reading interests. Modeling readers' changing concerns remains an area of active research.

The INRA workshop's sixth edition is co-located with International Conference on Information and Knowledge Management (CIKM) 2018. At this workshop, contributors and attendees focus on issues including news recommendation, news analytics, fake

news and disinformation, user experience, and evaluation. News recommendation attempts to identify the most relevant news articles for individual readers. Numerous directions promise advancement in the state of the art, including context-awareness, representing articles by word embeddings, or gamification to collect more data. Besides, news recommender systems ought to address scalability due to issues of big data, diversity, and mobility. News analytics concerns learning more about news reading behavior. For instance, researchers investigate social media usage or sentiment. Fake news and deliberate disinformation have emerged as significant issues. Currently, operators of media-related platform struggle to determine the trustworthiness of news. User experience affects the long-term success of publishers' services. Privacy and data authority have become central demands of customers. Researchers and businesses have yet to establish standardized evaluation protocols. Publicly available data sets and platforms seek to support the advancement of standardized evaluation, which will in turn advance trustworthy new recommendation technology.

INRA offers a venue for researchers, practitioners, and interested parties to come together. The primary objectives are support of the exchange of ideas and promotion of innovation. At the workshop, researchers have the opportunity to present findings and prototypes. Practitioners can share their everyday problems. Media critics can elaborate on societal effects and issues of news consumption. Additionally, invited experts present their insights on recent trends.

## 2 Workshop Details

The full-day workshop features seven paper presentations, three keynote speeches, and an interactive session for demonstrations and discussion.

## 2.1 Accepted Papers

INRA 2018 have received nine submissions. The following seven papers have been accepted:

**Yao & Hauptmann** News Recommendation and Filter Bubble.

**Chakraborty et al.** Predicting Tomorrow’s Headline using Today’s Twitter Deliberations.

**Maddalena, Ceolin & Mizzaro** Multidimensional News Quality: A Comparison of Crowd-sourcing and Nichesourcing.

**Lim, Jatowt & Yoshikawa** Understanding Characteristics of Biased Sentences in News Articles.

**Khattar et al.** RARE: A Recurrent Attentive Recommendation Engine for News Aggregators.

**Ollikainen** Clustering Enhancement for a Token-Based Recommender.

**Kille, Özgöbek & Lommatzsch** Defining Contextual Factors for News Consumption.

## 2.2 Keynote Speakers

The workshop has features three keynote speeches: **Frank Hopfgartner** (Information School of University of Sheffield, UK) News Retrieval and Recommendation Initiatives.

**Anja Benner-Tischler** (University of Kassel, Germany) EU Data Protection Law and its Influence on Webtracking—Everything new with the General Data Protection Regulation and the ePrivacy-Regulation?

**Leif Ramming** (plista GmbH, Germany) Generating Recommendations at Scale

## 2.3 Previous Workshops

**INRA’17** held in conjunction with IEEE/WIC/ACM International Conference on Web Intelligence (23 August, Leipzig, Germany)<sup>1</sup>

**INRA’16** held in conjunction with the 24th Conference on User Modeling, Adaptation and Personalization (16 July, Halifax, Canada)<sup>2</sup>

**INRA’15** held in conjunction with ACM RecSys (20 September, Vienna, Austria)<sup>3</sup>

**NRA’14** held in conjunction with the 22nd Conference on User Modeling, Adaptation and Personalization (11 July, Aalborg, Denmark)<sup>4</sup>

**NRS’13** held as International News Recommender Systems Workshop and Challenge (NRS) in conjunction with ACM RecSys (13 October, Hong-Kong)<sup>5</sup>

<sup>1</sup><http://research.idi.ntnu.no/inra/2017/>

<sup>2</sup><http://research.idi.ntnu.no/inra/2016/>

<sup>3</sup><http://research.idi.ntnu.no/inra/2015/>

<sup>4</sup><http://research.idi.ntnu.no/nra2014>

<sup>5</sup><http://recsys.acm.org/recsys13/nrs>

## 3 Workshop Organizers

**Özlem Özgöbek** (NTNU, Trondheim, Norway)

Özlem works as a postdoctoral researcher at the Department of Computer Science at NTNU. Her research focuses on recommender systems, privacy issues in recommender systems and disinformation detection for online news. She is a co-founder of the Norwegian Big Data Symposium and actively involved in organizing INRA workshop series since 2014.

**Benjamin Kille** (TU Berlin, Germany)

Benjamin works as a researcher at TU Berlin. He organized multiple data-driven competitions including NewsREEL. His PhD thesis focuses on context-aware news recommender systems.

**Jon Atle Gulla** (NTNU, Trondheim, Norway)

Jon Atle is a professor of Information Systems at the Department of Computer Science in Trondheim. His research centers on the semantic web, information retrieval, recommender systems, text analytics, and big data. He is the co-founder of Norwegian Big Data Symposium and INRA Workshop series.

**Martha Larson** (Radboud University, Nijmegen)

Martha holds professorships at Radboud University and TU Delft. Her research focuses on multimedia computing, language technology, information retrieval, and recommender systems. Martha has contributed to the organization of a variety of workshops and benchmarks including MediaEval and NewsREEL.

**Andreas Lommatzsch** (TU Berlin, Germany)

Andreas Lommatzsch works as a senior researcher and director of the Application Center “Data Analytics” at the DAI-Lab at the TU Berlin. He conducts research in the domains of distributed knowledge management and machine learning. He co-organizes the NewsREEL challenge focusing on recommender algorithms for online news portals.

## 4 Program Committee Members

Andreas Lommatzsch, Berlin Institute of Technology

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