

Preface to the 1st Workshop on the Impact of Recommender Systems at ACM RecSys 2019

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1 Background

Research in the area of recommender systems is largely focused on helping individual users finding items they are interested in. This is usually done by learning to rank the recommendable items based on their assumed relevance for each user. The implicit underlying goal of a such system is to affect users in different positive ways, e.g., by making their search and decision processes easier or by helping them discover new things.

Recommender systems can, however, also have other more directly-measurable impacts, e.g., such that go beyond the individual user or the short term influence. A recommender system on a news platform, for example, can lead to a shift in the reading patterns of the entire user base. Similarly, on e-commerce platforms, it has been shown that a recommender can induce significant changes in the purchase behavior of consumers, leading, for example, to generally higher sales diversity across the site. On the other hand, recommender systems usually serve certain business goals and can have an impact not only on the customers, e.g., by stimulating higher engagement on a media streaming platform or a social network, but also direct and indirect affect sales, revenue or conversion and churn rates.

2 Goals of the Workshop

The research literature that considers such more direct measurements of impact of recommender systems on the various stakeholders is comparably scarce and scattered. With the proposed workshop, we pursue different goals.

- First, the workshop will serve as a platform where researchers can present their latest works in which they analyzed different forms of impact of recommenders. We consider both papers where impact on individual users was measured (e.g., more healthy eating habits that were stimulated by a food recommender or a more efficient choice process), papers that highlight effects on a community or a society as a whole, and papers that demonstrate effects in terms of business value.
- Second, the goal of the interactive session is to explore new ways how the impact of recommender systems can be measured within academic settings, i.e., where some impacts can only be analyzed based on simulations or alternative computational measures.
- Third, the workshop shall serve as an instrument to raise awareness in the community regarding the importance of impact-oriented research. This aspect in our view is particularly important as more and more research works indicate that optimizing for the most accurate prediction not necessarily leads to the best recommendations in terms of the users' quality perception or the desired effects of a recommender.

3 Paper Selection

We received 21 submissions to the workshop (16 research papers and 5 position papers). Each research paper was reviewed by three members of the program committee (PC) and each position paper was reviewed by two PC members. After the reviewing process, we accepted six of the research papers. All position papers were considered relevant for the workshop.

4 Program

The program of the half-day workshop consists of:

- an invited keynote by Professor Joe Konstan from the University of Minnesota,
- the presentation of the selected research papers,
- poster presentations of the position papers,
- an open interactive session.

5 Program Committee

We thank the members of the Programme Committee for their thorough reviews and their detailed feedback they gave to the authors. The PC consisted of the following set of international experts.

- Gediminas Adomavicius, University of Minnesota
- Christine Bauer, Johannes Kepler University Linz
- Joeran Beel, Trinity College Dublin
- Pablo Castells, Universidad Autónoma de Madrid
- Paolo Cremonesi, Politecnico di Milano
- Michael Ekstrand, Boise State University
- Alexander Felfernig, Graz University of Technology
- Maurizio Ferrari Dacrema, Politecnico di Milano
- Werner Geyer, IBM T.J. Watson Research
- Michael, Jugovac TU Dortmund
- Surya Kallumadi, The Home Depot
- Iman Kamehkhosh, TU Dortmund
- Gal Lavee, Microsoft
- Slava Novgorodov, eBay Research
- Massimo Quadrona, Pandora
- Filip Radlinski, Google
- Adi Shalev, Intuit
- Harald Steck, Netflix
- Markus Zanker, Free University of Bozen-Bolzano
- Yong Zheng, Illinois Institute of Technology
- Alex Zhicharevich, Tel Aviv University