6th Joint Workshop on Interfaces and Human Decision Making for Recommender Systems (IntRS) 2019

Copenhagen, Denmark, September 19th, 2019

Proceedings

edited by Peter Brusilovsky

Marco de Gemmis

Alexander Felfernig

Pasquale Lops

John O'Donovan

Giovanni Semeraro

Martijn C. Willemsen

in conjunction with

13th ACM Conference on Recommender Systems (RecSys 2019)



Preface

This volume contains the papers presented at the 6th Joint Workshop on Interfaces and Human Decision Making for Recommender Systems (IntRS), held as part of the 13th ACM Conference on Recommender System (RecSys), in Copenhagen, Denmark.

RecSys is the premier international forum for the presentation of new research results, systems and techniques in the broad field of recommender systems. Recommendation is a particular form of information filtering, that exploits past behaviors and user similarities to generate a list of information items that is personally tailored to an end-user's preferences. Since the emergence of recommender systems, a large majority of research focuses on objective accuracy criteria and less attention has been paid to how users interact with the system and the efficacy of interface designs from users' perspectives. The field has reached a point where it is ready to look beyond algorithms, into users' interactions, decision making processes, and overall experience.

The IntRS workshop focuses on human-centered recommender system design and application. The workshop goal is to improve users' overall experience with recommender systems by integrating different theories of human decision making into the construction of recommender systems and exploring better interfaces for recommender systems.

The workshop follows successful workshops on the same topic organized at RecSys conferences in 2014 – 2018. The continuous aim of the workshop is to bring together researchers and practitioners around the topics of designing and evaluating novel intelligent interfaces for recommender systems in order to: (1) share research and techniques, including new design technologies and evaluation methodologies, (2) identify next key challenges in the area, and (3) identify emerging topics.

The 11 technical papers included in the proceedings were selected through a rigorous reviewing process, where each paper was reviewed by three PC members.

The IntRS chairs would like to thank the RecSys workshop chairs, Sandra Garcia and Christoph Trattner, for their guidance during the workshop organization. We also wish to thank all authors and all presenters, and the members of the program committee. All of them secured the workshop's high quality standards.

September 2019

Peter Brusilovsky Marco de Gemmis Alexander Felfernig Pasquale Lops John O'Donovan Giovanni Semeraro Martijn C. Willemsen



IntRS 2019 Workshop Organization

Chairs: Peter Brusilovsky, School of Information Sciences, University of Pittsburgh, USA

Marco de Gemmis, Dept. of Computer Science, University of Bari Aldo Moro, Italy

Alexander Felfernig, Institute for Software Technology, Graz University of

Technology, Austria

Pasquale Lops, Dept. of Computer Science, University of Bari Aldo Moro, Italy

John O'Donovan, Dept. of Computer Science, Univ. of California, Santa Barbara, USA Giovanni Semeraro, Dept. of Computer Science, University of Bari Aldo Moro, Italy

Martijn C. Willemsen, Eindhoven University of Technology, The Netherlands

Proceedings Chairs: Marco de Gemmis, Dept. of Computer Science, University of Bari Aldo Moro, Italy

Pasquale Lops, Dept. of Computer Science, University of Bari Aldo Moro, Italy

Web Chair: Pasquale Lops, Dept. of Computer Science, University of Bari Aldo Moro, Italy

Program Committee: Muesluem Atas, *Graz University*

Christine Bauer, Johannes Kepler University Linz

Ludovico Boratto, *Eurecat* Amra Delić, *TU Wien*

Michael Ekstrand, Boise State University

Gerhard Friedrich, Alpen-Adria-Universitaet Klagenfurt

Sergiu Gordea, Austrian Institute of Technology

Denis Helic, KTI, TU Graz

Dietmar Jannach, University of Klagenfurt

Gerhard Leitner, University of Klagenfurt

Elisabeth Lex, Graz University of Technology

Bamshad Mobasher, DePaul University

Cataldo Musto, University of Bari Aldo Moro

Fedelucio Narducci, University of Bari Aldo Moro

Julia Neidhardt, Vienna University of Technology

Francesco Ricci, Free University of Bozen-Bolzano

Olga C. Santos, aDeNu Research Group (UNED)

Christin Seifert, University of Twente

Luis Terán, University of Fribourg

Marko Tkalčič, Free University of Bozen-Bolzano

Katrien Verbert, Katholieke Universiteit Leuven

Wolfgang Wörndl, Technical University of Munich

Markus Zanker, Free University of Bozen-Bolzano

Table of Contents

Long Papers	
How Playlist Evaluation Compares to Track Evaluations in Music Recommender Systems	1
Sophia Hadash, Yu Liang and Martijn Willemsen	
To Explain or not to Explain: the Effects of Personal Characteristics when Explaining Feature-based Recommendations in Different Domains Martijn Millecamp, Sidra Naveed, Katrien Verbert and Jürgen Ziegler	10
Designing for Serendipity in a University Course Recommendation System Zach Pardos and Weijie Jiang	19
Using Facial Recognition Services as Implicit Feedback for Recommenders Toon De Pessemier, Ine Coppens and Luc Martens	28
Generation of Hints to Overcome Difficulty in Operating Interactive Recommender Systems	36
Yuri Nakao, Takuya Ohwa and Kotaro Ohori	
Investigating Mechanisms for User Integration in the Activity Goal Recommendation Process by Interface Design	46
Katja Herrmanny, Simone Löppenberg and Michael Schwarz	
Short Papers	
Spotivibes: Tagging Playlist Vibes With Colors Hiba Abderrazik, Giovan Angela, Hans Brouwer, Henky Janse, Sterre Lutz, Gwennan Smitskamp, Sandy Manolios and Cynthia Liem	55
Visualizing Ratings in Recommender System Datasets Diego Monti, Giuseppe Rizzo and Maurizio Morisio	60
The Effectiveness of Advice Solicitation and Social Peers in an Energy Recommender System Alain Starke	65
Towards Evaluating User Profiling Methods Based on Explicit Ratings on Item Features Luca Luciano Costanzo, Yashar Deldjoo, Maurizio Ferrari Dacrema, Markus Schedl and Paolo Cremonesi	72
Does the User Have A Theory of the Recommender? A Pilot Study Muheeb Faizan Ghori, Arman Dehpanah, Jonathan Gemmell, Hamed Qahri-Saremi and Bamshad Mobasher	77

