# 8<sup>th</sup> Joint Workshop on Interfaces and Human Decision Making for Recommender Systems (IntRS) 2021

Online Event, September 25<sup>th</sup> and September 29<sup>th</sup>, 2021

# Proceedings

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#### Preface

This volume contains the papers presented at the 8<sup>th</sup> Joint Workshop on Interfaces and Human Decision Making for Recommender Systems (IntRS), held as part of the 15<sup>th</sup> ACM Conference on Recommender Systems (RecSys), the premier international forum for the presentation of new research results, systems and techniques in the broad field of recommender systems. The workshop was organized as a virtual event with the possibility to arrange physical sessions at the venue of the main conference, Amsterdam. The workshop had a physical session on September 29.

Recommender systems were originally developed as interactive intelligent systems that can proactively guide users to items that match their preferences. Despite its origin on the crossroads of HCI and AI, the majority of research on recommender systems gradually focused on objective accuracy criteria paying less and less attention to how users interact with the system as well as the efficacy of interface designs from users' perspectives. This trend is reversing with the increased volume of research that looks beyond algorithms, into users' interactions, decision making processes, and overall experience.

The series of workshops on Interfaces and Human Decision Making for Recommender Systems focuses on the "human side" of recommender systems. The goal of the research stream featured at the workshop 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 8<sup>th</sup> Joint Workshop on Interfaces and Human Decision Making for Recommender Systems (IntRS'21) takes a *user-centric perspective* on recommender systems research. The workshop highlights research incorporating psychological theories and models and findings from HCI into the recommendation process.

It also studies interface-related aspects of recommender systems, i.e., how recommendations are presented to the user and what kind of interactions are crucial to user satisfaction with the system as a whole. The IntRS'21 workshop brings together an interdisciplinary community of researchers and practitioners who share research on novel (psychology-informed) recommender systems, including new design technologies and evaluation methodologies, and who aim to identify critical challenges and emerging topics in the field.

The workshop covers three main research strands:

- User modeling and human decision making (e.g., cognitive, affective, and personality-based user models for recommender systems, human-recommender interaction, decision biases, cognitive biases, decision theory, preference construction, human memory theory, persuasive recommendation and argumentation, cultural differences);
- User interfaces (e.g., visual interfaces, explanation interfaces, collaborative multi-user interfaces, spoken and natural language interfaces, trust-aware and social interfaces, context-aware interfaces, ubiquitous and mobile interfaces, example and demonstration-based interfaces, and decision making);
- Evaluation (e.g., user-centric evaluation, novel evaluation metrics, case studies, benchmarking platforms, empirical studies of new interfaces and interaction designs).

IntRS'21 follows successful workshops on the same topic organized at RecSys conferences in 2014 - 2020.

The workshop series was created by merging two original RecSys workshops series: Human Decision Making and Recommender Systems (Decisions@RecSys – 2010–2013) and Interfaces for Recommender Systems (InterfaceRS'12). The idea of merging the two workshops was motivated by the strong inter-relationship between the user interface and human decision making topics. The combination of these two aspects seems to be highly attractive. Earlier workshops, such as the IntRS'15 workshop in Vienna, the IntRS'16 in Boston, the IntRS'17 in Como, the IntRS'18 in Vancouver, the IntRS'19 in Copenhagen and the IntRS'20 (virtual conference) had attendance rates of over 50 participants.

The program includes an invited talk by Antony Jameson, Chusable AG, on Group Decision Making and Group Recommender Systems, and 8 technical papers, that were selected among 10 submissions, through a rigorous reviewing process, where each paper was reviewed by three PC members.

The IntRS chairs would like to thank the RecSys 2021 workshop chairs, Jennifer Golbeck, Marijn Koolen, and Denis Parra, 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 2021

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