# RecSys'15 Joint Workshop on Interfaces and Human Decision Making for Recommender Systems

**John O'Donovan**
Dept. of Computer Science,
University of California,
Santa Barbara, USA
jod@cs.ucsb.edu

**Nava Tintarev**
Dept. of Computer Science,
University of Aberdeen, UK
n.tintarev@abdn.ac.uk

**Alexander Felfernig**
Institute for Software Technology,
Graz University of Technology, Austria
alexander.felfernig@ist.tugraz.at

**Peter Brusilovsky**
School of Information Sciences,
University of Pittsburgh, USA
peterb@pitt.edu

**Giovanni Semeraro**
Dept. of Computer Science,
University of Bari "Aldo Moro", Italy
giovanni.semeraro@uniba.it

**Pasquale Lops**
Dept. of Computer Science, University
of Bari "Aldo Moro", Italy
pasquale.lops@uniba.it

## ABSTRACT

As an interactive intelligent system, recommender systems are developed to give recommendations that match users' 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. Following from the success of the joint IntRS 2014 workshop and previous workshops on Interfaces and Decisions in Recommender Systems, this workshop will focus on the aspect of integrating different theories of human decision making into the construction of recommender systems. It will focus particularly on the impact of interfaces on decision support and overall satisfaction, and on ways to compare and evaluate novel techniques and applications in this area.

## Categories and Subject Descriptors

H3.3 **[Information Search and Retrieval]**; H.4.2 **[Decision Support Systems]** H5.2 **[Information Interfaces and Presentation]**

## General Terms

Algorithms, Experimentation, Human Factors, Human-Computer Interaction

## Keywords

Recommender Systems, Decision Making, User Interfaces, Interaction, Decision Psychology, Recommender Algorithms, Decision Biases
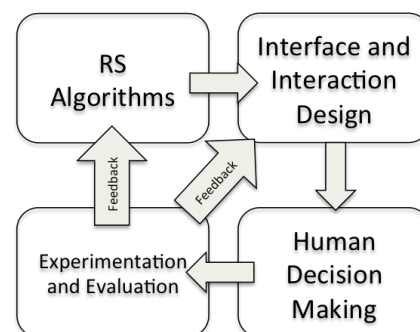
Fig 1: Overview of interactions between key workshop themes.

## 1. OVERVIEW AND MOTIVATION

The 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. This workshop aims at establishing an interdisciplinary community with a focus on the interface design issues for recommender systems and promoting the collaboration opportunities between researchers and practitioners. We particularly encourage demos and mock-ups of systems to be used as a basis of a lively and interactive discussion in the workshop

This workshop is a followup on five previous successful workshops at RecSys:

- Joint Workshop on Interfaces and Decision Making in Recommender Systems (IntRS)
2014: http://recex.ist.tugraz.at/intrs2014/

- Workshop on Human Decision Making in Recommender Systems (Decisions)
  2013: http://recex.ist.tugraz.at/RecSysWorkshop/
  2012: http://recex.ist.tugraz.at/RecSysWorkshop2012
  2011:
http://recex.ist.tugraz.at:8080/RecSysWorkshop2011
- Workshop on Interfaces for Recommender Systems (InterfaceRS)
  2012:
https://homepages.abdn.ac.uk/n.tintarev/pages/InterfaceRS/

## 2. TOPICS OF INTEREST

The following list outlines core topics of interest.

**User Interfaces**
- Visual interfaces for recommender systems
- Explanation interfaces for recommender systems
- Collaborative multi-user interfaces (e.g., group decision making in e-tourism)
- Spoken and natural language interfaces
- Trust-aware interfaces
- Social interfaces
- Context-aware interfaces
- Ubiquitous and mobile interfaces
- Conversational interfaces
- Example- and demonstration-based interfaces
- New approaches to designing interfaces for recommender systems
- User interfaces for decision making (e.g., decision strategies and user ratings)

**Interaction, user modeling and decision-making**
- Cognitive Modeling for recommender systems
- Human-recommender interaction
- Controllability, transparency and scrutability
- Decision theories in recommender systems (e.g., priming, framing, and decoy effects)
- Preference detection (e.g., eye tracking for automated preference detection)
- The role of emotions in recommender systems (e.g., emotion-aware recommendation)

- Trust inspiring recommendation (e.g., explanation-aware recommendation
- Argumentation and Persuasive recommendation (e.g., argumentation-aware recommendation)
- Cultural differences (e.g., culture-aware recommendation)
- Mechanisms for effective group decision making (e.g., group recommendation heuristics)
- Decision theories for effective group decision making (e.g., hidden profile management)
- Detection and avoidance of decision biases (e.g., in item presentations)

**Evaluation**
- Case studies
- Empirical studies and evaluations of new interfaces
- Empirical studies and evaluations of new interaction designs
- Evaluation methods and metrics (e.g., evaluation questionnaire design)
- Benchmarking for Interactive Recommender Systems
- Challenge Competitions

## 3. WORKSHOP FORMAT

The workshop format consists of a short general introduction to the workshop themes by the organizers. This is to be followed by oral presentation of accepted papers listed at the link below. Presentations will be grouped into sessions based on the subthemes of the workshop. One keynote presentation will be given. After each presentation and session, time will be allocated for general discussion and feedback.

## 4. FURTHER INFORMATION

The workshop material including list of accepted papers, invited talk and workshop schedule are available at the IntRS@RecSys 2015 webpage: http://intrs.ist.tugraz.at/intrs/ and via the workshops section on the main conference website: http://recsys.acm.org/recsys15/intrs/