

## Editorial

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# Introduction to Special Issue on User-Centred Recommender Systems

DOI 10.1515/icom-2015-0020

Most everyone who uses the Web for searching information or purchasing products has come across recommendations provided by Web shops and other applications. Over the past years, recommender systems have become important tools that can help users choose from a potentially huge set of items by identifying users' preferences and providing a selection of items that match the users' goals or liking. Since the early seminal contributions on recommender techniques some 20 years ago, a considerable amount of research has taken place both in academia and industry. All recommender systems in one way or another are based on algorithmic techniques for calculating user or item characteristics, for instance based on user ratings, and for predicting the relevance of an item for the individual user or a group. While research has produced powerful algorithms for generating predictions that match the user model with a high level of accuracy, users are nevertheless often not satisfied with the recommendations obtained. Reasons for this may lie in the large variability of users' situational needs, ineffective item presentations, or a lack of transparency with respect to how recommendations are produced. These limitations call for a more user-centred perspective, focussing on the user's goals and perceptions as well as their interaction with a recommender system.

This special issue specifically called for innovative research with respect to user-centred recommender systems—that is, contributions that deal with eliciting preferences from users, presenting recommendations, and allowing single-users or groups of users to interact with the recommended items in order to identify the item they finally want to choose. The special issue presents a set of papers that cover these issues from several perspectives.

The article by Benedikt Loepp et al. entitled “Merging Interactive Information Filtering and Recommender Algorithms – Model and Concept Demonstrator” proposes a model of blended recommending which allows users to explore recommended items and interactively influence the set of recommended items. The presented MyMovie-Mixer system allows users to manipulate various movie parameters and immediately get an updated set of movies to choose from. Providing recommendations in mobile scenarios is addressed by Wolfgang Wörndl and Béatrice Lamche. Their article “User Interaction with Context-aware Recommender Systems on Smartphones” provides a three-fold contribution: firstly, in the context of preference elicitation it presents a method for entering ratings on mobile phones, secondly with respect to the presentation of recommendations it suggests how to adapt the results to the users' context, and thirdly as far as feedback, critiquing, and refinement is concerned it provides an approach for interactive explanations of the recommendations.

The problem of evaluating the effectiveness of recommender systems it addressed in the article by Dietmar Jannach, Lukas Lerche, and Michael Jugovac. Specifically, they investigate the influence of the user's familiarity with recommended items on their stated satisfaction in empirical user studies. The paper provides a thorough discussion of the role and influence of item familiarity and presents the results of a user study examining this issue, providing first evidence that in fact familiarity plays an important role. The article by Peter Gräsch and Alexander Felfernig entitled “Spencer: On the Importance of Subtext in Recommender Systems” presents the speech-enabled, knowledge-based recommender system Spencer that aims at helping users with expressing their preferences. In particular, it offers a natural-language dialogue that combines factual constraints with nuanced lexical qualifiers and paralinguistic information and applies all this information in the recommender strategy.

Finally, the paper “Supporting Informed Negotiation Processes in Group Recommender Systems” by Tom Gross presents an approach to producing recommendations for groups of users. It first introduces the GroupRecoPF

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platform for the development of usable group recommendersystems with a special focus on the easy exploration of alternative methods for generating recommendations and calculating predictions based on various aggregation strategies. Secondly, it presents the AGRemo generic process model for group recommendations in the movie

domain. It also reports on a user study showing the practicability of the platform and the process model.

We, the coordinators of this special issue, would like to thank the authors contributing to the special issue as well as the paper reviewers, and wish all readers an inspiring and pleasant reading.