

# UCERSTI::2

>> User-Centered Evaluation of Recommender Systems and Their Interfaces 2

## Important Dates :

- \* Jul 25 :: Short and long abstract due
- \* Jul 27 :: Short and long papers due
- \* Aug 19 :: Author notification
- \* Sept 12 :: Camera-ready papers due

## Workshop organizers :

- \* Martijn C. Willemsen  
Human-Technology  
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- \* Dirk G. F. M. Bollen  
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- \* Michael Ekstrand  
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USA

## Call for papers :

### Description :

Research on "Human-Recommender Interaction" is scarce. Algorithm optimization and off-line testing using measures like RMSE are dominant topics in the RecSys community, but theorizing about consumer decision processes and measuring user satisfaction in online tests is less common. Researchers in Marketing and Decision-Making have been investigating consumer choice processes in great detail, but only sparingly put this knowledge to use in technological applications. Human-Computer Interaction has been focusing on the usability of interfaces for ages, but does not seem to link research on consumer choice and recommender system interfaces.

During RecSys 2010, we organized the first UCERSTI workshop to bridge these gaps. Two keynote speeches, 7 accepted papers and a lively panel discussion introduced the visitors of RecSys 2010 to the field of Human-Recommender Interaction. By means of UCERSTI 2 we hope to further strengthen the bonds between these researchers, to exchange new experiences, and meet other new researchers working on user-centric research in Recommender Systems.

The proposed format will be a half-day workshop with paper and poster presentations, and will be concluded by a panel discussion on "Recommender system evaluation : creating a unified, cumulative science". This panel discussion will be introduced by Jo Konstan and Bart Knijnenburg.

### Topics :

- \* Design and evaluation of recommender system user interfaces
- \* Preference elicitation methods and Decision Making research
- \* Applications of psychological theory and models in Recommender systems
- \* User-adaptive recommender interfaces
- \* Qualitative evaluation of recommender systems such as case studies and think-aloud evaluations
- \* Quantitative evaluation of recommender systems such as controlled experiments and field trials
- \* User-recommender interaction measurement techniques such as questionnaires and process data analysis
- \* Design guidelines for recommender systems
- \* user acceptance of recommender systems
- \* user-privacy issues of recommender systems

## Panel discussion :

The evaluation of recommender systems is typified by a proliferation of claims, metrics and procedures. A review of research papers in Recommender Systems shows a number of typical claims:

- This is an innovative way of recommending
- This algorithm is more accurate than others
- This algorithm is faster for large data sets than others
- This algorithm is better than others along a particular dimension (e.g., diversity, novelty)
- This way of eliciting ratings leads to greater accuracy of recommendations
- This recommender system (algorithm, interface, etc.) is preferred by users
- This recommender system (algorithm, interface, etc.) leads to greater long-term user retention than other systems

For each of these claims we have developed several distinct metrics to evaluate them, as well as a diverse set of procedures to conduct the evaluation.

This apparent heterogeneity stands in the way of scientific progress. Researchers face the impossible challenge of selecting a subset of claims/metrics/procedures that allows for comparability of their work with previous studies. To create a rigorous, cumulative science of recommender systems, we need to take a step back and reflect on our current practices.

This reflection is partly philosophical: Which of the possible investigative claims are worthy of our consideration? The answer to this question depends on the purpose or goal we ascribe to a recommender system, whom we feel should benefit from it, and where we believe the field of recommender systems blends into other fields. In other words, we need to decide on what a "good recommender system" really is.

It is also partly practical: As scientists, we need to understand best practices for providing the evidence to back up these claims, and for providing such evidence in a way that allows our field to move forward. Some claims (e.g., novelty) can simply be supported by a review of related work. Others (e.g., user satisfaction) require careful experimental designs that isolate and make salient as much as possible the factor being studied so that differences in results can be attributed to that factor. Still others (e.g., algorithmic performance) require standardization of metrics and evaluation procedures to ensure apples-to-apples comparisons against the best prior work.

This panel will address the general challenge of building a rigorous, cumulative science out of recommender systems with a specific focus on experiment design and standardization in support of better user-centered evaluation.

Submission	Long papers	Short papers
<b>Format :</b>	Should report original research	Should report on interesting work in progress
Send your submissions to <a href="mailto:ucersti@tue.nl">ucersti@tue.nl</a>	Maximum length: 8 pages (standard ACM SIG proceedings format)	Maximum length: 4 pages (standard ACM SIG proceedings format)
	Accepted papers are presented in a 15-20 minute presentation	Accepted short papers are presented as a poster

### Workshop Program Committee :

- **Benedict G. C. Dellaert**, Department of Business Economics, Erasmus University Rotterdam, The Netherlands
- **Maciej Dabrowski**, Digital Enterprise Research Institute, National University of Ireland, Galway, Ireland
- **Alexander Felfernig**, Software Technology Institute, Graz University of Technology, Germany
- **David Geerts**, Centre for User Experience Research, University of Leuven, Belgium
- **Kristiina Karvonen**, Helsinki Institute for Information Technology HIIT, Aalto, Finland
- **Bart Knijnenburg**, Donald Bren School of Information and Computer Sciences, University of California, Irvine, USA
- **Alfred Kobsa**, Donald Bren School of Information and Computer Sciences, University of California, Irvine, USA
- **Artus Krohn-Grimberghe**, Information Systems and Machine Learning Lab, University of Hildesheim, Germany
- **Sean M. McNee**, FTI Technology, USA
- **Steffen Rendle**, Information Systems and Machine Learning Lab, University of Hildesheim, Germany

### For more information :

check out the UCERSTI website at <http://ucersti.ieis.tue.nl>, or email us at [ucersti@tue.nl](mailto:ucersti@tue.nl)