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User Modeling, Adaptation, and Personalization

20th International Conference, UMAP 2012
Montreal, Canada, July 16-20, 2012
Proceedings

Volume Editors

Judith Masthoff
University of Aberdeen
Dept. of Computing Science
Meston Building, King's College, Aberdeen AB24 3UE, UK
E-mail: j.masthoff@abdn.ac.uk

Bamshad Mobasher
DePaul University
School of Computing, College of Computing and Digital Media
243 South Wabash Avenue, Chicago, IL 60604, USA
E-mail: mobasher@cs.depaul.edu

Michel C. Desmarais
Polytechnique Montreal
Génie informatique et génie logiciel
C.P. 6079, succ. Centre-Ville, Montreal, QC, Canada, H3C 3A7
E-mail: michel.desmarais@polymtl.ca

Roger Nkambou
UQÀM
Dépt. d'informatique
201, av. Président-Kennedy, local PK-4150 Montreal, QC, Canada
E-mail: nkambou.roger@uqam.ca

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Preface

The 20th International Conference on User Modeling, Adaptation and Personalization (UMAP 2012), chaired by Michel Desmarais and Roger Nkambou, took place in Montreal, Canada, during July 16–20, 2012. It was the fourth annual conference under the UMAP title, which resulted from the merger in 2009 of the successful biannual User Modeling (UM) and Adaptive Hypermedia (AH) conference series. Approximately 500 researchers from 38 countries were involved in creating the technical program, either as authors or as reviewers.

The Research Paper Track of the conference was chaired by Judith Masthoff from the University of Aberdeen, UK, and Bamshad Mobasher from DePaul University, USA. They were assisted by an international Program Committee of 95 leading figures in the AH and UM communities as well as highly promising younger researchers. Papers in the Research and Industry Paper Tracks were reviewed by three or more reviewers. The conference solicited Long Research Papers of up to 12 pages in length, which represent original reports of substantive new research. In addition, the conference solicited Short Research Papers of up to 6 pages in length, whose merit was assessed more in terms of originality and importance than maturity and technical validation. The Research Paper Track received 101 submissions, including 75 long and 26 short papers. Of these, 22 long and 7 short papers were accepted, resulting in an acceptance rate of 29% for long papers, 27% for short papers, and 29% overall. Many authors of papers that were not accepted were encouraged to revise their work and to resubmit it to conference workshops or to the Poster and Demo Tracks of the conference.

The Research Paper Track included sessions on a variety of established as well as emerging topics in user modeling, adaptation, and personalization. Among these were sessions on user engagement; trust; user motivation, attention, and effort; recommender systems (including topics such as matrix factorization, critiquing, noise and spam in recommender systems); user-centered design and evaluation; educational data mining; modeling learners; user models in microblogging; and visualization.

The Industry Paper Track was chaired by Ido Guy, from IBM Research in Israel, and Diego Zapata-Rivera, from ETS in USA. This track covered innovative commercial implementations or applications of UMAP technologies, and experience in applying recent research advances in practice. Submissions to this track were reviewed by a separate Industry Paper Committee with 11 leading industry researchers and practitioners. Of five submissions that were received, three were accepted (two long and one short papers).

The conference also included a Doctoral Consortium, a forum for PhD students to get feedback and advice from a Doctoral Consortium Committee of 17 leading UMAP researchers. The Doctoral Consortium was chaired by Lora Aroyo from the University of Amsterdam, The Netherlands, and Robin Cohen,

University of Waterloo, Canada. This track received 18 submissions of which 11 were accepted.

The Poster and Demo Session of the conference was chaired by Li Chen, Hong Kong Baptist University, China, and Stephan Weibelzahl, National College of Ireland, Ireland. As of the time of writing, the number of acceptances was still unknown. It was expected that this session would feature dozens of lively posters and system demonstrations. Summaries of these presentations will be published in online adjunct proceedings.

The UMAP 2012 program also included Workshops and Tutorials that were selected by Chairs Eelco Helder, L3S Research Center, Germany, and Kalina Yacef, University of Sydney, Australia.

The following tutorials were offered as part of the UMAP 2012 program:

- Empirical Evaluation of User Modeling Systems, by David Chin
- Evaluation of Adaptive Systems, by Stephan Weibelzahl, Alexandros Paramythi and Judith Masthoff
- Designing and Evaluating New-Generation User Modeling, by Frederica Cena and Cristina Gena

The following workshops were organized in conjunction with UMAP 2012:

- AUM: Second Workshop on Augmented User Modeling, chaired by Fabian Abel, Vania Dimitrova, Eelco Herder and Geert-Jan Houbert
- FactMod: Matrix Factorization Techniques for Student Skills and User Preference Modeling, chaired by Michel Desmarais, Neil Heffernan, Tomas Horvath, Thai-Nghe Nguyen, and Zacharia A. Pardos
- PALE: Personalization Approaches in Learning Environments, chaired by Milos Kravcik, Olga C. Santos, Jesus G. Boticario and Diana Perez-Marin
- PATCH: Fourth International Workshop on Personal Access to Cultural Heritage, chaired by Tsvi Kuflik, Lora Aroyo, Anthony Collins, Eyal Dim, Judy Kay and Bob Kummerfeld
- Personalized Knowledge Modeling with Big (Usage and Context) Data, chaired by Doreen Cheng, Lora Aroyo, Deborah McGuinness and Daniel Park
- SASWeb: Semantic and Adaptive Social Web, chaired by Lora Aroyo, Frederica Cena, Antonina Dattolo, Pasquale Lops and Julita Vassileva
- SRS: Third International Workshop on Social Recommender Systems, chaired by Ido Guy, Li Chen and Michelle Zhou
- TRUM: Trust, Reputation and User Modeling, chaired by Julita Vassileva and Jie Zhang
- TVM²P: International Workshop on TV and Multimedia Personalization, chaired by Shlomo Berkovsky and Luiz Pizzato

Two keynote speakers were invited to share their influential contributions in the field of adaptive interfaces: Francesco Ricci from the University of Bozen-Bozano (Italy), and Ryan S.J.d. Baker from Worcester polytechnic Institute (USA). A

panel was organized by Alfred Kobsa, the editor of the UMUAI journal, to commemorate two decades of research in our field.

In addition to all the contributors mentioned above, we would also like to thank the Local Arrangements Chair Jacqueline Bourdeau from TÉLUQ, Canada, and the Publicity Chair Cristóbal Romero from Universidad de Córdoba in Spain. A number of indispensable student volunteers also contributed to the organization, of which Pierre Chalfoun from the University of Montreal, and Daniel Capelo Borges from TÉLUQ, Canada, were involved from the start. We are also grateful to UQÀM for providing enthusiastic administrative and secretarial help from Jocelyne Blanchard and Louise Tremblay.

We deeply acknowledge the conscientious work of the Program Committee members and the additional reviewers, who are listed on the next few pages. We also gratefully acknowledge our sponsors who helped us with funding and organizational expertise: User Modeling Inc., ACM SIGART, SIGCHI and SIGIR, the Chen Family Foundation, Microsoft Research, the U.S. National Science Foundation, Springer, Polytechnique Montréal, and the Université du Québec à Montréal. Finally, we want to acknowledge the use of EasyChair for the management of the review process and the preparation of the proceedings.

April 2012

Judith Masthoff
Bamshad Mobasher
Michel C. Desmarais
Roger Nkambou

Organization

UMAP 2012 was organized by the Université du Québec à Montréal, Canada, in cooperation in cooperation with Polytechnique Montréal, User Modeling Inc., ACM/SIGIR, ACM/SIGCHI and ACM/SIGART.

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