

Proceedings of the

**Workshop on the Practical Use of
Recommender Systems, Algorithms and
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Preface

User modeling, adaptation, and personalization techniques have hit the mainstream. The explosion of social network websites, on-line user-generated content platforms, and the tremendous growth in computational power of mobile devices are generating incredibly large amounts of user data, and an increasing desire of users to “personalize” (their desktop, e-mail, news site, phone). The potential value of personalization has become clear both as a commodity for the benefit or enjoyment of end-users, and as an enabler of new or better services – a strategic opportunity to enhance and expand businesses.

An exciting characteristic of recommender systems is that they draw the interest of industry and businesses while posing very interesting research and scientific challenges. In spite of significant progress in the research community, and industry efforts to bring the benefits of new techniques to end-users, there are still important gaps that make personalization and adaptation difficult for users. Research activities still often focus on narrow problems, such as incremental accuracy improvements of current techniques, sometimes with ideal hypotheses, or tend to overspecialize on a few applicative problems (typically TV or movie recommenders – sometimes simply because of the availability of data). This restrains de facto the range of other applications where personalization technologies might be useful as well.

This workshop contrived for a new uptake on past experiences and lessons learned. We proposed an analytic outlook on new research directions, or ones that still require substantial research, with a special focus on their practical adoption in working applications, and the barriers to be met in this path.

The topics of interest were related to:

- Limits of recommender systems: main bottlenecks, research dead ends and myths in recommender systems; missing technology pieces for wider adoption; social (privacy, culture) issues
- Analytical view of personalization experiences: case studies of recommender system implementations & deployments; evaluation and user studies of recommender systems; scalability in large recommender systems; lessons learnt from your past experience; obstacles to massive deployment of recommendation solutions in industrial environments
- Recommendation in broader systems
- Next needs in recommender systems: new business models related to recommendation; new paradigms to provide recommendations; new areas for recommendations; users’ expectations about future recommender systems

This workshop brought together approximately 45 researchers and practitioners (including people from Microsoft, Amazon, Bloomberg, Telefónica, Netflix, Hitachi, eBay, YouTube, Strands, IBM, and many SMEs). Twelve papers were submitted to the workshop; nine were accepted, illustrating different facets of recommender systems that are important for a wider adoption, such as bringing more “realistic” algorithms that cope with problems related to feedback elicitation and serendipity, scalability, openness, handling multiple users, etc. The discussions sessions tried to confront the points of view of researchers and industry w.r.t. recommender systems. Several gaps in terms of concerns have been identified, among which user interfaces, scalability, and real-time issues, which are still under-represented topics in the research community.

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