Preface

Adaptation and Personalization for Web 2.0

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Abstract. AP-WEB 2.0, the International Workshop on Adaptation and Personalization for Web 2.0, held in Trento in connection to the first and seventeenth international conference on User Modeling, Adaptation and Personalization, UMAP 2009, aimed at discussing the challenges and approaches in adaptation and personalization for Web 2.0. Here we present an overview of the workshop. Thirteen full papers and five short papers were accepted, covering both theoretical and practical aspects of Personalization for Web 2.0. The papers discuss a wide range of areas including user awareness, recommender systems, user-generated content, and social networks.

Workshop Website: http://ailab.dimi.uniud.it/en/events/2009/ap-web20/

Keywords: User Modeling, Personalization, Web 2.0, Recommender Systems, Social Navigation, Knowledge sharing, Folksonomies and tagging, Social Networks, User Awareness.

Web 2.0 users generate a meaningful part of Web contents and traffic: they collaborate, connect, create, share, tag, remix, upload, and download new or existing resources in an architecture of participation, where user contribution and interaction add value. Web 2.0 is growing daily, both in terms of users and applications. Nevertheless, the effective use of adaptation and personalization methodologies within social systems is still an open challenge and current systems rarely go beyond user-driven customization.

User data is shared frequently in social network applications. Facebook, for example, is evolving as a platform that provides user identity and allows third party applications to share user data. A large variety of other social platforms including

MySpace, Hi5, Bebo, Ning, LinkedIn, Plaxo, Six Apart, Orkut, and Yahoo, use open standards such as OpenSocial, and OpenID to allow user identity to be established, third party applications to be added by users, and user data to be shared. Especially when using open standards, this sharing can happen in a decentralized way, by exchanging partial profiles for a purpose, in line with the decentralized/ubiquitous user modeling paradigm.

General open issues include understanding what (truly) adaptive personalized services can empower user interaction and information access and what kind of adaptation can be performed starting from the rich amount and variety of information available about Web 2.0 users, groups, and communities. Limiting the focus of attention to textual information, most of user generated contents are unstructured, expressed in natural language, and this raises other significant open questions: what viable natural language and text analysis techniques are adequate for the above tasks; what knowledge can be automatically extracted from the analysis of collective behavior, and how this knowledge can be exploited for personalization.

Another related key concept is social navigation, based on folksonomies and social tagging: how can tags be exploited for building user interests profiles and personal conceptual spaces; how different user perspectives coming from different tagging approaches can be consistently merged in order to improve social search and navigation; can 'personal' ontologies be derived from user tags and later be exploited for recommending tags in a personalized way to the user and what benefits could come from such an automatic tagging.

How can Web 2.0 application developers attract and sustain active user participation: various approaches have been proposed, varying from explicit incentive mechanisms to community visualizations, displaying user participation levels in order to encourage to improve the user's reputation and to trigger social behavior patterns that would benefit the community. User modeling and adaptation to individual and contextual factors are essential in the design of such incentive mechanisms and community visualizations (open group user models).

Finally, blogs, wikis, and forum systems are (one of) the main highway of user generated contents: how can they be analyzed in order to identify different personalized views and how can these be adaptively exploited for reducing information overload, can information extraction from user generated content be personalized, how standard social network analysis can be improved and innovated by means of content-based and adaptive approaches, are just a few open issues to be explored.

Three specific questions motivated this workshop:

1. How adaptation and personalization methodologies can augment Web 2.0 environments? And how can social adaptation mechanisms be evaluated?
2. What models, techniques, and tools are the most adequate to better support Web 2.0 users?

3. How much the introduction of tools for structuring personal user spaces (currently flat) can improve the creation and navigation processes and social awareness?

This workshop has received 21 submissions of which 13 were accepted as full papers and 5 as short papers. The accepted papers explore a wide range of themes, summarized in the following three macro-areas:

User Awareness: Wang and Vassileva discuss user awareness for reuse and integration by presenting personalized privacy control mechanisms for mashups transparent to the users, and Abel et al. provide a model for the effective interchange and mashup of user profiles. In the context of e-collaboration environments, Ardissono et al. propose a notification management model for supporting the selective deferral of context-aware notifications on the basis of the user's focus of attention, while Al-Jabari et al. analyse several use cases in order to improve the context interpretation of Web contents.

Recommender systems: This theme is treated focusing on integrating collaborative filtering recommender systems into existing Web 2.0 applications (Woerndl et al.), utilizing tags (Durao and Dolog), content (Nauerz et al.) and video content (Mercer) to improve recommendation, recommending personalized tag and content annotation (Baruzzo et al.), applying hybrid approaches and using different sources of data (Recuenco and Bueno).

User-generated content an social networks: Here the focus is on issues regarding the visualization of user interpersonal relationships in a social site (Sankaranarayanan and Vassileva) and of user visit patterns on a Web 1.0 website to acquire richer data about users (Quincey et al.); on the use of Web 2.0 technologies to acquire detailed data about user browsing (Hauger); on the social data portability and object-centered sociality supported by ontologies (Firantas et al), on authoring, tagging and form structuring (Di Iorio et al.), and navigation (Torres et al.); on reputation mechanisms for representing the qualification of user-generated data (Fernández and Hardings).. Finally personalization is discussed in (Luque) in the Health 2.0 domain.

We wish to express our sincere thanks to all the authors who submitted papers, the members of the Program Committee, who reviewed them on the basis of originality, technical quality, and presentation, and the numerous participants.

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