

## Preface

Dynamic generation of hypertext and its adaptation and personalization to particular users is a powerful and useful concept. It is particularly helpful for the reduction of the information overload such as is frequently experienced on the Internet. But it is equally helpful for guiding users towards “interesting” topics, products, artifacts or descriptions thereof in electronic shops, libraries or museums, or for filtering appropriate items from a general or domain-specific news feed.

Reference models and generic architectures unify a community and provide a leading generic model and/or architecture that spawns research activities in many directions. Examples of such generic models are AHAM for adaptive hypermedia and FOHM for open hypermedia. A nice example of a resulting generic implementation is the AHA! system that was last described in ACM Hypertext'06.

The research fields of hypertext and adaptive hypermedia (or adaptive web-based information systems) however, have been growing rapidly during the past ten years and this has resulted in a plethora of new terms, concepts, models and prototype systems. As a result the established models no longer include many of the recent new concepts and phenomena. In particular, open corpus adaptation, ontologies, group adaptation, social network analysis and data mining tools for adaptation are not or at least insufficiently supported.

The DAH'09 workshop<sup>1</sup> organized in conjunction with the 20th ACM International Conference on Hypertext and Hypermedia and held on June 29, 2009, in Turin, Italy. The workshop provides a focused international forum for researchers to discuss new developments in generic methods and technologies for dynamic and adaptive hypertext. Topics discussed during the workshop include: adaptation and personalization including such issues as open-corpus adaptation, group adaptation, higher order adaptation, and sharing of user models; adaptive and dynamic hypertext authoring (e.g. authoring conceptual adaptation models); service-oriented approaches for adaptation; use of data mining for user and domain modeling, and automatic generation of adaptation rules.

These proceedings include six accepted contributions to the workshop. We would like to thank the authors for their interest in the workshop and for submitting their contributions. Special thanks to the PC Members for their help in reviewing the submitted papers.

The first paper by Levacher *et al.* “A Framework for Content Preparation to Support Open-Corpus Adaptive Hypermedia” proposes a novel framework for open-corpus content preparation that allows processing documents existing in open and closed corpora and producing coherent conceptual sections of text with associated descriptive metadata. This work is important for enabling the mainstream adoption of AHS in web applications, which is impossible without enabling the repurposing existing content. The authors adopt state-of-the-art information extraction and structural content analysis techniques for an on-demand provision of tailored, atomic information objects.

Next contribution by van der Slijs *et al.* “GAL: A Generic Adaptation Language for describing Adaptive Hypermedia” argues that despite a large variety of personalization and adaptation features that different emerging Web applications offer, it is possible to distinguish a central and unifying objective of adaptive engines that facilitates these various features, that is, to create an adaptive navigation structure. The authors present Generic Adaptation Language (GAL) that specifies the engine independent basic adaptive navigation structure that allows using any authoring environment in combination with any adaptive engine as long as there is a corresponding GAL compiler.

The following two papers present the service-based view on the development of adaptive hypermedia. Harrigan and Wade in “Towards a Conceptual and Service-Based Adaptation Model” consider the limitations of the current practice in adaptation modeling which assume that concepts and relationships between concepts are the fundamental building blocks of any adaptive content and introduce a representation of a conceptual and service-based adaptation model. With their approach

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<sup>1</sup> The scientific programme overview, and other workshop-related information as well as the link to the online proceedings can be found at <http://www.win.tue.nl/~mpechen/conf/dah09/>.

having additional expressive power it would be possible to facilitate activity-based and process-oriented adaptive applications, including the adaptation of the process itself.

Koidl *et al.* in “Non-Invasive Adaptation Service for Web-based Content Management Systems” consider the architectural and technical issues related to provision of third party adaptive services pluggable into existing web-based content management systems (WCMS) like Wiki. The authors introduce a third party Adaptive Service that also contributes to mainstreaming the adoption of AHS. This work introduces a principled way of embedding adaptive technologies within existing WCMS allowing to reduce or avoid the expense of re-engineering such systems.

The paper by Hargood *et al.* “Investigating a thematic approach to narrative generation” considers the potential, the challenges and open issues in integrating themes in narrative generation systems that attempt to generate content within a narrative or story framework.

Knutov *et al.* in “Versioning in Adaptive Hypermedia” present an approach that reuses the key concepts and ideas behind versioning and applies them to the adaptive hypermedia field. The authors illustrate with a couple of intuitive examples how such an approach helps to facilitate authoring, managing, storing, maintenance, logging and analysis of behaviour because of providing more flexibility and maintainability of the systems. Particular, versioning helps to create, maintain and re-use concurrent versions of an application or a model or a particular property and value, saving authoring effort and that is not less important facilitating provenance analysis.

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Paul De Bra  
Mykola Pechenizkiy