



Proceedings of the

**Second International Workshop on
Dynamic and Adaptive Hypertext:
*Generic Frameworks,
Approaches and Techniques*
(DAH'11)**

co-located with
22nd ACM Conference on Hypertext and Hypermedia
(Hypertext'11)

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Preface

Dynamically generated hypertext adapted and personalized to the users' needs and abilities has proven to be a very successful technique over the last decade and a half. It is particularly helpful for reducing the information overload that frequently occurs in the modern information-driven world. Adaptive hypertext is equally effective for accessing many types of items, be it news, products, artifacts or descriptions thereof in electronic shops, libraries or museums, or even learning materials.

Architecture and framework building efforts allow hypertext community to lay the foundations for the creation of generic system reference models that spawn research activities in multiple domains. Examples of such generic models are AHAM for adaptive hypermedia and FOHM for open hypermedia as well as the APeLS and Personal Reader frameworks for service-based adaptive hypermedia.

Rapid expansion of hypertext, web-based systems, and adaptive hypermedia resulted in the emergence of a plethora of new terms, conceptual models, and prototype systems. Classical hypermedia models are no longer capable of capturing phenomena that evolve in the Social and Semantic Web. In particular, open corpus adaptation, ontologies, group adaptation, and data mining tools for adaptation are not supported or supported in a limited fashion.

The DAH'11 workshop was organized in conjunction with the 22th ACM International Conference on Hypertext and Hypermedia and held on June 6, 2011, in Eindhoven, the Netherlands. It builds on the success of DAH'09 at Hypertext'09 and WABBWUAS'10 workshop at UMAP 2010. The workshop provided a focused international forum for researchers to present, discuss and explore the state of the art as well as outline promising future research directions of dynamic and adaptive hypertext. The workshop addressed different aspects of dynamic and adaptive hypertext by focusing on generic frameworks, approaches and techniques and ways of reusing novel models and/or existing system and their components for building adaptive hypermedia systems. The DAH'11 workshop therefore covered the following (non-exhaustive) list of topics:

- Adaptation and personalization
 - open-corpus adaptation
 - group adaptation
 - sharing user models
- Adaptive/Dynamic Hypertext authoring
 - authoring conceptual adaptation models
- Data mining for
 - user modeling
 - domain modeling
 - automatic generation of adaptation rules
- Adaptation frameworks
 - reusing adaptation reasoning and techniques
 - evaluation of frameworks
 - scalability and performance issues

The DAH'11 proceedings include six accepted contributions that were presented at the workshop.

The first paper by Hannon *et al.* "Bridging Recommendation and Adaptation: Generic Adaptation Framework - Twittomender compliance case-study" discusses Recommender System (RS) modeling in terms of Adaptive Hypermedia Systems (AHS). The authors investigate AHS and RS functionality compliance in terms of common features, functionality, building blocks and composition of the system and bring up complementary aspects of adaptation, personalization and recommendation in a context of a generic framework. As a case study of their research the authors scrutinize the 'Twittomender' RS, decompose it in building blocks, outline and highlight its properties along with the advantages and possible enhancements of the system.

Celik *et al.* present their work entitled "Towards a Framework for Adaptive Faceted Search on Twitter" and propose strategies for inferring facets and facet values on Twitter by enriching the semantics of individual Twitter messages. The paper presents different methods, including

personalized and context-adaptive methods, for making faceted search on Twitter more effective. The authors also conduct a preliminary analysis that shows that semantic enrichment of tweets is essential for faceted search on Twitter and that there is essential need for adaptive faceted search on Twitter and finally propose an evaluation methodology.

Grishchenko *et al.* in “Referencing within evolving hypertext” introduce a minimalistic but powerful query language of specifiers that allows for great flexibility in referencing within a changing hypertext. This helps to capture the state of the hypertext, point at changes, expose authorship or blend branches of the versioned hypertext structures. Their approach is based on the Casual Tree model.

The paper by Zemirline *et al.* “A set of adaptation patterns for expressing adaptive navigation in Adaptive Hypermedia” presents a set of 22 adaptation patterns which are independent of any application domain and adaptation engines. These patterns have been translated to LAG and GLAM adaptation languages in order to plug them on existing adaptation engines. Currently they are used in the so-called EAP framework to define complex adaptation strategies.

Knutov *et al.* in “Adaptive Hypermedia Systems Analysis Approach by Means of the GAF Framework” consider an analysis approach of AHS composition and design by defining building blocks’ interfaces and presenting corresponding dependencies by means of the GAF framework, which helps to identify system design guidelines and facilitates the creation of adaptive systems from scratch. In their paper authors analyze adaptive system behaviour, architecture and risks involved.

In the last paper “Open Corpus Adaptation++ in GALE: Friend or Foe?” by Smits and De Bra raise a discussion about Open Corpus Adaptation. They describe how their GALE engine implementation achieves Open Corpus adaptation functionality and pose the question whether this is actually a desired feature or potentially a dangerous addition with unintended consequences.

We would like to thank the authors for their interest in the workshop and for submitting their contributions. And we thank the PC members for their help in reviewing the submitted papers.

Mykola Pechenizkiy
Evgeny Knutov
Michael Yudelson
Fabian Abel
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DAH’11 Organizing Committee, June 2011

Organization

DAH 2011 is co-located with the 22nd International Conference on Hypertext and Hypermedia (HT) 2011, Eindhoven, The Netherlands.

Organizing Committee

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