PREFACE

The benefits of the personalization and adaptation of computer applications to each user have been widely reported in recent decades. Educational applications are not an exception, both in e-learning, i.e. the use of electronic media to teach or assess, and in b-learning (blended learning), i.e. to combine traditional face-to-face instruction with electronic media.

The International Workshop on Personalization Approaches in Learning Environments (PALE) is the result of merging the experience and background of three workshops focused on applying user modeling, personalization and adaptation in learning environments. Each of them has been organized as a learning café following the corresponding methodology and aiming to provide an answer to the question *"Which approaches can be followed to personalize learning environments?"* from different perspectives, as follows:

- **APLEC: Adaptation and Personalization in E-B/Learning using Pedagogic Conversational Agents.** It is focused on the open issues in interactive learning environments that build the knowledge with the student through a set of interactions, such as in natural language by using animated Pedagogic Conversational Agents (PCAs).
- **ROLE: Personalizing Responsive Open Learning Environments.** It is focused on the open issues in responsive open learning environments that permit personalization of the entire learning environment and its functionalities, i.e. individualization of its components and their adjustment or replacement by alternative solutions.
- **TUMAS-A: Towards User Modeling and Adaptive Systems for All.** It is focused on the open issues in inclusive learning environments to provide a personalized, accessible and ubiquitous support for their users (learners, facilitators, professors) using the appropriate technologies and standards as well as the evaluation procedures that can measure the impact of the personalized and inclusive support for all, but considering their individual and evolving needs, in their particular context.

The workshop will take place on 15th of July 2011, in Girona, Spain in conjunction with the International Conference on User Modeling, Adaptation and Personalization (UMAP). A blind peer-reviewed process by at least two reviewers with expertise in the area has been carried out. As a result, 12 submissions have been accepted. This volume contains the proceedings of the workshop organized according to the different learning cafés. We would like to thank the authors for their submissions, our Programme Committee members for their reviews and the UMAP workshop chairs for their advice and guidance during the PALE workshop organization.

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