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Advances in Ubiquitous User Modelling

Revised Selected Papers

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Preface

In today's information world, small personal computerized devices, such as PDAs, smart phones and other smart appliances, have become widely available and essential tools in many situations. The ongoing penetration of computers into everyday life leads to so-called ubiquitous computing environments, where computational power and networking capabilities are available (and used) everywhere to support the environment's "inhabitants." The strive to provide personal services to users made user modelling capability an essential part of any ubiquitous application. Ubiquitous user modelling describes ongoing modelling and exploitation of user behavior with a variety of systems that share their user models. These shared user models can either be used for mutual or for individual adaptation goals. Ubiquitous user modelling differs from generic user modelling by three additional concepts: ongoing modelling, ongoing sharing and ongoing exploitation. Systems that share their user models will improve the coverage, the level of detail, and the reliability of the integrated user models and thus allow better functions of adaptation. Ubiquitous user modelling implies new challenges of interchangeability, scalability, scrutability and privacy.

During the past few years ubiquitous user modelling is an ongoing series of workshops focusing on the above challenges. It serves as a meeting place for ubiquitous user modelling researchers, for discussing new challenges and research directions and setting up the UbiqUM research agenda. This book presents a selection of papers representing the Ubiquitous User Modelling Workshop series.

We would like to thank the authors that contributed to the workshops and to this book, and to the reviewers that helped improve the extended original workshop papers.

September 2009

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