

Contents

Introduction — V

List of Contributing Authors — XI

Part I: Foundations of user modeling

Mark P. Graus and Bruce Ferwerda

1 Theory-grounded user modeling for personalized HCI — 3

Sarah Theres Völkel, Ramona Schödel, Daniel Buschek, Clemens Stachl, Quay Au, Bernd Bischl, Markus Bühner, and Heinrich Hussmann

2 Opportunities and challenges of utilizing personality traits for personalization in HCI — 31

Part II: User input and feedback

Mirjam Augstein and Thomas Neumayr

3 Automated personalization of input methods and processes — 67

Tobias Moebert, Jan N. Schneider, Dietmar Zoerner, Anna Tscherejkina, and Ulrike Lucke

4 How to use socio-emotional signals for adaptive training — 103

Dietmar Jannach, Michael Jugovac, and Ingrid Nunes

5 Explanations and user control in recommender systems — 133

Part III: Personalization approaches

Daniel Herzog, Linus W. Dietz, and Wolfgang Wörndl

6 Tourist trip recommendations – foundations, state of the art, and challenges — 159

Wilfried Grossmann, Mete Sertkan, Julia Neidhardt, and Hannes Werthner

7 Pictures as a tool for matching tourist preferences with destinations — 183

Xiangdong Li, Yunzhan Zhou, Wenqian Chen, Preben Hansen, Weidong Geng, and Lingyun Sun

8 Towards personalized virtual reality touring through cross-object user interfaces — 201

Peter Knees, Markus Schedl, Bruce Ferwerda, and Audrey Laplante

9 User awareness in music recommender systems — 223

Julio Abascal, Olatz Arbelaiz, Xabier Gardeazabal, Javier Muguerza, J. Eduardo Pérez, Xabier Valencia, and Ainhoa Yera

10 Personalizing the user interface for people with disabilities — 253

Miloš Kravčík

11 Adaptive workplace learning assistance — 283

Index — 303