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# Computer-Human Interaction Research and Applications

Second International Conference, CHIRA 2018  
Seville, Spain, September 19–21, 2018  
and Third International Conference, CHIRA 2019  
Vienna, Austria, September 20–21, 2019  
Revised Selected Papers

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# Preface

This book includes extended and revised versions of a set of selected papers from the International Conference on Computer-Human Interaction Research and Applications, CHIRA 2018 and 2019 editions. The 2nd edition of CHIRA was held in Seville, Spain, in the period of September 19–21, 2018, and the 3rd edition was held in Vienna, Austria, in the period of September 20–21, 2019.

The purpose of the International Conference on Computer-Human Interaction Research and Applications (CHIRA) is to bring together professionals, academics and students who are interested in the advancement of research and practical applications of interaction design and human-computer interaction. Five parallel tracks were held, covering different aspects of Computer-Human Interaction, including Interaction Design, Human Factors, Entertainment, Cognition, Perception, User-Friendly Software and Systems, Pervasive Technologies and Interactive Devices.

CHIRA 2018 received 28 paper submissions from 19 countries, of which 14% were included in this book. CHIRA 2019 received 36 paper submissions from 23 countries, of which 8% were included in this book.

The papers were selected by the event chairs and their selection is based on a series of criteria including the classifications and comments provided by the program committee members, the session chairs' assessment and the program chairs' global view of all papers included in the technical program. The authors of selected papers were then invited to submit a revised and extended version of their papers having at least 30% innovative material.

The papers selected to be included in this book contribute to the understanding of relevant trends of current research on Computer-Human Interaction, including: Agent design for shape-shifting technology; User experience characterization based on Brain-Computer Interface (BCI) metrics; Auditory distractions taxonomization; Empowering citizen-environment Interaction; Impact on engagement with social object labels; HCI in music composition; and Assistive technologies design.

We would like to thank all the authors for their contributions and also the reviewers who have helped to ensure the quality of this publication. Moreover, we would like to thank the work of the CHIRA secretariat, who always supported the processes to achieve the highest possible quality.

September 2019

Maria Jose Escalona  
Andres Jimenez Ramirez  
Hugo Plácido Silva  
Larry Constantine  
Markus Helfert  
Andreas Holzinger

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## Invited Speakers

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Julio Abascal	University of the Basque Country/Euskal Herriko Unibertsitatea, Spain
Norbert Streitz	Founder and Scientific Director, Smart Future Initiative, Germany
Georgios N. Yannakakis	University of Malta, Malta
Eduardo Rocon	Consejo Superior de Investigaciones Científicas, Spain

### 2019

Kristina Höök	KTH Royal Institute of Technology, Sweden
Pietro Cipresso	Catholic University of the Sacred Heart, Italy
Helmuth Windl	Panasonic Automotive Systems Europe GmbH, Germany



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