

# **Advances in Intelligent Systems and Computing**

Volume 607

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# Advances in Usability and User Experience

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California, USA

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# Advances in Human Factors and Ergonomics 2017

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# Preface

Successful interaction with products, tools, and technologies depends on usable designs and accommodating the needs of potential users without requiring costly training. In this context, this book is concerned with emerging ergonomics in design concepts, theories and applications of human factors knowledge focusing on the discovery, design and understanding of human interaction, and usability issues with products and systems for their improvement.

This book will be of special value to a large variety of professionals, researchers, and students in the broad field of human modeling and performance, who are interested in feedback of devices' interfaces (visual and haptic), user-centered design, and design for special populations, particularly the elderly. We hope this book is informative, but even more that it is thought provoking. We hope it inspires, leading the reader to contemplate other questions, applications, and potential solutions in creating good designs for all. This book is organized into seven sections that focus on the following subject matters:

*Section 1: Interface Design and Usability Evaluation*

*Section 2: User-Centered Design and Human Computer Interaction*

*Section 3: Accessibility and Ergonomics Modeling in Industry*

*Section 4: Smart Design and User Experience*

*Section 5: Ergonomic Evaluation and Design for All*

*Section 6: Heuristic Evaluation, Software and Service Design*

*Section 7: Usability and User Experience Applications*

This book will be of special value to a large variety of professionals, researchers and students in the broad field of human-computer interaction, usability engineering, and user experience research, who are interested in feedback of devices' interfaces (visual and haptic), user-centered design, and design for special populations, particularly the elderly.

Each section contains research paper that has been reviewed by members of the International Editorial Board. Our sincere thanks and appreciation to the board members as listed below:

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