# Advances in Human Factors, Software, and Systems Engineering

Edited By

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and

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### Preface

The discipline of Human Factors, Software, and Systems Engineering provides a platform for addressing challenges in in human factors, software and systems engineering that both pushes the boundaries of current research and responds to new challenges, fostering new research ideas. In this book researchers, professional software & systems engineers, human factors and human systems integration experts from around the world addressed societal challenges and next-generation systems and applications for meeting them. The books address topics from evolutionary and complex systems, human systems integration to smart grid and infrastructure, workforce training requirements, systems engineering education and even defense and aerospace. It is sure to be one of the most informative systems engineering events of the year.

This book focuses on the advances in the Human Factors, Software, and Systems Engineering, which are a critical aspect in the design of any human-centered technological system. The ideas and practical solutions described in the book are the outcome of dedicated research by academics and practitioners aiming to advance theory and practice in this dynamic and allencompassing discipline. A total of four sections presented in this book. Each section contains research paper that have 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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We hope that this book, which is the international state-of-the-art in human factors in software and systems engineering, will be a valuable source of theoretical and applied knowledge enabling human-centered design of variety of products, services and systems for global markets.

July 2014

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Editors