This book contains a selection of papers accepted for presentation and discussion at The 2017 World Conference on Information Systems and Technologies (WorldCIST’17). This conference had the support of the IEEE Systems, Man, and Cybernetics Society, AISTI (Iberian Association for Information Systems and Technologies/Associação Ibérica de Sistemas e Tecnologias de Informação), ISCAP (School of Accounting and Administration of Porto/Instituto Superior de Contabilidade e Administração do Porto), and GIIM (Global Institute for IT Management). It took place at Porto Santo Island, Madeira, Portugal, during April 11–13, 2017.

The World Conference on Information Systems and Technologies (WorldCIST) is a global forum for researchers and practitioners to present and discuss recent results and innovations, current trends, professional experiences, and challenges of modern information systems and technologies research, technological development, and applications. One of its main aims is to strengthen the drive towards a holistic symbiosis between academy, society and industry. WorldCIST’17 built on the successes of WorldCIST’13, held at Olhão, Algarve, Portugal; WorldCIST’14 held at Funchal, Madeira, Portugal; WorldCIST’15 held at São Miguel, Azores, Portugal; and WorldCIST’16 which took place at Recife, Pernambuco, Brazil.

The Program Committee of WorldCIST’17 was comprised of a multidisciplinary group of experts and those who are intimately concerned with information systems and technologies. They have had the responsibility for evaluating, in a ‘blind review’ process, the papers received for each of the main themes proposed for the conference: (A) Information and Knowledge Management; (B) Organizational Models and Information Systems; (C) Software and Systems Modeling; (D) Software Systems, Architectures, Applications and Tools; (E) Multimedia Systems and Applications; (F) Computer Networks, Mobility and Pervasive Systems; (G) Intelligent and Decision Support Systems; (H) Big Data Analytics and Applications; (I) Human-Computer Interaction; (J) Ethics, Computers & Security; (K) Health Informatics; (L) Information Technologies in Education; (M) Information Technologies in Radiocommunications.

WorldCIST’17 received about 400 contributions from 51 countries around the world. The papers accepted for presentation and discussion at the Conference are published by Springer (this book) and by AISTI (one issue in the Journal of Information Systems Engineering & Management) and will be submitted for indexing by ISI, EI-Compendex, Scopus, DBLP and/or Google Scholar, among others. Extended versions of selected best papers will be published in relevant journals, mainly SCI/SSCI and Scopus indexed journals.

We acknowledge all that contributed to the staging of WorldCIST17 (authors, committees, workshop organizers, and sponsors). We deeply appreciate their involvement and support that was crucial for the success of WorldCIST’17.

Porto Santo Island
April 2017

Álvaro Rocha
Ana Maria Correia
Hojjat Adeli
Luis Paulo Reis
Sandra Costanzo
Recent Advances in Information Systems and Technologies
Volume 1
Rocha, Â.; Correia, A.M.; Adeli, H.; Reis, L.P.; Costanzo, S. (Eds.)
2017, XXXII, 930 p. 271 illus., Softcover
ISBN: 978-3-319-56534-7