



The 14<sup>th</sup> edition of the **International Conference on ICT, Society and Human Beings (ICT 2021)** (part of the IADIS 15<sup>th</sup> Multi Conference on Computer Science and Information Systems 2021) was held virtually due to the COVID-19 pandemic, during **20-22 July, 2021**.

This conference was organized by the International Association for Development of the Information Society (IADIS).

The effects of ICT on human beings as well as the interaction between ICT, individuals, and society were all within the center of this conference. Both analyses of interactions and effects were important. Changes in behaviour, perspectives, values, competencies, human and psychological aspects and feelings were all of interest. Reflections on past, present, and future challenges – especially planning for handling the latter were encouraged. In general, all types of research strategies were encouraged, and especially cross-disciplinary and multi-disciplinary studies. The main topics for submissions were: Globalization and ICT; Life environment and ICT; Life role and ICT; ICT and effects on humans; Perspectives on ICT; Desirable goals and ICT and Actions for reaching the Good Information Society.

This edition was published jointly with the: 18<sup>th</sup> International Conference Web Based Communities and Social Media (WBC 2021) and 13<sup>th</sup> International Conference on e-Health (EH 2021). These conferences received 139 submissions from more than 21 countries. Each submission was anonymously reviewed by an average of four independent reviewers, to ensure that accepted submissions were of a high standard. Consequently, only 22 full papers were approved which meant an acceptance rate of 16%. A few more papers were accepted as short papers and reflection papers.

Extended versions of the best papers were selected to be published in:

- ❖ the IADIS International Journal on WWW/Internet (IJWI). ISSN: 1645-7641



Besides the presentation of full, short and reflection papers, the conference also included one keynote presentation by Professor Hermann Maurer, School of Computer Science, Graz University of Technology, Austria (co-presented by Dr. Bilal Zaka, COMSATS University Islamabad, Pakistan).

### Keynote Presentation:

#### NETWORKED INTERACTIVE DIGITIZED INFORMATION WILL CHANGE THE WORLD



by Professor Hermann Maurer, School of Computer Science, Graz University of Technology, Austria

The ICT 2021 Conference was published in hard copy by IADIS Press.  
ISBN: 978-989-8704-30-6

**Volume Editors:** Piet Kommers and Mário Macedo

**Computer Science and Information Systems Series Editors:** Piet Kommers and Pedro Isaías



## **Program Committee Members:**

### ***Program Chair***

Piet Kommers, University of Twente, The Netherlands

### ***MCCSIS General Conference Co-Chair***

Pedro Isaias, The University of New South Wales (UNSW – Sydney), Australia

## **Committee Members:**

Anastasija Nikiforova, Faculty of Computing, University of Latvia, Latvia

Arianit Kurti, Department of Informatics, Linnaeus University, Sweden

Bertil P. Marques, Instituto Superior de Engenharia do Porto (ISEP), Portugal

Caroline Parker, Glasgow Caledonian University, United Kingdom

Christophe Trefois, Université du Luxembourg, Luxembourg

Daniel Pimienta, Funredes, Dominican Republic

Eila Jarvenpaa, Aalto University, Finland

Fabio Cassano, Università Degli Studi di Bari, Italy

Farshad Badie, Aalborg University, Denmark

Francisco Garcia-Sanchez, University of Murcia, Spain

Jan Meyer (Pr.M), Deputy Director NWU Business School, South Africa

John Sören Pettersson, Karlstad University, Sweden

Jorge Franco, Universidade Presbiteriana Mackenzie, Brazil

Krzysztof Hauke, Wroclaw University of Economics, Poland

Manuela Repetto, University of Turin, Italy

Marc Van Lieshout, Tno Strategy and Policy for the Information Society, Netherlands

Marco Lazzari, University of Bergamo, Italy

Mikael Collan, Lappeenranta University of Technology, Finland

Monica Banzato, University of Ca' Foscari - Venice, Italy

Nicola Doering, Ilmenau University of Technology, Germany

Przemyslaw Falkowski-Gilski, Gdansk University of Technology, Poland

Sarai Lastra, Universidad Ana G. Méndez, Recinto de Gurabo, Puerto Rico

Siani Pearson, Just Algorithms Action Group, United Kingdom

Stamatis Papadakis, University of Crete, Greece

Stina Giesecke, Aalto University, Finland