# **Advances in Intelligent Systems and Computing**

Volume 649

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ISSN 2194-5357 ISSN 2194-5365 (electronic) Advances in Intelligent Systems and Computing ISBN 978-3-319-67179-6 ISBN 978-3-319-67180-2 (eBook) DOI 10.1007/978-3-319-67180-2

Library of Congress Control Number: 2017951436

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This Springer imprint is published by Springer Nature
The registered company is Springer International Publishing AG
The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

# **Preface**

This volume of Advances in Intelligent and Soft Computing contains accepted papers presented at SOCO 2017, CISIS 2017 and ICEUTE 2017, all conferences which will be held in the beautiful and historic city of León (Spain), in September 2017.

Soft computing represents a collection or set of computational techniques in machine learning, computer science and some engineering disciplines which investigate, simulate and analyse very complex issues and phenomena.

After a through peer-review process, the 12th SOCO 2017 International Program Committee selected 48 papers which are published in these conference proceedings, and represents an acceptance rate of 45%. In this relevant edition, a special emphasis was put on the organization of special sessions. Two special sessions were organized related to relevant topics such as Artificial Intelligence and Machine Learning Applied to Health Sciences and Soft Computing Methods in Manufacturing and Management Systems.

The aim of the 10th CISIS 2017 conference is to offer a meeting opportunity for academic and industry-related researchers belonging to the various, vast communities of computational intelligence, information security and data mining. The need for intelligent, flexible behaviour by large, complex systems, especially in mission-critical domains, is intended to be the catalyst and the aggregation stimulus for the overall event. One special session was organized related to the relevant topic of Identification, Simulation and Prevention of Security and Privacy Threats in Modern Communication Networks.

After a through peer-review process, the CISIS 2017 International Program Committee selected 18 papers which are published in these conference proceedings achieving an acceptance rate of 38%.

In the case of 8th ICEUTE 2017, the International Program Committee selected eight papers, which are published in these conference proceedings.

The selection of papers was extremely rigorous in order to maintain the high quality of the conference, and we would like to thank the members of the Program Committees for their hard work in the reviewing process. This is a crucial process to

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the creation of a high-standard conference, and the SOCO, CISIS and ICEUTE conferences would not exist without their help.

SOCO'17, CISIS'17 and ICEUTE'17 enjoyed outstanding keynote speeches by distinguished guest speakers: Prof. Hujun Yin—The University of Manchester (UK), Alberto Hernández Moreno INCIBE (Spain) and José Luis Verdegay—University of Granada (Spain).

SOCO'17 has teamed up with Neurocomputing (Elsevier) and the Journal of Applied Logic (Elsevier) for a suite of special issue including selected papers from SOCO'17.

For this CISIS'17 special edition, as a follow-up of the conference, we anticipate further publication of selected papers in two special issues, one in the prestigious Logic Journal of the IGPL published by Oxford Journals and another one in Open Mathematics published by De Gruyter.

ICEUTE'17 has been associated with International Journal of Engineering Education for a special edition that includes selected ICEUTE'17 works.

Particular thanks go as well to the conference's main sponsors, COESI, Startup Ole, The International Federation for Computational Logic and The Research Institute of Applied Sciences in Cybersecurity, who jointly contributed in an active and constructive manner to the success of this initiative. We want also to extend our warm gratitude to all the special sessions' chairs for their continuing support to the SOCO, CISIS and ICEUTE series of conferences.

We would like to thank all the special session organizers, contributing authors, as well as the members of the Program Committees and the Local Organizing Committee for their hard and highly valuable work. Their work has helped to contribute to the success of the SOCO 2017, CISIS 2017 and ICEUTE 2017 events.

September 2017

Hilde Pérez García Javier Alfonso-Cendón Lidia Sánchez González Héctor Quintián Emilio Corchado

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