Preface

This volume of Lecture Notes in Networks and Systems contains accepted papers presented at the *17th International Conference on Soft Computing Models in Industrial and Environmental Applications* (SOCO 2022). This conference was held in the beautiful city of Salamanca, Spain, in September 2022.

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

After a peer-review process, the SOCO 2022 International Program Committee selected 64 papers published in these conference proceedings, representing an acceptance rate of 60%. In this relevant edition, a particular emphasis was put on the organization of special sessions. Seven special sessions were organized related to relevant topics such as Machine Learning and Computer Vision in Industry 4.0; Time Series Forecasting in Industrial and Environmental Applications; Optimization, Modeling, and Control by Soft Computing Techniques; Soft Computing Applied to Renewable Energy Systems; Preprocessing Big Data in Machine Learning; and Tackling Real-World Problems with Artificial Intelligence.

The selection of papers was extremely rigorous to maintain the high quality of the conference. We want to thank the members of the Program Committees for their hard work during the reviewing process. This is a crucial process for creating a high-standard conference; the SOCO conference would not exist without their help.

SOCO 2022 enjoyed outstanding keynote speeches by distinguished guest speakers: Prof. Ajith Abraham, Director of Machine Intelligence Research Labs (MIR Labs), and Prof. Guy De Tré head of the research group on Database, Document, and Content Management (DDCM) at Ghent University (Belgium), and Felix Barrio General Director at INCIBE (Spain).

SOCO 2022 has teamed up with "Neurocomputing" (Elsevier), "Logic Journal of the IGPL" (Oxford University Press), and Cybernetics & Systems (Taylor & Francis) for a suite of special issues, including selected papers from SOCO 2022.

Particular thanks go as well to the conference's main sponsors, Startup Olé, the CYL-HUB project financed with next-generation funds from the European Union; the Ministry of Labor and Social Economy; the Recovery, Transformation, and

Resilience Plan; and the State Public Employment Service, channeled through the Junta de Castilla y León, BISITE research group at the University of Salamanca, CTC research group at the University of A Coruña, and the University of Salamanca. They jointly contributed in an active and constructive manner to the success of this initiative.

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 2022 event.

September 2022   Pablo García Bringas
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