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and Emilio Corchado (Eds.)

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International Joint Conference  
CISIS'12  
ICEUTE'12  
SOCO'12 Special Sessions

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# Preface

This volume of *Advances in Intelligent and Soft Computing* contains accepted papers presented at CISIS 2012 and ICEUTE 2012, both conferences held in the beautiful and historic city of Ostrava (Czech Republic), in September 2012.

CISIS aims 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.

After a thorough peer-review process, the CISIS 2012 International Program Committee selected 30 papers which are published in these conference proceedings achieving an acceptance rate of 40%.

In the case of ICEUTE 2012, the International Program Committee selected 4 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 the creation of a high standard conference and the CISIS and ICEUTE conferences would not exist without their help.

CISIS 2012 and ICEUTE 2012 enjoyed outstanding keynote speeches by distinguished guest speakers: Prof. Ponnuthurai Nagarathnam Suganthan, Prof. Jeng-Shyang Pan, Prof. Marios M. Polycarpou, Prof. Fanny Klett and Mr. Milan Kladniecek.

For this special edition, as a follow-up of the conference, we anticipate further publication of selected papers in a special issue of the prestigious *Logic Journal of the IGPL* Published by Oxford Journals.

Particular thanks go as well to the Conference main Sponsors, IT4Innovations, VŠB-Technical University of Ostrava, IEEE.- Systems, Man and Cybernetics Society CzechoSlovakia, IEEE.- Systems, Man and Cybernetics Society Spain, MIR labs, Spanish Association for Artificial Intelligence and IFCOLOG.

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 CISIS 2012 and ICEUTE 2012 events.

September, 2012

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### Text Processing Applications to Secure and Intelligent Systems

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## Soft Computing Models for Biomedical Signals and Data Processing

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## **Advanced Soft Computing Methods in Computer Vision and Data Processing**

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