

Introduction

The 18th International Conference on Systems, Signals and Image Processing (IWSSIP) was held in Sarajevo, Bosnia and Herzegovina, June 16–18, 2011. The conference was organized by Faculty of Electrical Engineering University of Sarajevo, in co-operation with BH Telecom, Ericsson Nikola Tesla, IskraTel and Bosnien Business Systems. Technical co-sponsorship were IEEE Region 8 and European Association for Signal, Speech and Image Processing.

IWSSIP is an annual event on signal and image processing systems. It brings together researchers and developers from both, academia and industry to discuss major issues and to debate the state-of-the-art systems.

We had 169 papers submitted for possible presentation at IWSSIP'2011. Out of these, 122 papers from 42 countries were accepted for presentation at the conference and inclusion in its proceedings in the form of a CD. The papers are mainly in the following topics: Information, Application and Network Security; Image and Video; Signal Processing and Technologies; Wireless Communications and Techniques for Multimedia Signal Transmission; Speech and Audio; Multimedia Communications, Networking, Services and Applications.

Authors of 23 most innovative papers were invited to submit substantially improved and updated papers for possible publication in this special issue. Each substantially extended paper was subsequently reviewed by 3 to 5 reviewers using the ICAE review form. The seven papers that passed through the journal's rigorous review process successfully are included in this issue.

We would like to express our thanks to all the reviewers and authors for their efforts during the process. We hope that this will be an interesting report and a high-impact issue on the latest advances in the area.

Our very special thanks to Prof. *Dr. Hojjat Adeli*, founder and *editor-in-chief* of the journal, for his great job in identifying and publishing the highest quality papers. This volume would not have been possible without his immense experience and effort. Finally, we wish to invite all readers to participate in the IWSSIP-2013 to be held in Bucharest, June 20–22 2013.

Branka Zovko-Cihlar and Narcis Behlilovic

Co-Chairs of 18th International Conference on Systems, Signals and Image Processing, IWSSIP 2011 held in Sarajevo – Bosnia and Herzegovina