

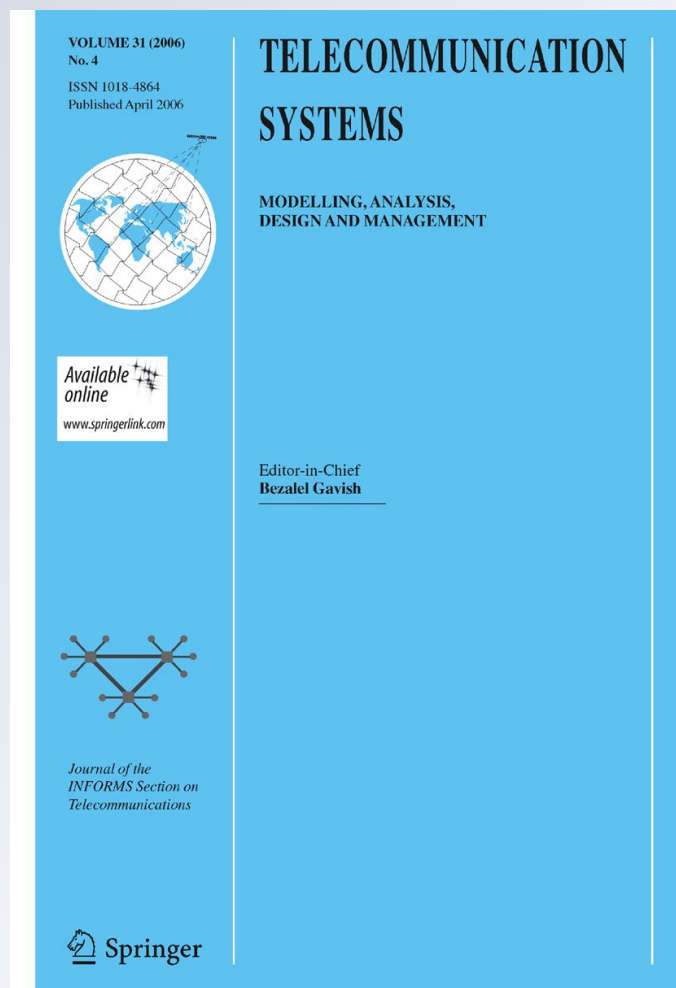
# Editorial

## Gregor Rozinaj

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## Editorial

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International Conference on Systems, Signals and Image Processing (IWSSIP) is an extraordinary conference started as an initiative of a group of scientific and academical experts in Central and Eastern Europe in 1994 to open a platform for idea and experience exchange in the field of systems, signals and image processing. Since that time, IWSSIP took place every year on various places. In a couple of years the conference has attracted the perspective authors not only from Europe but from all continents. IWSSIP 2008 hosted authors from 42 countries (85 from 196 paper proposals overseas).

We aim at bringing together a community of researchers working in related areas such as general signal processing, image and speech processing, multimedia networks and applications, communication networks and others. The present technology allows the convergence not only of the various types of networks, but integrating numerous mostly multimedia applications into complex, usually network oriented solutions. Our intention is not to bring the complex view on the mentioned topics, as they are too wide to be covered within several monographs, even, but to point several problems or better solutions in this field. The problem of security becomes more complex, spread from file protection to network security and combined multimedia network security. New improvement and enhancement of multimedia coding and processing are still a question of the present days. Wireless networks in various aspects from MIMO to large scale systems and network convergence are a solution for the actual keyword “mobility” and the methods of information transfer increase on speed, quality and security. Very important part of the research without any doubt is the

topic of a human-machine interface (HCI). The necessity of permanent communication, access to the information, being accessible “online” in various situation of the common life increases dramatically and a demand of natural communications with computers based mostly on speech and image communication is extremely actual.

In this Special Issue we present enhanced and updated versions of selected papers.

In a first paper “Content protection in greyscale and colour images based on the robust digital watermarking” R. Ridzoň and D. Levický describe a watermarking method for the colour images robust against geometrical attacks.

The second paper “VLC Table Prediction for CAVLC in H.264/AVC using Correlation, Statistics, and Structural Characteristics of Mode Information” written by Jin Heo and Yo-Sung Ho is dedicated to the new VLC table prediction algorithm using both the correlation of coding mode and the statistics of mode distribution in intra and inter frames.

A. Conci, R.H.C. de Melo in a paper “How Succolarity could be used as another fractal measure in image analysis” have reported about their work in Succolarity and a computational method based on fractal dimension. Next paper “On Multi Agent based Modelling and Control in Large Scale Wireless Communication Systems for Improved Resource Allocation Performance”, authors P.M. Papazoglou, D.A. Karras and R.C. Papademetriou describes a method of control in large scale wireless communication systems for improved resource allocation performance.

The article “Analysis of ARQ Schemes” presented by K. Kotuliaková, D. Šimlaščíková and J. Polec aimed at the problem of using ARQ schemes with analysis of the throughput performance of pure and hybrid ARQ techniques.

J. Kačur and G. Rozinaj in “Building accurate and robust HMM models for practical ASR systems” suggest the use

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of accurate and robust HMM models and the enhancement of the standard training procedure by introducing garbled speech models.

The paper “Optimization of Association Procedure in WiMAX Networks with Relay Stations” by Pavel Mach, Robert Bestak and Zdenek Becvar is devoted to the procedure in the IEEE 802.16 standards in PMP mode enhancing the standard procedure in relay scenarios by adding a new phase called Path selection.

Finally, the article “Provisioning of VoIP Services for Mobile Subscribers Using WiFi Access Network” written by R. Vargic, I. Kotuliak, A. Vrábel and F. Husák describes

the possibility to securely Access application servers within IMS architecture and a test bed for integration and testing of SIP and non-SIP services.

We hope that this Special Issue contributes to the various aspects of ICT research, helps to find other researchers working in the field and motivates the addressed community to continue in the relevant research challenges.

We express our gratitude to all authors for their contribution and confidence to this Journal. We would like to thank all reviewers for their valuable time and effort within the review process and for providing invaluable comments and suggestions to the authors.