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Multimedia and Network Information Systems

Proceedings of the 10th International
Conference MISSI 2016

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Preface

The International Conference “*Multimedia and Network Information Systems*”—MISSI 2016 organized by the Wrocław University of Science and Technology in Poland is an international scientific biennial conference for research on the field of multimedia and different aspects of Internet systems. This volume contains the proceedings of its 10th jubilee edition. The aim of the conference is to provide an internationally respected forum for research work on these areas. This conference covers their theoretical or practical aspects.

The MISSI Conferences are already a well-established event. During the span of the 20 years when the conference has been held we have the opportunity to see how the research area evolves, how new topics raised and the once formidable problems were solved. We have the privilege to host participants mostly from European countries but also from Asia, Africa, and America. The jubilee edition is no exception to the rule.

We have received 64 papers. All of them were reviewed by at least two members of the International Reviewer Board. The board has selected 36 papers with the highest quality for oral presentation and publication in the proceedings. All of them are original and were not published anywhere else.

This high turnout is probably due not only to the conference reputation but also due to the area it covers. The MISSI Conference is a specialized conference but the interest in multimedia and network systems does not wane. It grows with every year. Looking back over the previous editions of the conference we see that many of the subjects then fiercely discussed such as handwriting recognition or others are now embedded in everyday products.

The papers included in the proceedings cover among others the following topics: lip speech identification, user recognition based on fingerprint analysis, playing field detection in sports video shots, machine translation into mobile augmented reality systems, fast transmission of 3D computer graphics in the Web, brain computer interfaces for game control, prediction of topic popularity on online social networks, evaluating the quality of Internet LTE connections, movie recommendation using collaborative filtering, parallel implementations of ant colonies,

mitigating the dangerous activities of Web robots, various aspects of natural language processing with an emphasis on multilingual data access and statistical machine translation, question answering, named entity recognition, prediction of topics popularity on online social networks, RDF event stream processing, personalization of learning process using behavioral measures.

Some papers have theoretical character while others describe innovative applications. During the presentations and following discussions the presenters had the opportunity to exchange ideas and it was fascinating to see how these two approaches could interact and inspire each other.

Our special thanks go to the General Chair, Steering Committee, Program Chairs, Special Session Chairs, Organizing Chair, and Publicity Chair for their work for the conference. Without their help it would be impossible to guarantee the high quality of the papers presented at the conference.

We would like to express our thanks to the keynote speakers: Prof. Grzegorz Dobrowolski (AGH University of Science and Technology, Poland), Prof. Janusz Kacprzyk (Polish Academy of Sciences, Poland), and Prof. Gottfried Vossen (University of Münster, Germany) for their topical and inspiring talks.

Finally, we thank all the authors for their valuable contributions and all other participants of the conference. The success of the conference would not be possible without their involvement.

We sincerely hope that we have achieved our goal of providing the research community the up-to-date account on the work on rapidly evolving field of multimedia and Internet data processing. We would be pleased if the Conference could stimulate and inspire further research work on these areas.

This would be the greatest award for our effort on organizing the MISSI 2016 Conference.

Wrocław, Poland
June 2016

Aleksander Zgrzywa
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