



**10<sup>th</sup> International Conference on  
Multimedia and Network Information Systems - MISSI 2016  
September 14 – 16, 2016**

Wrocław University of Science and Technology, Department of Information Systems  
Poland, Wrocław, ul. Łukasiewicza 5 (building B4)

**Day 1. Wednesday, September 14, 2016**

10 <sup>00</sup> – 11 <sup>00</sup>	Registration Location: building B4, room 433	
11 <sup>00</sup> – 11 <sup>30</sup>	Opening Ceremony Speakers: prof. Aleksander Zgrzywa and prof. Nguyen Ngoc Thanh Location: b. B4, r. 448	
11 <sup>30</sup> – 13 <sup>00</sup>	Plenary Session 1 Speaker: prof. Gottfried Vossen Location: b. B4, r. 448	
13 <sup>00</sup> – 15 <sup>00</sup>	Lunch Break Location: b. B4, r. 447	
15 <sup>00</sup> – 16 <sup>30</sup>	Session 1: Images and Videos – VR and AR Location: b. B4, r. 227	Session 2: Tools and Applications Location: b. B4, r. 228
16 <sup>30</sup> – 17 <sup>00</sup>	Coffee Break – b. B4, r. 447	
17 <sup>00</sup> – 18 <sup>30</sup>	Session 3: Images and Videos – VR and AR Location: b. B4, r. 227	Session 4: Tools and Applications Location: b. B4, r. 228
19 <sup>00</sup> – 21 <sup>00</sup>	Reception Party Location: Professorial Club, b. A1, r. 238	

**Day 2. Thursday, September 15, 2016**

8 <sup>30</sup> – 10 <sup>00</sup>	Session 5: Natural Language in Infor. Sys. Location: b. B4, r. 227	Session 6: Internet and Network Techn. Location: b. B4, r. 228
10 <sup>00</sup> – 11 <sup>30</sup>	Plenary Session 2 Speaker: prof. Grzegorz Dobrowolski Location: b. B4, r. 448	
11 <sup>30</sup> – 12 <sup>00</sup>	Coffee Break – b. B4, r. 447	
12 <sup>00</sup> – 14 <sup>00</sup>	Bus transfer to Książ Castle	
14 <sup>00</sup> – 16 <sup>00</sup>	Panel Discussion (at Książ Castle)	
16 <sup>00</sup> – 18 <sup>00</sup>	Visiting Książ Castle Bus transfer to Książ Castle	
19 <sup>00</sup> – 21 <sup>00</sup>	Conference Dinner Location: Ślęza Mill, Szczepanów (between Świdnica and Wrocław)	

**Day 3. Friday, September 16, 2016**

8 <sup>30</sup> – 10 <sup>00</sup>	Session 9: Voice Interactions in Multimedia Systems Location: b. B4, r. 448	
10 <sup>00</sup> – 11 <sup>30</sup>	Session 7: Natural Language in Infor. Sys. Location: b. B4, r. 448	Session 8: Internet and Network Techn. Location: b. B4, r. 228
11 <sup>30</sup> – 12 <sup>00</sup>	Coffee Break – b. B4, r. 447	
12 <sup>00</sup> – 13 <sup>30</sup>	Plenary Session 3 Speaker: prof. Janusz Kacprzyk Location: b. B4, r. 448	
13 <sup>30</sup> – 14 <sup>00</sup>	Closing Ceremony Speaker: prof. Aleksander Zgrzywa Location: b. B4, r. 448	
14 <sup>00</sup> – 15 <sup>00</sup>	Lunch Break Location: b. B4, r. 447	

## Plenary Session 1

Chair: **prof. Dosam Hwang**

Title: **The Price of Data**

Speaker: **prof. Gottfried Vossen**

## Plenary Session 2

Chair: **prof. Kazimierz Choroś**

Title: **Agency of Computer Systems**

Speaker: **prof. Grzegorz Dobrowolski**

## Plenary Session 3

Chair: **prof. Aleksander Zgrzywa**

Title: **Collective decisions in human centric IT/ICT systems: a crucial role of affects, judgments and intentions**

Speaker: **prof. Janusz Kacprzyk**

## Session 1: Images and Videos – Virtual and Augmented Reality

Chairs: **Janusz Kowalski and Maria Pietruszka**

1. Building Knowledge for the Purpose of Lip Speech Identification: **Andrzej Czyżewski, Bożena Kostek, Marcin Szykulski and Tomasz E. Ciszewski**
2. PNG as fast transmission format for 3D computer graphics in the Web: **Daniel Dworak and Maria Pietruszka**
3. An Asymmetric Approach to Signature Matching: **Tatiana Jaworska**
4. Automatic Playing Field Detection and Dominant Color Extraction in Sports Video Shots of Different View Types: **Kazimierz Choroś**

## Session 2: Tools and Applications

Chairs: **Hanen Faiez and Jerzy Kisilewicz**

1. An Effective Collaborative Filtering Based Method for Movie Recommendation: **Rafał Palak and Ngoc-Thanh Nguyen**
2. Detection of Security Incidents in a Context of Unwelcome or Dangerous Activity of Web Robots: **Marcin Jerzy Orzel and Grzegorz Kończak**
3. A Linux Kernel Implementation of the Traffic Flow Description Option: **Robert R. Chodorek and Agnieszka Chodorek**
4. SelfAid Network — a P2P Matchmaking Service: **Michał Boroń, Jerzy Brzeziński and Anna Kobusińska**

## Session 3: Images and Videos – Virtual and Augmented Reality

Chairs: **Bożena Kostek and Marcin Pietranik**

1. Multi-label Classification with Label Correlations of Multimedia Datasets: **Kinga Glinka and Danuta Zakrzewska**
2. Implementing Statistical Machine Translation into Mobile Augmented Reality Systems: **Krzysztof Wołk, Agnieszka Wołk, and Krzysztof Marasek**
3. The Use of the Universal Quality Index for User Recognition Based on Fingerprint Analysis: **Jakub Pęksiński, Grzegorz Mikołajczak, and Janusz Kowalski**
4. A Compound Moving Average Bidirectional Texture Function Model: **Michal Haindl and Michal Havlíček**

## Session 4: Tools and Applications

Chairs: **Muhammad Abu Ul Fazal and Robert Choderek**

1. Measuring efficiency of Ant Colony Communities: **Andrzej Siemiński**
2. Communication Approach in Distributed Systems on .NET Platform: **Aneta Poniszewska-Maranda and Piotr Wasilewski**
3. The quality of Internet LTE Connections in Wrocław: **Jerzy Kisilewicz**
4. Stereoscopic 3D Graph Visualization For Assisted Data Exploration and Discovery: **Michał Turek, Dariusz Pałka, and Marek Zachara**

## Session 5: Natural Language in Information Systems

Chairs: **Dosam Hwang and Jarosław Jankowski**

1. Semi-Automatic and Human-Aided Translation Evaluation Metric (HMEANT) for Polish Language in Re-Speaking and MT Assessment: **Krzysztof Wołk, Danijel Korzinek, and Krzysztof Marasek**
2. Analysis of Complexity between Spoken and Written Language for Statistical Machine Translation in West-Slavic Group: **Agnieszka Wołk, Krzysztof Wołk, and Krzysztof Marasek**
3. Interactive Gradually Generating Relevance Query Refinement under the Human-Mediated Scenario in Multilingual Settings: **Jolanta Mizera-Pietraszko and Aleksander Zgrzywa**
4. Definition of Requirements for Accessing Multilingual Information and Opinions: **Mikołaj Leszczuk, Jan Derkacz, Michał Grega, Arian Koźbiał, and Kamel Smaïli**

## Session 6: Internet and Network Technologies

Chairs: **Marek Kopel and Jozef Pócs**

1. Prediction of Topics Popularity on On-Line Social Networks: **František Babič and Anna Drábiková**
2. eanaliza.pl – A New Online Service for Financial Analysis: **Tomasz Jastrząb, Monika Wieczorek-Kosmala, Joanna Błach, and Grzegorz Kwiatkowski**
3. Hierarchical Topic Modeling Based on the Combination of Formal Concept Analysis and Singular Value Decomposition: **Miroslav Smatana and Peter Butka**
4. RDF Event Stream Processing based on the Publish-Subscribe pattern: **Dominik Tomaszuk**

## Session 7: Natural Language in Information Systems

Chairs: **Mikołaj Leszczuk and Andrzej Siemiński**

1. Query Answering to IQ Test Questions Using Word Embedding: **Michał Frąckowiak, Jakub Dutkiewicz, Czesław Jędrzejek, Marek Retinger, and Paweł Werda**
2. Identification of a Multi-Criteria Assessment Model of Relation Between Editorial and Commercial Content in Web Systems: **Jarosław Jankowski, Wojciech Sałabun, and Jarosław Wątróbski**
3. Unsupervised Construction of Quasi-Comparable Corpora and Probing for Parallel Textual Data: **Krzysztof Wołk and Krzysztof Marasek**
4. Active Learning-Based Approach for Named Entity Recognition on Short Text Streams: **Cuong Van Tran, Tuong Tri Nguyen, Dinh Tuyen Hoang, Dosam Hwang and Ngoc Thanh Nguyen**

## Session 8: Internet and Network Technologies

Chairs: **František Babič and Bogdan Trawiński**

1. Influence of Message-Oriented Middleware on Performance of Network Management System: a Modelling Study: **Krzysztof Grochla, Mateusz Nowak, Piotr Pecka, and Sławomir Nowak**
2. Ant Colony Optimization in Hadoop ecosystem: **Marek Kopel**
3. Personalisation of Learning Process in Intelligent Learning Systems Using Behavioural Measures: **Piotr Chynał, Adrianna Kozierekiewicz-Hetmańska, and Marcin Pietranik**
4. Two-step Reduction of GOSCL Based on Subsets Quality Measure and Stability Index: **Peter Butka, Jozef Pócs and Jana Pócsová**

## Session 9: Voice Interactions in Multimedia Systems

Chairs: **Peter Butka and Grzegorz Dobrowolski**

1. Multiple Information Communication in Voice-based Interaction: **Muhammad Abu UI Fazal and Muhammad Shuaib Karim**
2. Separability Assessment of Selected Types of Vehicle-Associated Noise: **Adam Kurowski, Karolina Marciniuk, and Bożena Kostek**
3. Popular Brain Computer Interfaces for Game Mechanics Control: **Dominik Szajerman, Michał Warycha, Arkadiusz Antonik, and Adam Wojciechowski**
4. Pervasive System for Determining the Safe Region Among Obstacles: Mobile Doctor on the Road Case Study: **Hanen Faiez and Jalel Akaichi**