

Thursday, October 4th

09.00 – 10.00	Registration Reception desk Vilnius Grand Resort, Ežeraičių g. 2, Ežeraičių km., Vilnius distr.	
10.00 – 11.00	Opening Ceremony Prof. dr. Robertas Damaševičius, Faculty of Informatics	Conference Hall “Belvedere”
11.00 – 12.00	KEY NOTE Prof. dr. Patrick S.P. Wang “AI & PR and Applications for Greener and Safer World” Northeastern University, USA	
12.00 – 12.30	Coffee Break	
12.30 – 13.30	KEY NOTE Assoc. prof. dr. Eric T. Matson “Development of Self-Organizing Counter Autonomous Systems with the HARMS Integration Model” Purdue University, USA	Conference Hall “Belvedere”
13.30 – 15.00	Lunch Restaurant “Tilia” at Vilnius Grand Resort **** (1 st floor)	
15.30 – 21.00	Cultural programme and dinner <ul style="list-style-type: none"> • Excursion “Discover Vilnius Old Town” • Dinner at restaurant “Grey” in Vilnius Old Town 	

Friday, October 5th

09.30 – 10.00	Registration Reception desk, Vilnius Grand Resort	
10.00 – 11.00	Tutorial Dr. Zbigniew Marszałek and Dr. Dawid Połap “The Efficiency of Computing by the Use of Modern Architectures: The Case of IoT and Big Data Sorting” Silesian University of Technology, Poland	Conference Hall “Allegro”
11.00 – 11.30	Coffee Break	
11.30 – 13.30	Sessions	
<p>SESSION 1</p> <p>Information Systems Special Session on e-Health Information Systems and Special Session on Digital Transformation Chaired by Prof. dr. Rolf Engelbrecht and Prof. dr. Carsten Wolff, Conference Hall “Allegro”</p> <ol style="list-style-type: none"> 1. Rate Your Physician: Findings from a Lithuanian Physician Rating Website Frederik S. Bäumer, Joschka Kersting, Vytautas Kuršelis and Michaela Geierhos 2. Design of an Operator-Controller Based Distributed Robotic System Uwe Jahn, Carsten Wolff, and Peter Schulz <p>Information Systems Special Session on Information and Software Technologies for Intelligent Power System Chaired by Assoc. prof. dr. Vira Shendryk, Conference Hall “Allegro”</p> <ol style="list-style-type: none"> 3. Deployment of Battery Swapping Stations for Unmanned Aerial Vehicles Subject to Cyclic Production Flow Constraints Grzegorz Bocewicz, Peter Nielsen, Zbigniew Banaszak, and Amila Thibbotuwawa 4. Integral Fuzzy Power Quality Assessment for Decision Support System at Management of Power Network with Distributed Generation Sergii Tymchuk, Oleksandr Miroshnyk, Sergii Shendryk, and Vira Shendryk 		

SESSION 2

Information Systems

Special Session on Innovative Applications for Knowledge Transfer Support

Chaired by Prof. dr. Justyna Patalas-Maliszewska, Conference Hall "Andante"

- 1. An Information System Supporting the Eliciting of Expert Knowledge for Successful IT Projects**
Justyna Patalas-Maliszewska and Irene Krebs
- 2. Metis: A Scalable Natural-Language-Based Intelligent Personal Assistant for Maritime Services**
Nikolaos Gkanatsios, Konstantina Mermikli, and Serafeim Katsikas
- 3. Knowledge Acquisition Using Computer Simulation of a Manufacturing System for Preventive Maintenance**
Sławomir Kłos
- 4. Competence Management in Teacher Assignment Planning**
Eryk Szwarc, Irena Bach-Dąbrowska and Grzegorz Bocewicz

SESSION 3

Software Engineering

Special Session on Intelligent Systems and Software Engineering Advances

Chaired by Assoc. prof. dr. Marcin Woźniak, Conference Hall "Moderato"

- 1. SVM Accuracy and Training Speed Trade-off in Sentiment Analysis Tasks**
Konstantinas Korovkinas, Paulius Danėnas, and Gintautas Garšva
- 2. J48S: a Sequence Classification Approach to Text Analysis based on Decision Trees**
Andrea Brunello, Enrico Marzano, Angelo Montanari, and Guido Sciacicco
- 3. TabbyXL: a Framework for Rule-Based Spreadsheet Data Extraction**
Alexey Shigarov, Vasiliy Khristyuk, Andrey Mikhailov, Viacheslav Paramonov, and Gennadiy Ruzhnikov
- 4. Modification of Parallelization for Fast Sort Algorithm**
Zbigniew Marszałek

13.30 –
15.00

Lunch

Restaurant "Tilia" at Vilnius Grand Resort **** (1st floor)

15.00 –
16.30

Sessions

SESSION 4

Business Intelligence for Information and Software Systems

Special Session on Intelligent Methods for Data Analysis and
Computer-Aided Software Engineering

Chaired by Prof. dr. Audrius Lopata, Conference Hall “Allegro”

- 1. Adaptive Resource Provisioning and Auto-scaling for Cloud Native Software**
Olesia Pozdniakova, Dalius Mažeika, and Aurimas Cholomskis
- 2. Cloud Software Performance Metrics Collection and Aggregation for Auto-Scaling Module**
Aurimas Cholomskis, Olesia Pozdniakova, and Dalius Mažeika
- 3. Application of SEO Metrics to Determine the Quality of Wikipedia Articles and Their Sources**
Włodzimierz Lewoniewski, Ralf-Christian Härting, Krzysztof Węcel, Christopher Reichstein, and Witold Abramowicz
- 4. How to Describe Basic Urban Pattern in Geographic Information Systems**
Indraja E. Germanaitė, Rimantas Butleris, and Kęstutis Zaleckis
- 5. Problem Domain Knowledge Driven Generation of UML Models**
Ilona Veitaitė and Audrius Lopata
- 6. Visualization for Open Access – a Case Study of Karlstad University and the University of Makerere in Uganda**
Prima Gustiené

SESSION 5

Information Technology Applications

Special Session on Smart e-Learning Technologies and Applications
Chaired by Assoc. prof. Danguolė Rutkauskienė, Conference Hall
“Andante”

- 1. WBT-Master - Modern Learning Management System**
Nikolai Scerbakov and Frank Kappe
- 2. The Mobile Application Based on Augmented Reality for Learning STEM Subjects**

	<p>Tomas Valatkevičius, Andrius Paulauskas, Tomas Blažauskas, and Reda Bartkutė</p> <p>3. The Ways of Using Augmented Reality in Education Daina Gudonienė and Tomas Blažauskas</p> <p>4. Experience with Distance Learning of Informatics Rostislav Fojtík</p> <p>SESSION 3 (part 2) Software Engineering Special Session on Intelligent Systems and Software Engineering Advances Chaired by Dr. Zbigniew Marszałek, Conference Hall “Moderato”</p> <p>1. Text Semantics and Layout Defects Detection in Android Apps Using Dynamic Execution and Screenshot Analysis Šarūnas Packevičius, Dominykas Barisas, Andrej Ušaniov, Evaldas Guogis, and Eduardas Bareiša</p> <p>2. The Impact of the Cost Function on the Operation of the Intelligent Agent in 2D Games Dawid Połap and Marcin Woźniak</p> <p>3. Automated Design Thinking Oriented on Innovatively Personified Projects Petr Sosnin</p> <p>4. A Comparison of Concept and Global Probabilistic Approximations Based on Mining Incomplete Data Patrick G. Clark, Cheng Gao, Jerzy W. Grzymala-Busse, Teresa Mroczek, and Rafał Niemiec</p> <p>5. A Study in Granular Computing: Homogenous Granulation Krzysztof Ropiak and Piotr Artiemjew</p>	
<p>16.30 – 18.30</p>	<p>Tutorial Prof. dr. Vladimir Uskov and prof. dr. Jeffrey P. Bakken “From Traditional to Smart University: Information and Software Technologies Based Approach” InterLabs Research Institute, Bradley University, USA</p>	<p>Conference Hall “Moderato”</p>
<p>18.30 – 21.00</p>	<p>Fourchette at Restaurant “Tilia” of Vilnius Grand Resort **** (1st floor)</p>	

Saturday, October 6th

09.00 – 09.30	Registration Reception desk, Vilnius Grand Resort	
09.30 – 10.30	KEY NOTE Assoc. Prof. Dr. Seifedine Cadry “Big Data and Smart Cities” Beirut Arab University, Lebanon	Conference Hall “Allegro”
10.30 – 11.00	Coffee Break	
11.00 – 12.00	Workshop on Better Information for Better Health Care Prof. dr. Rolf Engelbrecht EFMI - European Federation for Medical Informatics, Germany	Conference Hall “Allegro”
12.00 – 13.40	Sessions	
<p>SESSION 6 Information Technology Applications Special Session on Language Technologies Chaired by Assoc. prof. Jurgita Kapočiūtė-Dzikiėnė, Conference Hall “Allegro”</p> <ol style="list-style-type: none"> 1. Word and Phrase Dictionaries Generated with Multiple Translation Paths Jouko Vankka, Christoffer Aminoff, Dmitriy Haralson, and Janne Siipola 2. Sentiment Analysis of Lithuanian Texts Using Deep Learning Methods Jurgita Kapočiūtė-Dzikiėnė, Robertas Damaševičius and Marcin Woźniak 3. Improvement of Reverse Dictionary by Tuning Word Vectors and Category Inference Yuya Morinaga and Kazunori Yamaguchi 4. Determining Quality of Articles in Polish Wikipedia Based on Linguistic Features Włodzimierz Lewoniewski, Krzysztof Węcel, and Witold Abramowicz 5. NLP in OTF Computing: Current Approaches and Open Challenges Frederik S. Bäumer and Michaela Geierhos 6. Text Augmentation Techniques for Document Vector Generation from Russian News Articles 		

Christoffer Aminoff, Aleksei Romanenko, Onni Kosomaa, and Jouko Vankka

SESSION 3 (part 3)

Software Engineering

Special Session on Intelligent Systems and Software Engineering Advances

Chaired by Dr. Dawid Połap, Conference Hall "Andante"

- 1. Detection of Dental Filling Using Pixels Colour Recognition**
Oleksandra Osadcha, Agata Trzcionka, Katarzyna Pachońska, and Marek Pachoński
- 2. The Use of an Artificial Neural Network for a Sea Bottom Modelling**
Jacek Lubczonek, Marta Włodarczyk-Sielicka
- 3. Application of an Ant Colony Optimization Algorithm in Modeling the Heat Transfer in Porous Aluminum**
Rafał Brociek, Damian Słota, Mariusz Król, Grzegorz Matula, and Waldemar Kwaśny
- 4. Model Driven Architecture Implementation using Linked Data**
Evgeny Cherkashin, Alexey Kopaygorodsky, Ljubica Kazi, Alexey Shigarov, and Vyacheslav Paramonov
- 5. Data Analysis Algorithm for Click Fraud Recognition**
Marcin Gabryel

13.40 – **Lunch**

15.00 Restaurant "Tilia" of Vilnius Grand Resort **** (1st floor)

15.00 – **Closing ceremony. Best Paper Awards.**

15.30 Prof. dr. Robertas Damaševičius

Conference Hall "Allegro"