

Tuesday, November 14th 2017

10.00-12.00 Registration of participants in Poprad
Hotel Poprad

Conference opening (with Lunch)

13.00

Session A: Invited lectures (Plenary session)

14.00-15.30

Chairmen: Valerie Novitzká, William Steingartner

Imre Rudas

Augmented Virtuality for the Next Generation Production Intelligence

Sonja Ristić

How to Apply Model-Driven Paradigm in Information System

(Re)Engineering

Andrzej Grzybowski

On some recent advancements within the pairwise comparison methodology

15.30-16.00 Coffee break

Session B: Theoretical Computer Science

16.00-18.00

Chairwoman: Sonja Ristić

16.00-16.20 Michal Kvet, Karol Matiaszko

Temporal data retrieval effectivity

16.20-16.40 William Steingartner, Mohamed Ali M. Eldojali,
Davorka Radaković and Jiří Dostál

Software support for course in Semantics of programming languages

16.40-17.00 Uroš Čibej, Jurij Mihelič

Heuristic sampling for the subgraph isomorphism problem

17.00-17.20 Liberios Vokorokos, Zuzana Bilanová, Daniel Mihályi

Linear Logic Operators in Transparent Intensional Logic

17.20-17.40 Ján Perháč, Daniel Mihályi, Lukáš Mat'áš

Resource Oriented BDI Architecture for IDS

17.40-18.00 Michal Sičák, Ján Kollár

Supercombinator Driven Grammar Reconstruction

Session C: Applied Informatics

16.00-18.20

Chairman: Zbigniew Domański

16.00-16.20 István Lakatos, Illés Lőrincz, Ádám Titrik

Logistic conception for real-time based info-communication system applied in selective waste gathering

16.20-16.40 Petr Šaloun, Martin Malčík, David Andrešič, David Nespěšný

Using Eyetracking to Analyse How Flowcharts Are Understood

16.40-17.00 Michal Vrábek, Ján Genčí, Pavol Bobik

Low-level computer vision techniques for processing of extensive air shower track images

17.00-17.20 Andrzej Z. Grzybowski, Piotr Puchala

Monte Carlo Simulation in the Evaluation of the Young Functional Values

17.20-17.40 Pawel Drag, Krystyn Styczeń

The variability constraints in simulation of index-2 differential-algebraic processes

17.40-18.00 Lukáš Čegan, Petr Filip

Advanced web analytics tool for mouse tracking and real-time data processing

18.00-18.20 Karol Matiaško, Michal Kvet

Medical data management

Session D: Artificial Intelligence

16.00-18.00

Chairwoman: Jarmila Škrinárová

16.00-16.20 Jindřich Skupa, Jiří Šafařík

Survey of traffic prediction methods for dynamic routing in overlay network

16.20-16.40 Marko Arsenovic, Srdjan Sladojevic, Andras Anderla,
Darko Stefanovic, Bojan Lalic

Deep learning powered automated tool for generating image based datasets

16.40-17.00 Peter Halaš, Marek Lóderer, Viera Rozinajová

Prediction of Electricity Consumption using Biologically Inspired Algorithms

17.00-17.20 Zoltán Subecz

*Event Detection in Hungarian Texts with Dependency and Constituency
Parsing and WordNet*

17.20-17.40 Peter Laurinec, Mária Lucká

*New Clustering-based Forecasting Method for Disaggregated End-consumer
Electricity Load Using Smart Grid Data*

17.40-18.00 Tomáš Jarábek, Peter Laurinec, Mária Lucká

*Energy Load Forecast Using S2S Deep Neural Networks with k -Shape
Clustering*

Session E: Computer Graphics and Virtual Reality

16.00-18.00

Chairwoman: Mária Lucká

16.00-16.20 Emir Buza, Amila Akagic, Samir Omanovic, Haris Hasic
Unsupervised Method for Detection of High Severity Distresses on Asphalt Pavements

16.20-16.40 Michal Vagač, Michal Povinský, Miroslav Melicherčík
Detection of shoe sole features using DNN

16.40-17.00 Marián Hudák, Štefan Korečko, Branislav Sobota
Peripheral Devices Support for LIRKIS CAVE

17.00-17.20 Dana Horváthová, Vladimír Siládi
Creation of interactive panoramic video for phobia treatment

17.20-17.40 Konstantin S. Kurachka, Ihar M. Tsalka
Vertebrae Detection in X-Ray Images Based on Deep Convolutional Neural Networks

17.40-18.00 Ivan Plander, Michal Štepanovský
MEMS technology in optical switching

19.00 Welcome Party with Dinner

Wednesday, November 15th 2017

Session F: Information System Research

9.00-12.00

Chairman: Andrzej Z. Grzybowski

9.00-9.20 Paweł Kossecki, Łukasz Korc, Stefan Kossecki

*Valuation of Intellectual Property – Income Approach and Scenario Analysis.
Software on Early Stage of Implementation*

9.20-9.40 Milan Jičínský, Jaroslav Marek

Clustering analysis of phonetic and text feature vectors

9.40-10.00 Serkan Savaş, Nurettin Topaloğlu

Crime Intelligence from Social Media: A Case Study

10.00-10.20 Zuzana Dankovičová, Peter Drotár, Juraj Gazda,
Liberios Vokorokos

Overview of the Handwriting Processing for Clinical Decision Support System

10.20-10.40 Coffee break

10.40-11.00 Jakub Oravec, Ján Turán

*Substitution Steganography with Security Improved by Chaotic Image
Encryption*

11.00-11.20 Ľuboš Ovseník, Ján Turán, Tomáš Ivaniga, Petr Ivaniga

Deployment of the PON with an Optical Fibre G-652.B

11.20-11.40 Dávid Solus, Ľuboš Ovseník, Ján Turán

*Usage of Optical Correlator in Video Surveillance System for Abandoned
Luggage*

11.40-12.00 Michal Márton, Ľuboš Ovseník, Michal Špes

Measurement Effect of Visibility in Experimental FSO systém

Session G: Computer Architectures and Networks

9.00-12.00

Chairman: William Steingartner

9.00-9.20 Branislav Madoš, Ján Hurtuk, Eva Chovancová, Peter Feciľák, Dávid Bajkó

Downsizing of Web Server Design Using Raspberry Pi 3 Single Board Computer Platform

9.20-9.40 Maksat N. Kalimoldayev, Vladimir Siládi, Maxat N. Satymbekov, Lyazat Naizabayeva

Solving Mean-Shift Clustering Using MapReduce Hadoop

9.40-10.00 Vladimir Siládi, Michal Povinský, Ľudovít Trajtelľ, Maxat N. Satymbekov

Adapted parallel Quine-McCluskey algorithm using GPGPU

10.00-10.20 Ammar Ahmed Khan, Mika Ahistus, Tero Liukko, Joni Lumela, Otto Sassi, Seppo J. Ovaska

aaltOS for Energy Harvesting Applications: Effects of Clock Frequency and System Tick on Power and Energy Consumption

10.20-10.40 Coffee break

10.40-11.00 Jurij Mihelič, Uroš Čibej

Dataflow Processing of Matrices and Vectors: Experimental Analysis

11.00-11.20 Juraj Mihaľov, Michal Hulič

NFC/RFID technology using Raspberry Pi as platform used in Smart Home project

11.20-11.40 Sabina Szymoniak, Olga Siedlecka-Lamch, Mirosław Kurkowski

SAT-based Verification of NSPK Protocol Including Delays in the Network

11.40-12.00 Branislav Sobota, Milan Guzan

Calculation of Cross-Sections of Boundary Surface Using Parallelization

Session H: Applied Informatics

9.00-12.00

Chairman: Gábor Sági

9.00-9.20 Ján Boháčik, Michal Zábovský

Nearest Neighbor Method Using Non-nested Generalized Exemplars in Breast Cancer Diagnosis

9.20-9.40 Ján Boháčik, Michal Zábovský

Naive Bayes for Statlog Heart Database with Consideration of Data Specifics

9.40-10.00 Tomasz Derda, Zbigniew Domański

Simulation Study of Critically Loaded Arrays of Pillars

10.00-10.20 Gabriela Nečasová, Petr Veigend, Václav Šátek, Jiří Kunovský

Model of the Telegraph Line

10.20-10.40 Coffee break

10.40-11.00 Alena Novák Sedláčková, Pavol Kurdel, Boris Mrekaj

Synthesis Criterion of Ergatic Base Complex with Focus on its Reliability

11.00-11.20 Kornélia Lazányi, Beáta Hajdu

Trust in human-robot interactions

11.20-11.40 Péter Szikora, Nikolett Madarász

Self-driving cars – the human side

11.40-12.00 Kornél Gyöngyösi, Péter János Varga, Zsolt Illési

WLAN heat mapping in hybrid network

12.00 Lunch

13.00 Trip A – *Museums in Tatranská Lomnica*

Trip B – *Tricklandia Starý Smokovec*

19.00 Banquet

Thursday, November 16th 2017

Session J: Applied Informatics

9.00-12.20

Chairman: Paweł Koscecki

9.00-9.20 Darko Galinec, William Steingartner

Combining Cybersecurity and Cyber Defence to achieve Cyber Resilience

9.20-9.40 Jarmila Škrinářová, Adam Dudas, Eduard Vesel

Model of education and training strategy for the management of HPC systems

9.40-10.00 Andrzej Z. Grzybowski, Tomasz Starczewski

Remarks about Inconsistency Analysis in the Pairwise Comparison Technique

10.00-10.20 Katarína Teplická, Soňa Hurná

Using software support to implement enterprise controlling

10.20-10.40 Coffee break

10.40-11.00 Peter Krammer, Marcel Kvassay, Ladislav Hluchý

Cluster Identification in Time Dependent Multidimensional Data

11.00-11.20 Marie Nedvědová, Jaroslav Marek

The simulation of paintings with different aesthetic variables Temperature and Harmony

11.20-11.40 Urszula Świerczyńska-Kaczor, Małgorzata Kotlińska

Could the Movie Be Cute? Understanding the User-Generated Word-of-Mouth by Implementing Text Mining Analysis on the Movie Market

11.40-12.00 Gabriel Baban, Alexandru Iovanovici, Cristian Cosariu, Lucian Prodan

Determination of the critical congestion point in urban traffic networks: a case study

12.00-12.20 Renata-Graziela Boar, Alexandru Iovanovici, Horia Ciocarlie

Complex networks analysis of international import-export trade

Session K: Programming Languages and Theoretical Computer Science

9.00-12.20

Chairman: Vladimír Siládi

9.00-9.20 Gábor Sági, Ramón Horváth

Non-Computable Models of Certain First Order Theories

9.20-9.40 Gábor Márton, Imre Szekeres, Zoltán Porkoláb

High level C++ Implementation of the Read-Copy-Update Pattern

9.40-10.00 Grigoreta Sofia Cojocar, Adriana-Mihaela Guran

On A Top Down Aspect Mining Approach for Monitoring Crosscutting Concerns Identification

10.00-10.20 Milan Spišiak, Ján Kollár

Quantum programming: a review

10.20-10.40 Coffee break

10.40-11.00 Sergej Chodarev, Michaela Bačíková

Development of Oberon-0 using YAJCo

11.00-11.20 Michaela Bačíková, Lukáš Galko, Eva Hvizdová

Manual Techniques for Evaluating Domain Usability

11.20-11.40 Tomáš Dobravec

Estimating the time complexity of the algorithms by counting the Java bytecode instructions

11.40-12.00 Matej Madeja, Jaroslav Porubän

Automatic assessment of assignments for Android application programming courses

12.00-12.20 Matúš Sulír, Jaroslav Porubän, Ondrej Zoričák

IDE-Independent Program Comprehension Tools via Source File Overwriting

Session L: Software Engineering

9.00-12.00

Chairman: Jurij Mibelić

9.00-9.20 Judith Jakob, Kordula Kugele, József Tóth

Defining Camera-Based Traffic Scenarios and Use Cases for the Visually Impaired by means of Expert Interviews

9.20-9.40 Median Hilal, Christoph G. Schütz, Michael Schrefl

Superimposed Multidimensional Schemas for RDF Data Analysis

9.40-10.00 Ján Juhár, Liberios Vokorokos

Towards a Uniform Code Annotation Approach with Configurable Annotation Granularity

10.00-10.20 Ondrej Kainz, František Jakob, Miroslav Michalko

Proposal of Human Body Description Format XML Schema and Validation of Anthropometric Parameters

10.20-10.40 Coffee break

10.40-11.00 Milan Jančár, Jaroslav Porubán

Examining Truthfulness of Informal Diagrams More Than a Year After Their Creation

11.00-11.20 František Silváši, Martin Tomášek

Fully Automatic Modular Theorem Prover with Code Generation Support

11.20-11.40 Rafał Kozik, Michał Choraś, Damian Puchalski, Rafał Renk

Data Analysis Tool Supporting Software Development Process

11.40-12.00 Jana Št'astná, Martin Tomášek

Assembling Behavioural Characteristics of Malicious Software

13.00 Lunch

13.30 Conference closing

Notes: