Wrocław University
of Science and Technology

DepCoS - RELCOMEX 2019 Programme

Monday (1.07.19)

16.00 - Registration
19.30 - Welcome drink
19.40 - Welcome dinner

Tuesday (2.07.19)

8.30- 9.15 Breakfast
9.20- 9.45 Introduction and Welcoming Remarks
9.45- 10.05 Invited speaker
10.05-11.00 Session 1
11.00- 11.30 Coffee break
11.30- 12.45 Session 2
13.15- 14.15 Lunch
14.30- 16.00 Session 3
16.00- 16.30 Coffee break
16.30- 18.15 Session 4, 5
19.30- Banquet

Wednesday (3.07.19)

8.00- 8.45 Breakfast
9.00- 18.00 Excursion
19.00- Dinner (barbecue)

Thursday (4.07.19)

8.30- 9.15 Breakfast
9.30- 11.00 Session 6, 7
11.00- 11.30 Coffee break
11.30- 12.45 Session 8
13.15- 14.15 Lunch
14.30- 16.00 Session 9
16.00- 16.30 Coffee break
16.30- 18.15 Session 10
18.15- 18.30 Closing ceremony
19.00- Dinner

Friday (5.07.19)

8.00- 8.45 Breakfast
9.15- Departure

Tuesday

Invited speaker

Bogdan Czejdo and Wiktor B. Daszczuk, *Framework to Verify Distributed IoT Solutions for Traffic Analysis in ATN Stations*

Session 1: Dependability aspects of software - *Czesław Smutnicki*

Jarosław Rudy, *Algorithm-Aware Makespan Minimisation for Software Testing Under Uncertainty*

Ilona Bluemke and Agnieszka Malanowska, *Tool for Assessment of Testing Effort*

Daniel Obrębski and Janusz Sosnowski, *Log Based Analysis of Software Application Operation*

Piotr Lubkowski, Robert Sierzputowski, Rafał Polak, Dariusz Laskowski and Grzegorz Rozanski, *The SCIP Interoperability Tests in Realistic Heterogeneous Environment*

Session 2: Data mining - *Victor Toporkov*

Kamil Szyc, *An Impact of Different Images Color Spaces on the Efficiency of Convolutional Neural Networks*

Tomasz Walkowiak, Szymon Datko, and Henryk Maciejewski, *Low-Dimensional Classification of Text Documents*

Tomasz Walkowiak and Mateusz Gniewkowski, *Distance Measures for Clustering of Documents in a Topic Space*

Jacek Mazurkiewicz and Aleksandra Cybulska, *Softcomputing Art Style Identification System*

Tomasz Andrysiak and Łukasz Saganowski, *A Comparative Study of Statistical and Neural Network Models for PLC Network Traffic Anomaly Detection*

Session 3: Data mining II - *Ilona Bluemke*

Tomasz Szandała, *Benchmarking Comparison of Swish vs. Other Activation Functions on CIFAR-10 Imageset*

Michał Lower and Anna Lower, *Assessment of the Potential of the Waterway in the City Using a Fuzzy Inference Model*

Urszula Kużelewska, *Multi-clustering Used as Neighbourhood Identification Strategy in Recommender Systems*

Ewa Dudek-Dyduch, Zbigniew Gomolka, Boguslaw Twarog, and Ewa Zeslawska *The Concept of the ALMM Solver Knowledge Base Retrieval Using Protégé Environment*

Jacek Mazurkiewicz, Tomasz Walkowiak, Jarosław Sugier, Przemysław Śliwiński, and Krzysztof Helt, *Intelligent Agent for Weather Parameters Prediction*

Session 4: Engineering and applications - *Wiktor Daszczuk*

Jarosław Sugier, *Cracking the DES Cipher with Cost-Optimized FPGA Devices*

Rafał Chałupnik, Michał Kędziora, Piotr Jóźwiak, and Ireneusz Jóźwiak, *Correspondent Sensitive Encryption Standard (CSES) Algorithm in Insecure Communication Channel*

Ali Al-Dahoud, Mohamed Fezari, and Hanene Mehamdia, *Water Quality Monitoring System Using WSN in Tanga Lake*

Katarzyna Pietrucha-Urbanik and Barbara Tchórzewska-Cieślak, *Cost Analysis of Water Pipe Failure*

Anna Derezińska and Mateusz Byczkowski, *Evaluation of Design Pattern Utilization and Software Metrics in C# Programs*

Franciszek Grabski, *Minimization Problem Subject to Constraint of Availability in Semi-Markov Reliability Models*

Paweł Nowacki and Marek Woda, *Capabilities of ARCore and ARKit Platforms for AR/VR Applications*

Session 5: Optimization in computer systems and networks - *Vyacheslav Kharchenko*

Victor Toporkov and Dmitry Yemelyanov, *Coordinated Resources Allocation for Dependable Scheduling in Distributed Computing*

Wojciech Bożejko, Radosław Idzikowski, and Mieczysław Wodecki, *Flow Shop Problem with Machine Time Couplings*

Henryk Piech and Grzegorz Grodzki, *Prioritization of Tasks in the Strategy Evaluation Procedure*

Dariusz Dorota, *Scheduling Tasks in a System with a Higher Level of Dependability*

Elena V. Savenkova, Alexander Y. Bystryakov, Oksana A. Karpenko, and Tatiana K. Blokhina, *Identifying Factors Affecting the Activities of Technology Parks*

Nail Musakaev, Stanislav Borodin, Sergey Rodionov, and Evgeniy Schesnyak, *Mathematical Modeling of the Hot Steam-Water Mixture Flow in an Injection Well*

Thursday

Session 6: Transport I - *Eugene Brezhniev*

Agnieszka Tubis, *Information Needs of Decision Makers for Risk Assessment in Road Transport*

Marek Sumiła, *Maintaining Railway Operational Requirements in the Context of the GSM-R User Interface Capacity*

Mirosław Siergiejczyk, *Security Analysis of Information Transmission in Intelligent Transport Telecommunications Network*

Dinara Myrzabekova, Mikhail Dudkin, Marek Młyńczak, Alfiya Muzdybayeva, and Murat Muzdybayev, *Concept of Preventive Maintenance in the Operation of Mining Transportation Machines*

Tomasz Kisiel and Maria Pawlak, *Reliability Modeling of Technical Objects in the Airport Security Checkpoint*

Igor Kabashkin, *Dependability of Multichannel Communication System with Maintenance Operations for Air Traffic Management*

Session 7 Assurance in computer systems – *Jarosław Sugier*

Andrzej Barczak and Michał Barczak, *Spreading Information in Distributed Systems Using Gossip Algorithm*

Andrzej Bialas, Marcin Michalak, and Barbara Flisiuk, *Anomaly Detection in Network Traffic Security Assurance*

Agnieszka Bier and Zdzisław Sroczyński *Development of the Multi-platform Human-Computer Interaction for Mobile and Wearable Devices*

Aleksander Jarzębowicz and Szymon Markiewicz, *Representing Process Characteristics to Increase Confidence in Assurance Case Arguments*

Andrzej Bialas, *Structurization of the Common Criteria Vulnerability Assessment Process*

Alexander Frolov, *On Some Computational and Security Aspects of the Blom Scheme*

Session 8: Transport II - *Andrzej Białas*

Szymon Haładyn, Franciszek J. Restel, and Łukasz Wolniewicz *Method for Railway Timetable Evaluation in Terms of Random Infrastructure Load*

Sebastian Ernst, Konrad Komnata, Marek Łabuz, and Kamila Środa, *Graph-Based Vehicle Traffic Modelling for More Efficient Road Lighting*

Johannes Friedrich and Franciszek J. Restel, *A Fuzzy Approach for Evaluation of Reconfiguration Actions After Unwanted Events in the Railway System*

Zbigniew Gomolka, Boguslaw Twarog, Ewa Zeslawska and Damian Kordos, *Registration and Analysis of a Pilot's Attention Using a Mobile Eyetracking System*

Session 9: Dependability models - *Robert Sobolewski*

Vyacheslav Kharchenko, Yuriy Ponochovnyi, Anton Andrashov, Eugene Brezhniev, and Eugene Bulba, *Modelling and Safety Assessment of Programmable Platform Based Information and Control Systems Considering Hidden Physicaland Design Faults*

Przemysław Rodwald, *Attack on Students' Passwords, Findings and Recommendations*

Mieczyslaw Drabowski, *Comparison of Parallel and Non-parallel Approaches in Algorithms*

for CAD of Complex Systems with Higher Degree of Dependability

Mieczyslaw Drabowski, *Examples of Applications of CAD Methods in the Design of Fault*

Tolerant Systems

Sambor Guze, *An approach to finding and identyfing the transport network bottlenecks*

Alicja Dąbrowska, Robert Giel, and Marcin Plewa, *The Picking Process Model in e-Commerce Industry*

Session 10: Electrical components and systems - *Marek Młyńczak*

Jacek Paś, Adam Rosiński, Jarosław Łukasiak, and Marek Szulim *The Impact of Strong Electromagnetic Pulses on the Operation Process of Electronic Equipment and Systems Used in Intelligent Buildings*

Jacek Paś, Adam Rosiński, Marek Szulim, and Jarosław Łukasiak *Modelling the Safety Levels of ICT Equipment Exposed to Strong Electromagnetic Pulses*

Agnieszka Choroszucho and Adam Steckiewicz, *Numerical Analysis of the Building Materials Electrical Properties Influence on the Electric Field Intensity*

Robert Adam Sobolewski, *Semi-Markov Reliability Model of Internal Electrical Collection Grid*

of On-Shore Wind Farm

Alexander Yu. Khrennikov, Nikolay M. Aleksandrov, and Pavel S. Radin *Dependability of Service of Substation Electrical Equipment: Estimation of the Technical Condition State with the Use of Software and Information Tools*