



Wrocław University
of Science and Technology

DepCoS - RELCOMEX 2026 Programme

Monday (29.06.2026)

16.00 –	Registration
19.30 – 19.40	Welcome Reception
19.40 –	Dinner

Tuesday (30.06.2026)

8.00 – 8.45	Breakfast
9.00 – 9.15	Welcoming Remarks
9.15 – 10.00	Invited Speaker I
10.00 – 10.45	Invited Speaker II
10.45 – 11.15	Coffee Break
11.15 – 12.45	Session 1
13.00 – 14.00	Lunch
14.30 – 15.15	Invited Speaker III
15.15 – 16.45	Session 2
16.45 – 17.15	Coffee Break
17.15 – 18.45	Session 3
19.30 – 20.15	Concert: Continuo String Quartet
20.15 –	Banquet

Wednesday (1.07.2026)

8.00 – 8.45	Breakfast
9.00 – 10.50	Session 4
10.50 – 11.20	Coffee Break
11.20 – 12.50	Session 5
13.00 – 14.00	Lunch
14.30 – 15.15	Invited Speaker IV
15.15 – 16.45	Session 6
16.45 – 17.05	Coffee Break
17.05 – 17.50	Industrial Session I
17.50 – 18.15	Industrial Session II
18.15 – 19.15	Session 7
19.45 –	Barbecue

Thursday (2.07.2026)

8.00 – 8.45	Breakfast
9.00 – 10.50	Session 8
10.50 – 11.20	Coffee Break
11.20 – 12.50	Session 9
12.50 – 13.00	Closing Ceremony
13.15 – 14.15	Lunch
14.45 –	Departure

Tuesday

9.15 – 10.00 – Invited Speaker I

How and why to learn to unlearn? Recent advances in Machine Unlearning
Marek Klonowski

10.00 – 10.45 – Invited Speaker II

Machine learning-based surrogate models for generation of urban-scale air pollution maps
Henryk Maciejewski

11.15 – 12.45 – Session 1 – Henryk Maciejewski

Performance Analysis of the Plasma Generator System Used in Medical Devices
Paweł Dobrowolski, Michał Wiśniewski

Cervical Cancer Classification Based on Graph-Extracted Features
Jan Poręba, Lukasz Jeleń

Cervical Cell Classification Using ResNet50V2 with Multiscale Feature Fusion for Enhanced Cervical Cancer Screening
Betelhem Zewdu Wubineh, Andrzej Rusiecki, Krzysztof Halawa

Trustworthy EEG-Based Epilepsy Classification: Evaluating Explanation Consistency with the E_cons Index
Flavia Costi, Emanuel Covaci, Darian Onchis

Solving Capacitated Vehicle Routing Problem in a Distributed Computing System
Andrzej Gnatowski, Konrad Pempera

14.30 – 15.15 – Invited Speaker III

Practical classical quantum aspects in the use of Gaussian kernels for quantum unidimensional binary clustering, based on the method proposed by Horn and Gottlieb
Sergii Trotskyi

15.15 – 16.45 – Session 2 – Marek Klonowski

Road-Lighting Variant Search via Similarity and Conformity Graphs
Artur Basiura

Dependable Resource Planning in Smart Breweries through a Digital Twin of Flexible Batch Fermentation Processes
Krzysztof Rewak, Andrzej Rusiecki

Analysis of the impact of dynamic adaptive refinement criteria on the quality and performance of three-dimensional fluid simulation using the smoothed particle hydrodynamics method
Marek Woda, Andrzej Sołtysik

Exploring the New Edge AI Computer Based on Raspberry Pi CM5
Ali Al Dahoud, Mohamed Fezari, Ahmad Al Dahoud, Ala' M. Al-Zoubi, Hani Al-Mimi

Styles for Describing Safe Finite State Machines in Verilog HDL
Valery Salauyou

17.15 – 18.45 – Session 3 – Vyacheslav Kharchenko

A Dependable Explainable NLP Framework for Clinical Personality Trait and Subtype Analysis
Aleksandra Ata, Stanisław Lota, Karol Kozak

Verification of Synchronization of LLM Agents in the Integrated Model of Distributed Systems using Petri Net
Denny B. Czejdo, Wiktor B. Daszczuk, Waldemar Grabski

Compliance-First RAG with Inference Isolation: Embedding Choice and Prompt-Injection Robustness in a Polish Enterprise Corpus
Miłosz Kucharski

Comparative Evaluation of Text Detection and Extraction Methods for Use in Comics
Hedi Hassan, Marek Woda

Wednesday

9.00 – 10.50 – Session 4 – Wiktor B. Daszczuk

AI in CCTV: The Gap Between Perception and Reality – A Survey of Multimodal AI, RAG, and Agentic Frameworks in Video Surveillance Systems

Paweł Narolski

Proxy-Based Interaction Logging for Traceability in AI-Assisted Software Development

Ami Otsuka, Jinshan Luo, Madoka Hasegawa, Artur Bąk, Atsushi Ito

Multi-Version AI Systems with Retraining: Availability Assessment Using Single- and Multi-Fragment Markov Models

Vyacheslav Kharchenko, Yuriy Ponochovnyi, Ievgen Babeshko, Oleksandr Ivasiuk, Vitalii Mikhalevskyi

Hammering test for adhesive-applied tile wall using Deep Learning

Atsushi Ito, Yuto Kurosawa, Masako Saito, Masafumi Koike

Soft Contrastive Learning for Semi-Supervised Image Recognition

Jakub Szafrński, Patryk Wawrzacz, Kamil Szyc

The Renaissance of Computer Piracy as a Result of the Evolution of Digital Content Distribution Models

Artur Wojciechowski, Kamil Dembowski

11.20 – 12.50 – Session 5 – Andrzej Kucharski

Reinforcement Learning Based Control of Quantum Key Distribution Protocol

Aleksandra Birut, Paweł Ksieniewicz

On Quantum Annealing Chain Strength Related Parameters Control in D-Wave for the Single Machine Total Weighted Tardiness Problem

Wojciech Bożejko, Filip Górajewski, Yana Baloshenko, Oskar Siemieniuk, Jarosław Wielgus

Hybrid Quantum Image Recognition on Limited-Qubit Hardware

Olaf Duda, Mateusz Kucharski, Radosław Idzikowski

Quantum circuit compilation for IQM Spark

Andrzej Gnatowski, Aleksander Biskup, Karolina Berniker, Marcel Owczarek, Eryk Sikora

Experimental Analysis of Quantum Neural Networks on Odra 5 Quantum Computer

Małgorzata Jędruszek, Radosław Idzikowski, Mateusz Kucharski

14.30 – 15.15 – Invited Speaker IV

The Evolution of Security and Cybersecurity at the Turn of the 20th and 21st Centuries

Kamil Dembowski

15.15 – 16.45 – Session 6 –Denny B. Czejdo,

A New Method for Finding Local Extrema Using a Quantum Annealer

Michał Jaroszczuk

Hybrid Algorithm for Secure Key Generation Using Quantum Randomness

Paulina Muzaj, Piotr Sulikowski

Overview and Experimental Analysis of the HHL Quantum Algorithm

Dominik Pawelec, Hubert Siewiera, Jakub Blukacz, Paweł Siewiera, Andrzej Kucharski

Towards More Reliable Signal Strength based Indoor Localization in Bluetooth Low Energy

Maciej Nikodem, Piotr Patronik, Adam Jeżak, Mariusz Słabicki

FPGA Implementations of the Ascon Permutation Function

Jarosław Sugier

17.05 – 17.50 – Industrial Session I

Modern Programmable Platform-based Safety Critical I&C Systems for Nuclear Utilities: Challenges, Solutions and Implementation.

Jacek Gajewski, Vyacheslav Kharchenko

17.50 – 18.15 – Industrial Session II

Scaling Intelligent Manufacturing

Mariusz Prószyński

18.15 – 19.15 – Session 7 – Jacek Mazurkiewicz

Self-Assessment of Cybersecurity Readiness of Local Government Units in Poland

Paweł A. Nowak, Wiktor Ziętara, Dariusz Jędryczek

Modern Threats in Computer Networks: Examples and Analysis of Zero Trust Bypass Attacks

Krystian Marchwicki

A Modern Approach to the Protection of People and Property – Integration of Physical and Technological Security Systems

Marcin Sabat

Thursday

9.00 – 10.50 – Session 8 – Maciej Nikodem

A Scalable PSO–MC Hybrid Metaheuristic for Multiprocessor Task Scheduling

Dariusz Dorota

Optimization of Deep Neural Networks for Improving the Effectiveness of Cancer Treatment

Amelia Draga, Konrad Pempera

Reliable Software Distribution at Scale Using Containerized Delivery and Discrete Scheduling Optimization

Piotr Nadybski, Krzysztof Rewak, Karol Zygadło, Kamil Piech, Jacek Sawoszczuk, Ewelina Skrzypacz

Developing Enterprise Architecture Reference Models for Assessing Digital Sovereignty of Data Centers

Wojciech Urbańczyk, Jan Werewka

Evaluation of AI-Generated Image Quality for Selected Artistic Styles

Maciej Kopczyński, Jakub Ogar

11.20 – 12.50 – Session 9 – Czesław Smutnicki

Visualizing Authorial Style: How Chunk Size Affects UMAP and PaCMAP Representations

Tomasz Walkowiak

The use of machine learning techniques in a smart referee table system

Mikołaj Lipiński, Tomasz Zamojski

Explainable Deep Learning for RF Fingerprinting Using Convolutional Neural Networks

Piotr Korycki, Michał Stojke, Krzysztof Kępa

Cyberattacks – Forecast of Their Role in Future Battlefields

Wiktor Ziętara