

3rd International Conference on Smart Automation & Robotics for Future Industry
(SMARTINDUSTRY – 2026)



Lviv Polytechnic National University,
Ukraine

March 26-27, 2026, Lviv, Ukraine

<https://science.lpnu.ua/smartindustry-2026>

<https://dou.ua/calendar/56701/>

CONFERENCE PROGRAMME

Organisers



Kingston University, London, United Kingdom



Lviv Polytechnic National University, Ukraine



Enterprise of «Electron» engineering corporation



Digital services company providing software product design and development services



Software Engineering & Product Development Services



Manufacturer of custom automated equipment



IT solutions provider in Ukraine and Europe



Commercial Cleaning Robotics



Sumy State University



National Academy of Sciences of Ukraine Institute for Safety Problems of Nuclear Power Plants

March 26-27, 2026, Lviv, Ukraine

General SMARTINDUSTRY – 2026 Timetable

March 26	
10:00 – 16:30 Kyiv time	<p align="center">3rd International Symposium & Workshop on Cobots and Industrial Robots (CIR-2026)</p> <p align="center">https://us06web.zoom.us/j/85382103592?pwd=pFUkfJltdDSiYUifW6Nw1T7FWtKcu5.1</p> <p align="center">Meeting ID: 853 8210 3592 Passcode: 306572</p> <p align="center">Lviv Polytechnic National University, S. Bandera, str. 12, Lviv, 79013, Ukraine</p>
March 27	
10:00 – 16:30 Kyiv time	<p align="center">3rd International Conference on Smart Automation & Robotics for Future Industry (SMARTINDUSTRY – 2026)</p> <p align="center">https://us06web.zoom.us/j/85970406716?pwd=uaRSRMwQKXWYp61h1wbVas8dM0lWgr.1</p> <p align="center">Meeting ID: 859 7040 6716 Passcode: 407359</p> <p align="center">Department of Artificial Intelligence Systems, 5 Kniazia Romana St., Lviv, Ukraine, 79000</p>

TIME FOR PRESENTATIONS

Paper presentation – 8 min.
Discussions and questions – 7 min.



SMARTINDUSTRY – 2026

International Conference on Smart Automation & Robotics for Future Industry

3rd International Conference on Smart Automation & Robotics for Future Industry

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3rd International Symposium & Workshop on Cobots and Industrial Robots
(CIR-2026)

March 26, Session 1

Chairperson: Dr. Solomiia Liaskovska

- 09.00 – 10.00 Registration
- 10.00 – 10.10 **Dr. Solomiia Liaskovska**, Organizing Committee Chairperson, Lviv Polytechnic National University, Researcher Kingston University, London, UK
Intro speech: Smart Manufacturing for Future
- 10.10 – 10.20 **Prof. Natalia Shakhovska**, Rector of Lviv Polytechnic National University, Ukraine
Artificial Intelligence for the Future of Construction
- 10.20 – 10.30 **Prof. Andy Augousti** Professor of Applied Physics and Instrumentation, Kingston University, London, UK
Welcome speech
- 10.30 – 10.40 **Dr. Olga Duran**, Head of the Department of Mechanical Engineering, Kingston University, London, UK
Welcome speech

Implementation of Smart Technologies: Advantages/Challenges

- 10.40 – 10.55 **Oleksandr Starodub**, CEO (Spheros - Electron) Member of the Board (Electron PJSC)
Implementation of Smart Manufacturing Methods: Advantages, and Challenges
- 10.55 – 11.10 **Michaela Macharik** | CEO & co-Owner at Czech-German contract manufacturer in Ukraine, "Time&Space Group" - wire harnesses for home appliance & automotive and mobile devices for water cleaning, President Czech-Ukrainian Chamber of Industry & Commerce
- 11.10 – 11.25 **Prof. Nazar Podolchak** | Academic Supervisor of the Business Innovation Center "Tech StartUp School", Director of the Science Park of Lviv Polytechnic National University — SID City, Head of the Department of Administrative and Financial Management
- 11.25 – 11.40 **David Nichols**, CEO at Qore Technologies
Agentic AI in industrial contexts - how we can provide value by enabling an LLM to drive model training using MCP/agentic AI

- 11.40 – 12:00 **Panel Discussion: Prototype for Quality Assessment at the Final Stage of Production**
Dr.- Ing., Markus Ciupek, COO & co-Owner at Czech-German contract manufacturer in Ukraine, "Time&Space Group" - wire harnesses for home appliance & automotive and mobile devices for water cleaning, Head of Committee Industry at AHK - German-Ukrainian Chamber of Industry & Commerce
Time & Space Team: Nataliia Ilchenko, Mariia Maletych | **Artificial Intelligence Dep Team:** Dr. Solomiia Liaskovska, Bohdan Sydor, Pavlo Kordan, Dmytro Tomchuk, Volodymyr Matsko, Sviatoslav Soprun: *Prototype for Quality Assessment at the Final Stage of Production*

- 12.00 – 12:15 **Bogdan Holovko**, Fujikura Automotive Ukraine
Technological Support for Workforce Efficiency in Manufacturing Processes
- 12:15 – 12:30 **Valentyn Fregan** | It Planet Group | IT solutions provider in Ukraine and Europe

- 12:30 – 12:50 **Panel Discussion:**
OpenTech SoftServe: Oksana Synenko, Business Analyst, SoftServe | **AI Department Team:** Solomiia Liaskovska, Oleg Basystuk, Bohdan Sydor, Sofia Berzden | **Roksolyana Shymchyk Art Gallery:** Roksolyana Shymchyk:
The Museum of the Future: Virtual Implementation and Digital Transformation

12:35 - 14:00
Robots exhibition CIR-2026 | Coffee Break

Session 2

- 14:00 – 14:15 **Prof. Nataliia Melnykova**, Head of Artificial Intelligence Department, Lviv Polytechnic National University
Intro speech
- 14:15 – 14:30 **Roman Hasko**, Artificial Intelligence Department, Lviv Polytechnic National University
Design of a Robotics Educational Laboratory on a Unified Smart City Platform with a Three-Level Architecture
- 14:30 – 14:45 **Andrij Petlovannyy**, Global Logic | digital services company providing software product design and development services
Physical AI in medical devices
- 14:45 – 15:00 **Volodymyr Iyatsyshyn**, Founder and CEO at GeeksCode
Drone Technologies for Humanitarian and Emergency Applications
- 15:00 – 15:15 **Maxim Saveliev** Senior PhD Researcher at Division of Nuclear and Radiation Safety Institute for Safety Problems of Nuclear Power Plants, National Academy of Sciences of Ukraine
40 Years of Chernobyl Disaster: Nuclear Safety and Technological Monitoring
- 15:15 – 15:30 **Eugene Zasoba, CTO of Somatic**
Why Neural Networks Break in the Real World: From Laboratory Results to Production Chaos
- 15:30 – 15:45 **Vlad Panin**, CEO, iFrameAI, California, USA
- 15:45 – 16:00 **Iryna Dymun**, Artificial Intelligence Department, Lviv Polytechnic National University
Formation of students' professional competencies: theoretical and practical mastery of Generative AI
Book Presentation: "Generative AI"
Authors: Vlad Panin, Natalia Shakhovska, Solomiia Liaskovska, Iryna Dymun
- 16:00 – 16:15 **Nazar Fedorchuk**, CEO, Senstone Inc.
Voice Tech: Turning Frontline Conversations into Structured Data

Close ceremony

3rd International Conference on Smart Automation & Robotics for Future Industry
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March 27

Chairperson: Solomiia Liaskovska 09:30 – 10:00 <i>Registration / Zoom Link</i>	
10:00 – 10:05	Solomiia Liaskovska, Organizing Committee Chairperson <i>Intro speech</i>
10:05 – 10:10	Natalia Shakhovska, Rector at Lviv Polytechnic National University <i>Welcome speech</i>
10:10 – 10:15	Olga Duran, Head of Department of Mechanical Engineering at Kingston University, London <i>Welcome speech</i>
10:15 – 10:20	Andy Augousti, Professor of Applied Physics and Instrumentation at Kingston University, London <i>Welcome speech</i>
10:20 – 10:35	Nilgün (Dogan) Baydoğan, Professor at Istanbul Technical University, Energy Institute, Istanbul, Türkiye <i>Smart Technologies for Sustainable Systems – SunGel</i>
10:35 – 10:50	Pavlo Bratiuk and Leonid Ozirkovskyi <i>Reconciliation of calculations of average power of pulse signals under dual definitions of electric current power and their relevance to robotics</i>
10:50 – 11:05	Abhishek Pandey, V. Ramesh <i>RMSprop-Enhanced ResNet152V2 for Automated Plant Leaf Disease Detection</i>
11:05 – 11:20	Alexandr Trunov <i>Constructive and intellectual improvement of socially accessible grippers of Manipulators</i>
11:20 – 11:35	Luís Frólén Ribeiro, Larysa Savosh and Bernardo Farrero <i>Staged Integration of Recurrent Soft Actor-Critic for Bioreactor Control</i>
11:35 – 11:50	Lesia Mochurad, Roman Triska, Oksana Mulesa <i>Performance Aware PCA Acceleration for Healthcare Data Analytics</i>
11:50 – 12:05	Andy Augousti, Olena Lanets, Sahand Hosouli, Solomiia Liaskovska <i>Review and system design framework of photovoltaic-powered water treatment</i>
12:05 – 12:20	Yurii Kryvenchuk, Sofia Barylko <i>Utilization of Machine Learning in recognition of rocks and mock-mines by sonar chirp signals in real time</i>

12:20 – 12:35	Victor Sineglazov, Oleksii Shcherban, <i>Decentralized UAV Swarm Interception under Limited Communication with Parameter Optimization</i>
12:35 – 12:50	Dmytro Petrov, Volodymyr Shymanskyi, and Hakan Kutucu <i>Forecasting of GSM Network Stress Load Using Machine Learning and Time Series Analysis</i>
12:50 – 13:05	Nataliia Lotoshynska, Volodymyr Manko, Michal Gregus, <i>Development of a Method for Verification of Tactile Surface Relief for 3d-printed Educational Materials Using Convolutional Neural Networks</i>
13:05 – 13:15	Break
13:15 – 13:30	Roman T. Hasko Oleksandra L. Hasko Nataliia I. Melnykova Anastasiia O. Kushnirov <i>Design of a Robotics Educational Laboratory on a Unified Smart City Platform with a Three-Level Architecture</i>
13:45 – 14:00	Vitaliy Korendiy, Olga Duran, Pavlo Krot, Roman Karpyn, Mykhailo Pylyp <i>Kinematic–dynamic modelling and numerical evaluation of joint torques for the Telemax EVO Plus manipulator</i>
14:00 – 14:15	Oleksandr Petrovskyi, Serge Dolgikh <i>Fourier-Neural-Operator-based hybrid reinforcement learning framework for continuous adaptive control</i>
14:15 – 14:30	Iryna Dumyn <i>Interactive multi-step agent for reliable artificially generated texts detection in industrial security systems</i>
14:30 – 14:45	Oleh Basystiuk, Zoriana Rybchak <i>Multimodal Sensor Data Fusion for Robust Deep Learning Models in Manufacturing Applications</i>
14:45 – 15:00	Oleh Staso, Nazarii Burak <i>Forecasting fire emergencies using historical regional data: an experimental comparison of probabilistic-statistical methods</i>
15:00 – 15:15	Zoriana Dvulit , Liana Maznyk, Kyrylo Maznyk, Lesia Brych, Pavlo Yatchenko, Khrystyna Peredalo <i>Digital HR Systems: Cyber Risk Management, Compliance, and Ethical Regulation</i>
15:15 – 15:30	Olexander Mazurets, Olha Zalutska, Maryna Molchanova, Olena Sobko, Liudmyla Bukhantsova and Oksana Zakharkevich <i>Neural network method for patch-oriented microtextures analysis to detecting textile structural heterogeneity for automated sorting</i>
15:30 – 15:45	Oleksandr Romaniak, Yevheniya Levus <i>Adaptive software architecture for managing autonomous robotic logistics in contested environments</i>

15:45 – 16:00	B. Gunalan, B. Zeytuncu Gokoglu, H. Macun Elmali, T. Dogan, N. Baydogan <i>Design and Experimental Evaluation of a Solar-Powered Portable Water Filtration System Integrated</i>
16:00 – 16:15	Dmytro Kyrychuk, Oleksandr Pshenychnyy, Yevhen Martyn <i>Small Object Defect Detection for PCB Inspection under Scale Mismatch</i>
16:15 – 16:30	Andrii Dumyn, Oleh Basystiuk Multimodal Data Integration for Smart Industrial Automation Pipelines

Close ceremony

INTERNATIONAL PROGRAM COMMITTEE

Program Committee Chair

Nataliia Shakhovska, Lviv Polytechnic National University, Ukraine

Andy Augousti, Kingston University, United Kingdom

Olga Duran, Kingston University, United Kingdom

Program Committee Members

Oleh Berezsky, West Ukrainian National University, Ukraine

Olexander Barmak, Khmelnytskyi National University, Ukraine

Yevgeniy Bodyanskiy, Kharkiv National University of Radio Electronics, Ukraine

Jaime Campos, Linnaeus University, Sweden

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Mikolaj Karpinski, University of the National Education Commission, Poland

Iurii Krak, Taras Shevchenko National University of Kyiv, Ukraine

Evgeniy Lavrov, Sumy State University, Ukraine

Solomiya Liaskovska, Lviv Polytechnic National University, Ukraine

Volodymyr Lytvynenko, National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute", Ukraine

Nataliia Melnykova, Lviv Polytechnic National University, Ukraine

Oksana Mulesa, Prešovská univerzita v Prešove, Slovakia

Marco Schmidt, Wurzburg University, Germany

Elena Zaitseva, University of Zilina Slovakia

Sergey Subbotin, National University "Zaporizhzhia Polytechnic", Ukraine

Vitaliy Yakovyna, Lviv Polytechnic National University, Ukraine