

AUTOMAATIOPÄIVÄT AUTOMATION DAYS 2025

25.–26.3.2025, HOTELLI TORNI, TAMPERE

Smart, safe and secure automation –
Älykästä ja turvallista automaatiota



TUESDAY, MARCH 25TH

08:00-09:00 Registration and morning coffee

09:00-09:10 Session OP: Opening (EN), Room B

09:10-10:00 **Session K1: Keynote (EN), Room B**
Michael A. Taube (Principal Consultant, S&D Consulting, Inc., United States)
Remembering the most important element of Automation: PEOPLE!

10:00-10:40 Coffee and dividing to sessions (session=room A, B or C)

10:40-12:00

ROOM A

**Session S1-A: Energy systems,
green transition (FI/EN)**

10:40 *Alex Kanerva (Tampere University, Finland), Teijo Juntunen (Tampere university of technology, Finland), Antti Ranta (Tampere University, Finland), Matti Viikko (Tampere University, Finland), Sami Repo (Tampere University, Finland), David Hästbacka (Tampere University, Finland)*
Defining Energy Flexibility for Energy-intensive Industrial Processes

11:00 *Lasse Linnamaa (Fingrid oyj, Finland)*
Säätöä verkossa - kanta-verkkoyhtiön näkökulma

11:20 *Sanni Siltala (Sweco Finland Oy, Finland), Ralf Carlsson (Sweco Finland Oy, Finland)*
Case Loval, Tehtaan hukkalämmöntalteenotto ja hiilijalanjäljen pienentäminen rakennus-automaation avulla

11:40 *Markku Ohenoja (Oulun yliopisto, Finland), Samuli Bergman (Ferroman Engineering Oy, Finland), Outi Rask (Tampereen ammattikorkeakoulu, Finland), Yrjö Majanne (Tampereen yliopisto, Finland)*
Automaatio vihreässä siirtymässä -kysely ja työryhmän toiminta-suunnitelma

ROOM B

**Session S1-B: ICT, IoT,
Digitalization (EN)**

10:40 *Jouni Aro (Proslys OPC Ltd, Finland), Luukas Lusetti (Proslys OPC Ltd, Finland), Elias Nykänen (Proslys OPC Ltd, Finland)*
Role-Based Security Management for Industrial Devices and Applications Based on OPC UA

11:00 *Mikael Filppula (Tampere University, Finland), Harry Edelman (Turku University of Applied Sciences, Finland), David Hästbacka (Tampere University, Finland)*
Heating Control of Residential Building Apartments with IoT and Presence Estimation

11:20 *Heikki Saha (Tampere University, Finland)*
An improved IoT GW and configuration approach for mobile mining machine applications

11:40 *Vjatsheslav Kekshin (Early Stage Researcher, Estonia), Artjom Kurapov (Founding engineer, Estonia), Vladimir Kuts (Docent, Estonia)*
Integration of beekeeping with the concept of smart manufacturing

ROOM C

**Session S1-C: Safety, security,
system design (FI/EN)**

10:40 *Sami Matinaho (Neste Corporation, Finland)*
Safety requirements specification (SRS) as a supporting tool in Design and engineering of safety instrumented system (SIS)

11:00 *Teemu Kumpulainen (Konecranes Global Oy, Finland)*
Varjoista valoon: Järjestelmien kartoitus ja matka hallintaan

11:20 *Raimo Rahkonen (Remuscon Oy, Finland)*
Engineering a digitalized plant

11:40 *Iiro Jantunen (Rejlers, Finland)*
Cybersecurity Considerations of Industrial Automation Supply Chain

12:00-13:00 Lunch

Oikeus muutoksiin pidätetään.
Lisätietoja: office@automaatioseura.fi, puh. 050 4006624,
www.automaatioseura.fi/automaatiopivat2025



SUOMEN AUTOMAATIOSEURA RY
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13:00-14:40

ROOM A

Session S2-A: Control, optimization, simulation (EN)

13:00 Micke Talvi (Tampere University, Finland), Kari Lappalainen (Tampere University, Finland)
Comparison of ramp-rate-based energy storage system control methods for power smoothing of PV systems

13:20 Alexander Bor (Scientia Industrial Technologies Oy, Finland), Alexey Zakharov (Scientia Industrial Technologies Oy, Finland)
Mechanistic AI: Enhancing Accuracy and Interpretability of Soft Sensors in Advanced Process Control

13:40 Mats Friman (Valmet, Finland)
Tuning of Control Loops with Valve Problems

14:00 Teijo Juntunen (Tampere University, Finland), Alex Kanerva (Tampere University, Finland), Antti Ranta (Tampere University, Finland), Sami Repo (Tampere University, Finland), David Hästbacka (Tampere University, Finland), Matti Vilkkö (Tampere University, Finland)
Framework for the Quantification of the Process Flexibility in Industrial Processes

14:20 Azwirman Gusrialdi (Tampere University, Finland)
Resilient Cooperative Control of Cyber-Physical Systems Under Cyber-Attacks

ROOM B

Session S2-B: AI, ML, data-driven methods (FI/EN)

13:00 Markku Ohenoja (University of Oulu, Finland), Aki Sorsa (University of Oulu, Finland), Mika Ruusunen (University of Oulu, Finland)
Interpretable machine learning for transparent industrial applications

13:20 Hung Ta (Green Factory AI Ltd., Finland), Petteri Ormio (Green Factory AI Oy, Finland)
Artificial Intelligence for Automation in Manufacturing: Advancing Sustainability and Profitability in Continuous Process IndustriesAI, manufacturing automation, process optimization, sustainability, digital transformation

13:40 Mikko Haikonen (Solita Oy, Finland), Hannu Toivonen (Åbo Akademi University, Finland), Jerker Björkqvist (Åbo Akademi University, Finland)
Evaluation of classifiers for audio based bearing diagnostics in HVAC machines

14:00 Tomi Peltola (Digisalix, Finland), Tommi Pesu (Digisalix, Finland), Janne Lehtinen (Digisalix, Finland), Kalle Raita (Digisalix, Finland)
Data-driven pallet packing made easy

14:20 Antti Välimäki (Tampere University of Applied Sciences, Finland), Outi Rask (Tampere University of Applied Sciences, Finland), David Hästbacka (Tampere University, Finland), Tero Hietanen (Oulu University of Applied Sciences, Finland), Manne Tervaskanto (Oulu University of Applied Sciences, Finland)
Tekoälytutkimukseen liittyvän valmistelu-hankkeen tuloksia

ROOM C

Session S4-C: Control, optimization, simulation (FI/EN)

13:00 Tero Hietanen (OAMK, Finland), Outi Rask (TAMK, Finland), Veli-Pekka Pyrhönen (TAU, Finland), Jari Boling (UTU, Finland), Ville Kyrki (Aalto, Finland)
Automaatiokoulutuksen tulevaisuus 2024

13:20 Olli Väänänen (JAMK University of Applied Sciences, Finland), Karo Saharinen (JAMK University of Applied Sciences, Finland)
Automaatiotekniikan kyberturvallisuuden koulutus- ja testausympäristö

13:40 Heikki Isometsä (LapinAMK, Finland), Jaakko Etto (Lapland University of Applied Sciences, Finland)
Kehittyvä ja muuttuva teollisuuden prosessiautomaation laboratorio

14:00 Mika Ruusunen (University of Oulu, Finland), Petri Hietaharju (University of Oulu, Finland), Outi Ruusunen (University of Oulu, Finland), Aki Sorsa (University of Oulu, Finland)
Opetuksen ja oppimisen tehostaminen tekoälymalleilla

14:20 Antti Liljaniemi (Metropolia AMK, Finland), Heikki Paavilainen (Metropolia AMK, Finland), Engineering Education
Revolutionized: The Holodeck as a Catalyst for Immersive and Experiential Learning

14:40-15:00

Coffee Break

15:00-15:45

Session S: Panel (FI/EN)

Industrial Solutions for Smart and Secure Automation - Exhibitors' Moderated Panel Discussion

15:45-16:15

Session AP: Automation Award (FI/EN)

Automation Award announcement and the winners presentation about the topic

19:00-21:30

Dinner at restaurant Tampella

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