

INVITED SESSION SUMMARY

Title of Session:

Intelligent Systems in the Sustainable Development context

Name, Title and Affiliation of Chair:

Chaired and organized by group of researchers:

dr inż. Adam Sulich, prof. UEW (Wroclaw University of Business and Economics),

mgr inż. Tomasz Zema, PhD Candidate (Wroclaw University of Business and Economics),

dr inż. Letycja Sołoducho-Pelc (Wroclaw University of Business and Economics),

Details of Session (including aim and scope):

This session, titled 'Intelligent Systems in the Sustainable Development Context,' explores the pivotal role of computer science, particularly intelligent systems, in enhancing environmental and social wellbeing.

We aim to spotlight the potential of advanced computer science techniques, especially intelligent systems, in advancing sustainable solutions, management, and strategies. Attendees will have the opportunity to engage in enriching discussions, share insights, and explore the myriad ways in which technology intersects with sustainability.

Key topics of interest include, but are not limited to:

- Smart devices and AI integration in intelligent transportation (Autonomous Cars) and smart urban planning (Smart Cities).
- Robotics and creation of intelligent devices capable of performing physical tasks and interacting with the environment (Computer Vision).
- Recommendation systems and Intelligent Systems guiding users towards Sustainable Development Goals (SDG) and zero waste.
- Al-driven Intelligent Systems in resource consumption and waste management, measures for environmental protection and Cybersecurity.
- Using management and education to raise environmental awareness with Intelligent Systems.
- Al applications, development of Machine Learning or Deep Learning models and adoption of sustainable strategies, policies, and green management practices.
- Natural Language Processing in Intelligent Systems development and advancing SDGs.
- The impact of automation and Intelligent Systems in sectors such as production, agriculture, and forestry.
- Applying sustainability principles throughout the lifecycle of Al development and deployment.
- Using intelligent systems for managing and controlling devices and sensors connected to the Internet of Things (IoT)

We warmly welcome any fresh topics for discussion proposed by KES 2024 participants.

Given the urgent need for technological advancements in intelligent systems and their significance for a sustainable future, this session serves as a clarion call to both academics and practitioners. If you are involved in the development or application of technologies, we invite you to join this enlightening discourse and contribute to the ongoing dialogue about sustainable pathways and computer science practices.

Main Contributing Researchers / Research Centres (tentative, if known at this stage):

dr hab. inż. Marcin Hernes, Wrocław University of Business and Economics, Poland **prof. Bogdan Franczyk,** University of Leipzig, Germany

prof. Ing. Vladimir Gazda, PhD, University of J. Selye in Komárno, Komarno, Slovakia prof dr. Maryna Gudz, National University "Zaporizhzhia Polytechnik", Zaporizhzhia, Ukraine ing. Jakub Kintler, PhD, University of Economics in Bratislava, Bratislava, Slovakia prof. Romana Korez Vide, PhD, University of Maribor, Maribor, Slovenia prof. dr hab. Czesław Mesjasz, Cracow University of Economics, Cracow, Poland dr Noémi Csigéné Nagypál, Budapest University of Technology and Economics, Budapest Hungary prof dr. Viktorija Skvarciany, Vilnius Gediminas Technical University, Vilnius, Lithuania

Website URL of Call for Papers (if any):

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