#### **Conference Co-Chairmen**

Anatoliy Sachenko, Ukraine Carsten Wolff, Germany Uwe Grossmann, Germany Christof Roehrig, Germany

#### International Programme Committee Co-Chairmen

Jürgen Sieck, Germany Yuriy Kondratenko, Ukraine Agata Manolova, Bulgaria Andrea Kienle, Germany Masami Iwase, Japan









#### CONTACTS

### **IDAACS Organizing Committee:**

IDiAL of Fachhochschule Dortmund Otto-Hahn-Str. 23, 44227 Dortmund +49-231-9112-8118 info@idaacs.net

OR

Research Institute for Intelligent Computer Systems West Ukrainian National University 11 Lvivska Str, Ternopil 46009 Ukraine +380352- 517582 ext. 11012 or 11421 info@idaacs.net

#### **IMPORTANT DATES**

Extended Abstract submission: 15 May 2023

01 June 2023

Notification Acceptance: 05 June 2023

16 June 2023

Camera Ready Papers: **09 July 2023** Early Registration: **until 15 Aug 2023** 





### TENTATIVE CALL FOR PAPERS



# will be held in hybrid mode

The 12<sup>th</sup> IEEE International Conference on Intelligent Data Acquisition and Advanced Computing Systems:

Technology and Applications

September 7-9, 2023 Dortmund, Germany

Organized by

Research Institute for Intelligent Computer Systems, West Ukrainian National University and V.M. Glushkov Institute of Cybernetics, National Academy of Sciences of Ukraine

in cooperation with

Dortmund University of Applied Sciences and Arts (Fachhochschule Dortmund)
Dortmund, Germany
www.idaacs.net/2023

## **Proceedings History**

The first Workshop IDAACS'2001 was organized in a beautiful resort area Foros, Crimea, Ukraine. It was followed by: IDAACS'2003 in Lviv, Ukraine, IDAACS'2005 in Sofia, Bulgaria, IDAACS'2007 in Dortmund, Germany, IDAACS'2009 in Rende, Italy, IDAACS'2011 in Prague, Czech Republic, IDAACS'2013 in Berlin, Germany, IDAACS'2015 in Warsaw, Poland, IDAACS'2017 in Bucharest, Romania, IDAACS'2019 in Metz, France, IDAACS'2021 in Cracow, Poland. Now, we would like to invite all our friends from the previous IDAACS as well as researchers worldwide to attend the IDAACS'2023 in Dortmund and the Ruhr Valley, Germany and discuss latest findings in Intelligent Data Acquisition and Advanced Computer Systems.

The main goal of the IDAACS is to provide a forum for high quality reports on the state-of-the-art theory, technology and applications of Intelligent Data Acquisition and Advanced Computer Systems as used in measurement, automation, and scientific research, in industry and in business.

The importance of IDAACS is its vision to establish scientific contacts between research teams and scientists from different countries for future joint research collaborations.

### The Expected Benefit

IDAACS provides the opportunity to discuss topics with colleagues from different spheres such as academia, industry, instrumentation and computer manufacturing companies, public and private research institutions and organizations. IDAACS with its truly international character promotes the development of relationships between former Eastern and Western Europe, and with countries from all parts of the globe.

# **Conference Language and Publications**

The official Conference language is English. No simultaneous translation will be provided. All materials concerning the IDAACS'2023 should be written in English. A number of selected papers will be collected for a publication in international journals indexed by Web of Science, Engineering Index () and Scopus.

#### **Tentative Streams and Topics**

The conference scope includes, but it's not limited to:

- 1. Advanced Instrumentation and Data Acquisition Systems
- 2. Advanced Mathematical Methods for Data Acquisition and Computing Systems
- 3. Computational Intelligence for Instrumentation and Data Acquisition Systems
- 4. Data Analysis and Modeling
- 5. Intelligent Information Systems, Data Mining and Ontology
- 6. Information Computing Systems for Commercial Applications
- 7. Intelligent Distributed Systems and Remote Control
- 8. Internet of Things, 5G and Industrial Internet
- 9. Pattern Recognition, Digital Image and Signal Processing
- 10. Computer Systems for Healthcare and Medicine
- 11. Bio-Informatics
- 12. Human-Computer Interaction
- 13. Special Stream on Advanced Distributed Data Bases
- 14. Special Stream on Intelligent Software Systems and Tools
- 15. Special Stream on Advanced Machine Learning
- 16. Special Stream on Cyber Security
- 17. Special Stream on Advanced Systems Engineering
- 18. Special Stream on Design and Testing of Advanced Measuring and Computer Systems
- 19. Special Stream on Big Data
- 20. Special Stream on Advanced Computer Architectures and Embedded Systems
- 21. Special Stream on Wireless Systems
- 22. Special Stream on Advanced Automatic Control and Information Technology
- 23. Special Stream on Intelligent Robotics and Sensors
- 24. Special Stream on Hydrogen and Renewable Energy Systems
- 25. Special Stream on Electrical Mobility and Intelligent Mobility Solutions
- 26. Special Stream on Smart Buildings and Smart Cities
- 27. Special Stream on Project Management
- 28. Special Stream on Digital Education and Engineering Education
- 29. Special Stream on VR and AR
- 30. Special Stream on Innovation & Entrepreneurship in Digital Transformation
- 31. Workshop Cyber Physical Systems and IoT Dependability and Resilience (CyberIoT 2023)
- $32.\,Workshop$  Beyond 5G and 6G Networks Technologies and Security

#### **Invitation to Sponsoring Program**

Organizations interested in presenting their products and ideas are invited to participate as a sponsor in the IDAACS Market, a company and student fare.

#### **Submission**

Prospective authors are invited to submit an extended abstract of 3-4 A4 pages (in English only).

The manuscript should define the scope of the paper, emphasize on new advances, theories and/or applications and include an analysis of results and findings. It must be structured such that the program committee will be able to understand the originality and the value of the work.

All information about IDAACS'2023 is available at:

#### www.idaacs.net/2023

Accepted papers will be published in Conference Proceedings and available in the IEEE Xplore and indexed by Scopus and DBLP. The Conference Proceedings shall be submitted to Web of Science as well (previous IDAACS Proceedings were indexed by Web of Science).

### **Dortmund and the Ruhr Valley**

The Ruhr Valley has been the industrial heartland of Germany, steel and coal shaped the face of the cities. Dortmund was one of the largest steel production sites, same as Bochum, Herne and Gelsenkirchen, the other partner cities of IDAACS 2023 in the Ruhr Valley. Today, the region has been transformed into a technology and innovation hub with many universities and research institutes. Participants of IDAACS will experience this blend of old, heavy industries and modern, innovative ideas and businesses. The main conference site will be the campus of the Dortmund University of Applied Sciences and Arts (Fachhochschule Dortmund), but thematic sessions and visits to Bochum, Herne and Gelsenkirchen will complement the conference program, organized by the DeepTech network ruhrvalley.tech.