INVITED SESSION SUMMARY

Title of Session:
Smart Generative AI and Data Visualization Technologies

Name, Title, and Affiliation of Chair:

Professor Dr. Cesar Sanin (Chair)

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Details of Session (including aim and scope):

In the rapidly evolving landscape of artificial intelligence, intelligent technologies, and information systems, there exists a continual drive to push the boundaries of augmenting human intelligence and refining decision-making models. At the forefront of this

advancement are smart generative AI and data visualization technologies. Progress in these areas is driving towards increasingly complex methods of augmenting human intelligence and refining decision-making models. Consequently, the demand for sophisticated tools and techniques for representing, managing, and discovering knowledge is on the rise.

This special session is dedicated to exploring the latest innovations in smart system methodologies and algorithms, particularly focusing on the integration of generative AI and data visualization technologies as they pertain to real-world problems. Submissions are invited from all corners of the smart systems and information systems domain, provided they have a significant component related to the aforementioned fields. The primary goal of this session is to assemble a diverse community of researchers, scientists, engineers, professionals, and academics from various disciplines to exchange and refine existing practices while pioneering new techniques. Original contributions on algorithms, tool design, implementation, and real-world applications, especially those leveraging generative AI and data visualization technologies, are highly encouraged to address contemporary challenges effectively.

Extended versions of selected papers will be considered for publication in:

- **Computer, Materia and Continua**

- **Human Centric Intelligent Systems**

Relevant topics include but not limited to:
- Generative Artificial Intelligence
- Augmented Intelligence
- eXplainable Artificial Intelligence
- Artificial and Computational Intelligence
- GenAI Web-based Systems
- Distributed Artificial Intelligence
- Intelligent Agents and Multi-Agent Systems
- Intelligent Techniques in Bioinformatics
- Intelligent Techniques in Optimization
- Intelligent Systems: Energy, Hybrid
- Robotics and Autonomous Robots
- Knowledge-Based Systems and Expert Systems
- Data Science and Visualization Systems
- Data Analytics
- Big Data and Visualization Systems
- Data Analysis and Pattern Recognition
- Cognitive Systems
- Machine Learning and Neural Networks
- Genetic Algorithms and Evolutionary Computing
- Hybrid Intelligent Systems
- Natural Language Processing
- Knowledge Discovery and Data Mining

- Knowledge Representation and Management
- Image Processing
- Machine and Computer Vision
- Context-aware and Affective (Emotional) Computing
- Business Intelligence Systems
- Human-centered Computing
- DNA Computing
- Intelligent Tutoring Systems
- E-commerce/E-business and E-learning
- Semantic Web

Proposed Dates:

Call for Papers: November 10nd, 2024.
Paper to be received by: April 15th, 2025.
Notification of Acceptance: May 5th, 2025.
Camera ready to be received by: June 2nd, 2025.
Early / Authors Registration Deadline: Same to KES conference deadline

Main Contributing Researchers / Research Centres (tentative, if known at this stage):
KERT – Knowledge Engineering Research Team, Australia
Australian Institute of Higher Education, Australia
Knowledge Engineering Team, Aligarh Muslim University, India
Information Systems, Chengdu University of Information Technology, China
Grupo de Inteligencia Computacional, University of the Basque Country, Spain
Knowledge Management Team, Gdansk University of Technology, Poland
Mechanical Engineering, Sharda University, India
Visión Artificial y Fotónica, ITM, Colombia
Information technology, University of Oviedo
University of New England, Australia
Taylors University, Malaysia
University of Central Queensland
… among others.

Website URL of Call for Papers (if any):

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