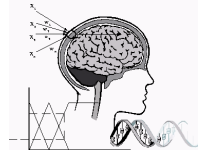




# International

*Innovation in Knowledge Based and Intelligent  
Engineering Systems*



## INVITED SESSION SUMMARY

**Title of Session:**

**2<sup>nd</sup> Smart Generative AI and Data Visualization Technologies - SGVIDVT**

**Name, Title, and Affiliation of Chair:****Professor Dr. Cesar Sanin (Chair)****Associate Dean**

ICMS

151 Darley Road, Manly, NSW 2095, Australia, Australia

Ph. +61 (2) 9977 0333

[csanin@icms.edu.au](mailto:csanin@icms.edu.au)

LinkedIn: <https://au.linkedin.com/in/cesar-sanin>

ORCID: <https://orcid.org/0000-0001-8515-417X>

Website: <https://www.newcastle.edu.au/profile/cesar-maldonadosanin>

**Professor Dr. Edward Szczerbicki****Director Knowledge Engineering Research Team - KERT**

College of Engineering, Science and Environment

The University of Newcastle,

University Drive, Callaghan, NSW 2308, Australia

Ph. +61 (2) 49216209

[Edward.Szczerbicki@newcastle.edu.au](mailto:Edward.Szczerbicki@newcastle.edu.au)

Google Scholar: <https://scholar.google.com/citations?hl=en&user=Zx7jdewAAAAJ>

ORCID: <https://orcid.org/0000-0001-7794-2862>

Website: <https://www.newcastle.edu.au/profile/edward-szczerbicki>

**Dr Rafiqul Islam****Senior Lecturer**

Charles Darwin University

54 Cavenagh Street, Darwin City, NT 0800, Australia

Ph. +61 (2) 9020 8050

[r.islam@aih.edu.au](mailto:r.islam@aih.edu.au)

LinkedIn: <https://au.linkedin.com/in/md-rafiqul-islam-5053a3184>

Website: <https://www.md-rafiqul-islam.com/>

**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, explainable AI, and visual analytics technologies. Progress in these areas is driving towards increasingly complex methods of augmenting human intelligence and refining decision-making models with refined support. 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, explainability, 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, Material 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: February 15<sup>th</sup>, 2026.

Paper to be received by: May 4<sup>th</sup>, 2026.

Notification of Acceptance: May 18<sup>th</sup>, 2026.

Camera ready to be received by: June 1<sup>st</sup>, 2026.

Early / Authors Registration Deadline: Same to KES conference deadline

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

ICMS, Australia

Charles Darwin University, 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):**

TBD

**Email & Contact Details:**

Ph. +61 (2) 9977 0333

[csanin@icms.edu.au](mailto:csanin@icms.edu.au)