INVITED SESSION

The 28ᵗʰ International Conference on Knowledge-Based and Intelligent Information & Engineering Systems (KES-2024), 11-13 September 2024, Seville, Spain

Title of Session: **Generative Artificial Intelligence: Catalyst for Transformation in the Digital Era**
Name, Title and Affiliation of Chair: **Prof. Ahmad Taher Azar, IEEE Senior Member** Full professor, College of Computer and Information Sciences, Prince Sultan University, Riyadh, Saudi Arabia. Leader of Automated Systems & Soft Computing Lab (ASSCL), Prince Sultan University, Riyadh, Saudi Arabia Email: **aazar@psu.edu.sa**; **ahmad_t_azar@ieee.org**
Details of Session (including aim and scope): In the dynamic landscape of the digital era, Generative Artificial Intelligence (AI) stands out as a transformative force with unparalleled potential to reshape industries, processes, and human experiences. The proposed special session, titled "Generative Artificial Intelligence: Catalyst for Transformation in the Digital Era," seeks to explore and illuminate the groundbreaking advancements, challenges, and opportunities that arise from the intersection of generative AI and the ongoing evolution of our digital world. Generative AI, a subset of artificial intelligence that focuses on creating new content, information, or artifacts, has emerged as a powerful tool for innovation across diverse domains. From generating realistic images and text to designing novel solutions in medicine, finance, and beyond, generative AI is pushing the boundaries of what is possible in the digital landscape. This special session aims to bring together researchers, practitioners, and thought leaders to delve into the multifaceted impacts of generative AI and its role as a catalyst for transformative change. The digital era is marked by an unprecedented influx of data, computational power, and connectivity, creating an ecosystem where generative AI can thrive. This session will provide a platform for participants to discuss the latest developments in generative AI algorithms, applications, and ethical considerations. Topics of interest include but are not limited to generative models, creative applications, adversarial training, ethical implications, and the integration of generative AI into various industries and sectors. As we navigate the complexities of the digital era, understanding the potential and challenges posed by generative AI is essential for harnessing its capabilities responsibly and ethically. This special session aims to foster dialogue and collaboration among researchers and practitioners who are at the forefront of generative AI research, providing insights that will shape the future trajectory of artificial intelligence in the digital landscape. Researchers are encouraged to contribute their latest findings and perspectives to contribute to the collective understanding of how generative AI can serve as a catalyst for positive transformation in our increasingly digitalized world.

Topics of interest for submission include but are not limited to:

Artificial Creativity	Machine learning
Augmented intelligence	New frontiers of creativity
Creative AI	Personalized experiences
Data-driven innovation	Predictive analytics
Digital transformation	Reinforcement learning
Emerging technologies	Responsible AI
Generative AI applications	Rise of AI-powered creativity
Generative models	Shaping the future of work
Human-AI collaboration	Social Impact of AI
Intelligent automation	Transformational power of AI
Unleashing innovation	Value creation

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

Prof. Dr. Aboul Ella Hassanien Faculty of Computers and Artificial Intelligence, Cairo University, Giza 12613, Egypt
Scientific Research Group In Egypt, Cairo University, Egypt
Prof. Dr. Ibrahim A. Hameed Department of ICT and Natural Sciences, Norwegian University of Science and Technology, Larsg ardsveg-en, 26009 Alesund, Norway
Dr. Gabriella Casalino Department of Computer Science, University of Bari Aldo Moro, Via Orabona, 4-70125 Bari, Italy
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Dr. Jothi Ganesan, Department of Computer Applications, Sona College of Arts and Science, Salem 636005, Tamil Nadu, India
Dr. Arvind Sharma, Yogananda School of AI, Computer and Data Sciences, Shoolini University, Kumarhatti, District - Solan, Himachal Pradesh

Researchers / Research Centres would be invited upon approval of this SS.

Important Dates:

Website URL of Call for Papers (if any):

https://sites.google.com/view/profazar/recent-announcements/copy-of-call-for-papers-kes-24

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