ICICC-2024
7th International Conference on Innovative Computing and Communication

Organized by Shaheed Sukhdev College of Business Studies, New Delhi, India
On 16-17th FEBRUARY 2024.

************** CALL FOR PAPERS ***************

SPECIAL SESSION ON
Data Driven Intelligence for Future Generation Computing Systems

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SESSION DESCRIPTION:
The world of computing is on the cusp of a remarkable transformation with the advent of future generation computing systems. These systems will have the ability to redefine the boundaries of what is possible, reshaping industries, research, and everyday life. Building upon the foundations laid by

current technologies, future generation computing systems harness the power of innovation to unlock new frontiers of performance, efficiency, and capability. These computing systems are characterized by their potential to deliver unprecedented levels of computational prowess, enabling tasks that were once deemed insurmountable within reasonable timeframes. Whether it's simulating complex physical phenomena, training intricate machine learning models, or deciphering intricate cryptographic algorithms, these systems are poised to accelerate progress across a spectrum of domains. One of the defining attributes of future computing systems is their inclination toward specialization. Quantum computing, neuromorphic computing, and other specialized architectures are emerging as contenders to drive innovation beyond the limitations of traditional computing paradigms. These systems, equipped with advanced processing capabilities and specialized architectures, are poised to leverage data in unprecedented ways, transforming industries, research, and societal paradigms. Future generation computing systems possess the capacity to not only process immense volumes of data but also to derive meaningful insights from it. Whether it is the domain of scientific exploration, healthcare diagnostics, financial analysis, or urban planning, these systems can harness data to unveil patterns, trends, and correlations that were previously hidden. This makes the integration of data driven intelligence an indispensable component of the future generation computing systems.

However, the journey toward harnessing data-driven intelligence is challenging. The sheer volume and variety of data pose questions of storage, management, and privacy. Future systems must embrace scalable and efficient data architectures to handle the influx of information, while also considering data availability and bias which is critical to prevent erroneous decision-making. Moreover, data-driven intelligence necessitates the development of new programming paradigms and tools. As specialized computing architectures like quantum computing and neuromorphic computing gain prominence, programming languages and frameworks must be devised to harness their unique capabilities effectively.

The aim of this special session is to provide a common platform to the researchers for contributing to the state-of-the-art tools and techniques for data-driven intelligence that will aid in shaping the trajectory of future computing systems.

RECOMMENDED TOPICS:
Topics to be discussed in this special session include (but are not limited to) the following:
- **Data-driven modelling and methods for context awareness in computing systems**
- **Data centric communication techniques for IoT ecosystem**
- **Machine learning techniques for intelligent decision-support systems**
- **Advanced optimization techniques for effective computing**
- **Path planning and control for intelligent mobile devices**
- **Data availability and quality in IoT ecosystem**
- **Collaboration and control of intelligent multi-agent systems**
- **Data mining and information retrieval for intelligent systems**
- **Ontology driven knowledge management for semantic web**
- **Data driven computation in pattern recognition**
- **Data security and privacy in digital ecosystems**

SUBMISSION PROCEDURE:

Researchers and practitioners are invited to submit papers for this special theme session on [**Data Driven Intelligence for Future Generation Computing Systems**] *on or before* [**30th November 2024**]. All submissions must be original and may not be under review by another publication. INTERESTED AUTHORS SHOULD CONSULT THE CONFERENCE'S GUIDELINES FOR MANUSCRIPT SUBMISSIONS at https://icicc-conf.com/paper_submission. All submitted papers will be reviewed on a double-blind, peer review basis.

NOTE: While submitting paper in this special session, please specify [**Data Driven Intelligence for Future Generation Computing Systems**] at the top (above paper title) of the first page of your paper.

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