Call for Papers
ADCOM 2022: Embedded AI and Beyond

The **Advanced Computing and Communication Society** (ACCS) in association **with the International Institute of Information Technology Bangalore (IIITB)** announces the 27th annual **International Conference on Advanced Computing and Communications** (ADCOM 2022) at Bangalore during 12th - 14th December 2022.

ADCOM, the flagship Systems Conference of the ACCS, is a major annual international meeting that draws leading scientists and researchers in computational and communications engineering from across industry and academia. ADCOM highlights the growing importance of Large-Scale Systems Engineering and provides the platform to share, discuss and witness leading edge research and trends.

ADCOM 2022 explores the current state-of-art in embedded artificial intelligence. Embedded AI involves programming edge nodes with AI models developed using machine learning algorithms trained on very large datasets. This allows edge nodes to make high probability decisions about processing information efficiently and autonomously. The AI module on these devices processes large amounts of data collected from the sensors and perform on-device processing of datasets to make real-time decisions without the need for any external guidance in most cases. With embedded AI in edge computing, the need to transfer raw data from a device is obviated and processing times are reduced. The availability of processing at the edge allows us to increase the scale of operations vastly in domains like automation, transportation, healthcare and so on. Depending on the size of the dataset, it is possible to adapt machine learning algorithms for specific domains or applications. Embedded AI offers a more focused approach than traditional Machine Learning in embedded computing that requires extensive datasets for training and model verification.

ADCOM 2022 calls for original, high impact research papers and case studies on many aspects of Embedded AI systems and related technologies while seeking novel contributions that help identify challenges in the widespread deployment of such systems. Researchers and practitioners are encouraged to submit original research contributions in all major areas, which include, but not limited to:

- Bringing AI, machine learning – deep learning, reinforcement learning etc. – to embedded devices and the network edge
- Defining edge requirements: intelligence, computing performance, connectivity
- Low power design
- Edge architectures and cloud connectivity
- Smart sensors, node to cloud platform topologies
- Energy harvesting
- RF technology at the edge

- Hardware Accelerators
- Neuromorphic Processors
- Reconfigurable Systems
- Mobile Embedded Systems
- Tool chains and development platforms
- Applications of Embedded AI in Automotive, telecom, defence and e-governance applications
- Security, privacy and regulatory aspects
- Case studies

Important Dates:

Full Technical Papers Sought by	**20 Sep 2022**
Acceptance Communicated by	**30 Oct 2022**
Final Print Ready Papers due by	**25 Nov 2022**

Submissions only through EasyChair –

https://easychair.org/conferences/?conf=adcom2022

Visit us at https://accsindia.org/adcom2022/ for detailed information on the conference

For more information on the Conference:

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