9th International Conference on Micro-Electronics,

Electromagnetics and Telecommunications

ICMEET - 2024

December 19 - 20, 2024

Organized by

Department of Electronics and Communication Engineering, & Dept. of EE

National Institute of Technology Mizoram, India

CALL FOR PAPERS: SPECIAL SESSION

Special Session on "Revolutionizing RF Signals and IoT with AI and ML"

Session Chair(s):

Dr. Pradeep Kumar Boya,

Director & Chief Technology Officer (CTO), Incline Inventions Pvt. Ltd, Hyderabad, Telangana, India.

Email id: pradeep@inclineinventions.com

Mobile No: 8885388855

Dr. Surendra Kumar Bitra,

Senior engineer, Astra microwave products ltd,

Hyderabad, Telangana, India.

Email id: surendrakumar.b@astramwp.com

Mobile No: 9959146136

Theme of Session:

The primary goal of this special session is to delve into the integration of Radio Frequency (RF), Internet of Things (IoT), Artificial Intelligence (AI), and Machine Learning (ML) models. Technological advancements in recent years have resulted in an explosion of connected devices and a surge in data generation. Much of this data comes in the form of RF signals, which play a crucial role in various IoT applications. AI and ML models are becoming essential for making sense of this vast data by extracting valuable insights. These models have transformed numerous fields by enabling computers to learn from data and make predictions or decisions autonomously. Applied to RF and IoT, AI and ML models provide powerful tools for analyzing complex signals and deriving meaningful information to facilitate intelligent decision-making. The integration of



9th International Conference on Micro-Electronics,

Electromagnetics and Telecommunications

ICMEET - 2024

December 19 - 20, 2024

Organized by

Department of Electronics and Communication Engineering, & Dept. of EE

National Institute of Technology Mizoram, India

AI and ML with RF and IoT offers vast potential, from enhancing wireless network efficiency to enabling smart decisions in IoT systems. Nevertheless, challenges like RF module design, data quality, model transparency, and computational demands must be addressed for the successful implementation of these models.

Topics of Interest:

We invite original (un-published) research contributions based on the above-mentioned theme including following topics **but not limited to**:

- > Antenna and Filter Design
- > RF Circuit Design
- ➤ RF and Microwave Circuits for Next Generation Communications
- Millimeter wave, THz and UWB propagation
- Metamaterials
- Antenna Systems for 5G and 6G communications
- > RF sensors and systems
- **Plasmonics**
- Photonic circuits and systems
- Planar arrays, MIMO and Multiband antennas
- ➤ Micro-climate monitoring
- ➤ Infections & Disease monitoring
- Ground Mapping & sensors
- Agri-robots & drones
- > Autonomous driving in Defence and agriculture
- Disease detection
- > Robotic harvesting
- ➤ AI/ML techniques

Paper Submission Process:

Please submit your paper (in word/pdf format) at

email: niticmeetrfiotconference@gmail.com

with Revolutionizing RF Signals and IoT with AI and ML: mentioned in the subject line.

Program Committee: Name(s), Affiliation(s)



9th International Conference on Micro-Electronics,

Electromagnetics and Telecommunications

ICMEET - 2024

December 19 - 20, 2024

Organized by

Department of Electronics and Communication Engineering, & Dept. of EE

National Institute of Technology Mizoram, India

For any further queries related to this special session, please contact the session chairs at:

E-mail ID: niticmeetrfiotconference@gmail.com

Mobile No.: 9959146136

