





11<sup>th</sup> IEEE U. P. Section International Conference on Electrical, Electronics and Computer Engineering (UPCON-2024),

Shri Ramswaroop Memorial College of Engineering & Management (SRMCEM), Lucknow, U.P. India, NOV 29<sup>th</sup> - DEC 01<sup>st</sup>, 2024

https://upcon.srmcem.ac.in/

Final paper submission deadline: 10<sup>th</sup> October 2024
Early Bird Registration Deadline: 28<sup>th</sup> August 2024
Camera Ready Submission: 14<sup>th</sup> October 2024

11th IEEE Uttar Pradesh Section International Conference On Electrical, Electronics And Computer Engineering (UPCON-2024), the IEEE UP Section's own conference during Nov 29- Dec 01, 2024. The amount of Research and Development activities across the globe has been drastically scaled up from the past one decade, specifically, in the research areas of Electrical, Electronics and Computer Engineering. The IEEE UPCON-2024 aims to provide an excellent platform for researchers to present their research findings. The IEEE UPCON-2024 conference will feature Invited & Expert Talks by Eminent Researchers, Technical Sessions, Special Sessions and Workshops/ Tutorials/ Ph.D. Colloquiums. The conference is technically and financially sponsored by IEEE UP Section.

### **Technical Areas**

**UPCON-2024** solicits papers in all areas of electronic devices, including materials, processes, modeling, device/circuit/system design, reliability, packaging, manufacturing, testing and yield any other topic under the scope of IEEE. It includes parallel technical sessions of oral and poster presentations. Submitted papers after review will be considered for Best Paper, Best Student Paper, and Best Poster Awards.

# **Publications**

The accepted and presented papers will be published in the UPCON-2024 Proceedings included in IEEE Xplore. The authors of a selected number of high-impact papers will be invited to submit extended versions for publication in the special issue IEEE Industry Applications Society (IAS).

# **Short Courses and Tutorials**

UPCON-2024 will start with a set of short courses and tutorials August 12<sup>th</sup>, 2024. Tutorials will cover selected topics from the basics to the state-of-the-art. The Short Courses will discuss the latest research and challenges on emerging and advanced topics.

### **Exhibition**

UPCON-2024 provides vendors with an opportunity to exhibit their innovative programs, goods, and technologies, giving delegates access to new tools and methods for departments, government agencies, non-governmental organizations, and institutions.

# TRACKS/SESSION

## **Electronics Devices, Circuits and Systems**

Micro and nano electronics and materials, Circuit theory and design, Circuit analysis and simulation, CAD; testability, fault tolerant design, minimisation of circuits and CAD for VLSI; novel or improved electronic devices for both traditional and emerging technologies including nanoelectronics and MEMs, device and process.

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Varun Kakar, BTKIT, Dwarahat Somak Bhattacharyya, IIT BHU Akhilesh Tiwari, IIIT Allahabad Call for Papers

### **Network Technologies and Systems**

Network performance, reliability, and quality of service; Ad-hoc networks; mesh networks; channel modelling and propagation; coding for wireless systems; diversity and space-time techniques; end-to-end design techniques; error control coding; iterative techniques for joint optimization; Resource Distribution over Wireless Networks, Cryptography, Security, and Authentication, Wireless Multimedia Communication, Wireless Sensor Networks, Ultra-Wide-band Systems, Vehicular Networks, Wireless System Architectures and Applications, Wireless Traffic and Routing

### **Signal Processing**

Biomedical Signal and Information Theory and Methods, Bio-inspired Signal Processing and System, Biomedical Circuits and Systems. Audio Processing, Speech Information Processing Recognition Synthesis, Modern Signal Processing Theory and Method.

## **Data Mining and Big Data Analysis**

Data Preprocessing, Association mining, Clustering, Classification, Prediction, Regression, Optimization Clustering, Data Integration, Metadata Management, and Interoperability, **Communication Technologies and Systems.** 

Adaptive Modulation and Coding, Multiple Access Techniques, CDMA and Spread Spectrum, OFDM and Multiuser Communication System, MIMO System Design and Analysis, RF & Antenna Design, Mobile and Vehicular antennas, RFID antennas and systems, Broadband / ultra-wideband antennas.,

### **Bioinformatics and Machine Learning Algorithms**

Next Generation Sequencing, Protein/RNA structure prediction, Annotation of Sequence and structural motifs, Biochemical pathways and biological networks, Biomedical literature mining, Drug design and Modelling, Ontology and Biological databases

### Multimedia Processing Technologies and Systems

Multimedia Processing Technologies and Systems track cover all the areas related to image and video processing and systems including but not limited to Image Processing & Video Processing, Image and Video communications,

# **Power Systems**

All related areas

# Language Technologies and Information Retrieval

Language modelling, Application of language technology in document summarization, machine translation, automatic essay evaluation, etc. Tools and techniques for apprising, chunking, tagging, morphological analysis and generation. Special emphasis on Indic languages.

### **Machines and Instrumentation**

All related areas

## **Robotics and Artificial Intelligence**

Aerial Robotics and Unmanned aerial vehicles, Agricultural Robotics and Automation, Algorithms for planning and control of Robot motions, Algorithms for Trajectory planning, Autonomous Ground Vehicles and Intelligent Transportation Systems, Bio Robotics, Cognitive Robotics, Computer and Robot Vision, Haptics, Human Robot Interactions and co-ordinations.

## **Power Electronics and Control Engineering**

Modelling, simulations and control of power electronics circuits, Power electronics converters, DC-DC, DC-AC, AC-DC and AC-AC conversion, Choppers, Rectifiers, Inverters, Cyclo-Converters, Modulation methods and control, Electrical drives, control and applications, AC and DC motor drives.

### **Open Ended Tracks**

Those are not covered in above tracks.

# Industrial Application All related areas.