CALL FOR PAPERS

Call for Paper Submissions & Special Session proposals

IEEE Future Directions Guiding Smarter, Cleaner, Secure, & Resilient Living

TENCON is a premier IEEE international technical conference which has been conducted in region 10, to bring exciting discoveries, knowledge & understanding together. TENCON 2021 has been themed inspired by the IEEE Future Directions platforms both graduated & ongoing. This year’s TENCON is organized by IEEE NZ North Section, designed to be a blended event from Auckland, New Zealand. The conference will be held from 7-10 December 2021 in Auckland, New Zealand for the venue based physical attendees. The others will be joining virtually to hear & engage with the exciting & innovative programs that is being planned.

Some key highlights of this annual conference includes:
- Tutorial Sessions
- Keynote presentations from practice leaders in the field
- Presentation & poster sessions for idea sharing & discussion
- Students/Young Professionals Networking Forum
- Trade booths & themed panel sessions

Themes planned for TENCON 2021:
Hosting TENCON 2021 in Auckland (Virtual & in-person mode) with a focus on IEEE Future Directions will provide IEEE members & non-members access to the best knowledge, resources & opportunities in emerging technologies, & address public fear & challenges faced by the city as innovative technology is introduced & embraced. The theme has been selected to give a strong international & local flavor. The technical tracks will align with the strong traditional technical themes of IEEE like signal processing, robotics, biomedical, communications, computers, power & energy, power electronics, software etc. along with new emergent & exciting IEEE Future Directions platforms.

Conference website: www.tencon2021.com
Conference Submission: PaperCept Manuscript Submission Site
Technical Enquiries: tencon2021@gmail.com

About Auckland

Sky Tower Auckland
Auckland’s needle-like Sky Tower is the city’s most prominent landmark and, at 328 meters high, is New Zealand’s highest building. If you’re looking for a place to snap the perfect city panorama then the observation deck here-reached by zooming up to the top of the building in a glass-elevator—is just the place to get your camera out, with views stretching into the distance for 80 kilometers on a clear day.

Waitemata Harbour
The wide sweep of Waitemata Harbour slices Auckland in two and is the city’s most prominent natural feature. It was because of this easily navigable waterway that Auckland became New Zealand’s capital in 1840 (the country’s capital is now Wellington, though Auckland remains New Zealand’s economic powerhouse). It’s a delightful area to explore on foot and features a variety of shopping, dining, and entertainment opportunities.
**Theme 1**
Low-Carbon Energy Future
- Renewable Energy Sources & Technology
- Energy Storage System
- Microgrids
- Distributed Generation
- Green Communications
- Electrification & transportation
- Agriculture powering technologies

**Theme 2**
Future of Space Technologies
- Aerospace, Transportation Communication
- Networking & Broadcast Technologies
- Components, Circuits, Devices & Systems
- Computing & Processing
- Fields, Waves & Electromagnetics

**Theme 3**
Smart Cities & Technologies
- Communications
- Control Systems
- Industry Applications
- Sustainable Energy
- Electric & autonomous vehicles
- Systems, Man, & Cybernetics
- Intelligent transportation systems
- Sustainable & resilient construction
- Green building technologies
- AR/VR based man-machine interaction
- AI-powered intelligent services

**Theme 4**
Future of learning & computing
- 3D printing, adaptive & interactive learning
- Cloud based computing
- Virtual & mixed reality
- Real-time processing
- Low power processing
- Biometrics
- Block-chains
- Deep learning
- Novel computer architectures
- Novel algorithms
- Quantum computing hardware & algorithms
- Biologically inspired processing
- Internet of things
- Cyber-security

**Theme 5**
Community spirit
- Smart village
- Indigenous data
- Education & STEM initiatives
- Equity & diversity
- Special Interest Group on Humanitarian Technology

**Theme 6**
Future of Industrial Automation & Smart Manufacturing
- Industry 4.0
- Industrial Internet of Things
- Robotics & mechatronics in industrial applications
- Real-time, distributed, & embedded computing
- Machine learning in industrial applications

**Theme 7**
Future of work in world of Automation
- Intelligent control
- Neuro-control, Fuzzy control & their applications
- Instrumentation systems
- Industrial automation
- Big Data Analytics
- High Performance Computing
- Data, Text, Web Mining, & Visualization
- Knowledge Engineering
- Networks, IoT & Cyber Security
- Cluster, Cloud, & Grid Computing
- Data Mining
- Neural Networks & Deep Learning
- Machine Learning
- Business Intelligence
- Crowd Sourcing & Social Intelligence
- Art & Entertainment Robotics
- Human-Robot Interaction
- Education Robotics
- Grasping & Manipulation
- Aerial Systems
- Wearable Robotics
- Robot Companions
- Navigation
- Service Robotics
- Rehabilitation Robotics
- Surgical Robotics

**Theme 8**
Future of Food, Nutrition, & Health
- Wearable Sensors
- Biomedical Imaging
- Micro/Nano-bioengineering
- Biomaterials
- Computational Systems
- Modelling & Simulation in Medicine
- Biomedical & Health Informatics
- AgriTech
- Food technology
- Computational Biology & Bioinformatics
- Precision agriculture
- Robotics in agriculture: planting, weeding, pruning, harvesting
- Plant growth monitoring
- Distributed sensors
- Sensing for food safety
- Smart prosthetics
- Human-brain interface

**Theme 9**
Other Topics
- Materials & fabrication processes
- Beyond CMOS devices
- Novel circuits & applications
- Signal, image, speech processing algorithms & architectures
- Sensor & instrumentation applications
- Novel control systems & applications
- Communication & network protocols & architectures

**Theme 10**
IEEE Societies Based
- Communications
- Computer
- Computational Intelligence
- Control
- Education
- Engineering in Medicine & Biology
- Industrial Applications
- Industrial Electronics
- Power & Energy
- Power Electronics
- Robotics & Automation
- Signal Processing
- Vehicular Technology

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**Papers Submission**
- Full-Paper Deadline: 25 September 2021
- Acceptance Notification: 21 October 2021
- Camera Ready Submission: 10 November 2021

**Tutorial Proposals**
- Proposal Deadline: 25 September 2021
- Decision Notification: 21 October 2021

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**Important Dates**

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**IEEE Robotics & Automation Society**

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**IEEE Signal Processing Society**

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**IEEE Control Systems Society**

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**IEEE Education Society**