

ORGANIZING COMMITTEE TENCON 2021



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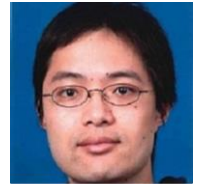
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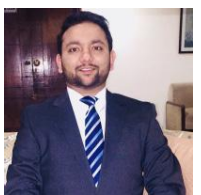
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Conference website:

www.tencon2021.com

Conference Submission:

[PaperCept Manuscript Submission Site](#)

Technical Enquiries:

tencon2021@gmail.com

TENCON 2021

Virtual and Physical

7-10 December 2021 | Auckland, New Zealand

Call for Paper Submissions & Special Session proposals



IEEE
FUTURE DIRECTIONS

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.

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.



CALL
FOR
PAPERS

Tutorial Sessions

The regular tracks will be supplemented with Tutorial & workshop sessions which will be mostly focused on future direction of different technology to enhance the resilience of the living. These are currently planned for venue-based attendees.

More information for the paper submission as per the IEEE guidelines can be found on the conference website. The accepted & presented papers will be submitted to IEEE Xplore Digital Library.

Theme 1

Low-Carbon Energy Future

Renewable Energy Sources & Technology
Energy Storage System
Microgrids
Distributed Generation
Green Communications
Electrification & transportation
Agriculture powering technologies

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 5

Community spirit

Smart village
Indigenous data
Education & STEM initiatives
Equity & diversity
Special Interest Group on Humanitarian Technology

Theme 2

Future of Space Technologies

Aerospace, Transportation Communication
Networking & Broadcast Technologies
Components, Circuits, Devices & Systems
Computing & Processing
Fields, Waves & Electromagnetics

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 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 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 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 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



Important Dates

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

