

## ORGANIZING COMMITTEE TENCON 2021



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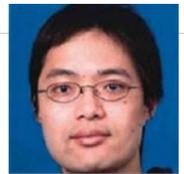
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Conference website:

[www.tencon2021.com](http://www.tencon2021.com)

Conference Submission:

[PaperCept Manuscript Submission Site](#)

Technical Enquiries:

[tencon2021@gmail.com](mailto:tencon2021@gmail.com)



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 an in-person mode) with a focus on IEEE Future Directions will provide IEEE members and non-members access to the best knowledge, resources and opportunities in emerging technologies. It also attempts to address public fear and challenges faced by humanity across the world as innovative technology is introduced and rolled out. The theme of TENCON 2021 has been selected to give a strong international exposure along with 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 and exciting IEEE Future Directions platforms.

CALL  
FOR  
PAPERS

## 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.



### 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 sprit

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



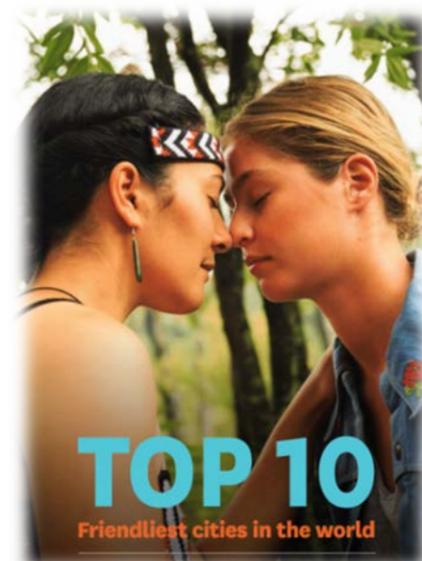
## Important Dates

### Papers Submission

Full-Paper Deadline: 15 August 2021  
Acceptance Notification: 20 October 2021  
Camera Ready Submission: 10 November 2021

### Tutorial Proposals (Venue Based)

Proposal Deadline: 30 August 2021  
Decision Notification: 1 October 2021



TOP 10  
Friendliest cities in the world

