

# JAC-ECC 2021 Technical Program



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# JAC-ECC2021 Conference Program

## (At-A-Glance)

**Day 1: Monday, December 13, 2021**

Times	Activity\Session		
9:00 – 10:00	<b>Connection Setup</b>		
10:00 – 10:45	<p style="text-align: center;"><b>Opening Session</b></p> <p style="text-align: center;">Hosts by: Prof. Mohammed Abo-Zahhad, (Conference Chair, E-JUST, Egypt), Prof. Haruichi Kanaya, (Conference Chair, Kyushu University, Japan), and Prof. Maha Elsabrouty, E-JUST, Egypt</p> <p style="text-align: center;"><b>Room:</b> <a href="#">JAC-ECC 2021 Virtual Room 1</a></p>		
10:45 – 11:30	<p style="text-align: center;"><b>Keynote Session 1</b></p> <p style="text-align: center;"><b>Chairs:</b> Prof. Satoshi Goto, E-JUST, Egypt, Prof. Ahmed Hassan, Nile University, Egypt, and Prof. Mohammed Abo-Zahhad, E-JUST, Egypt</p> <p style="text-align: center;"><b>Room:</b> <a href="#">JAC-ECC 2021 Virtual Room 1</a></p> <p style="text-align: center;"><b>Keynote #1: Prof. Masayoshi Ohashi, Fukuoka University, Japan</b></p> <p style="text-align: center;"><b>“Onga River IoT Project by Nogata City – Remote Monitor of Water Level and Control of Sluice Gates”</b></p>		
11:30 – 12:15	<b>Coffee Break</b>		
12:15 – 13:00	<p style="text-align: center;"><b>Keynote Session 2</b></p> <p style="text-align: center;"><b>Chairs:</b> Prof. Salah Obayya, Zewail City of Sci. and Technol., Egypt, Prof. Hesham ElBadawy, National Telecomm. Institute, Egypt, and Prof. Tanemasa Asano, Kyushu University, Japan</p> <p style="text-align: center;"><b>Room:</b> <a href="#">JAC-ECC 2021 Virtual Room 1</a></p> <p style="text-align: center;"><b>Keynote #2: Prof. Julian Webber, Osaka University, Osaka, Japan</b></p> <p style="text-align: center;"><b>“Terahertz Band Communications: New Trends, Applications and Challenges”</b></p>		
13:00 – 13:45	<p style="text-align: center;"><b>Keynote Session 3</b></p> <p style="text-align: center;"><b>Chairs:</b> Prof. Hadia Elhennawy, Ain Shams University, Egypt, Prof. Haruichi Kanaya, Kyushu University, Japan, and Dr. Ahmed Allam, E-JUST, Egypt</p> <p style="text-align: center;"><b>Room:</b> <a href="#">JAC-ECC 2021 Virtual Room 1</a></p> <p style="text-align: center;"><b>Keynote #3: Prof. Adel Bedair, E-JUST, Egypt</b></p> <p style="text-align: center;"><b>“Principles of Coupled Defected Ground Structures Resonators and Its Applications in WPT”</b></p>		
13:45 – 14:00	<b>Coffee Break</b>		
14:00 – 15:30	<p style="text-align: center;"><b>Technical Session #1</b></p> <p style="text-align: center;">Selected Topics in Signal, Image, and Video Processing</p> <p style="text-align: center;"><b>Room:</b> <a href="#">JAC-ECC 2021 Virtual Room 1</a></p>	<p style="text-align: center;"><b>Technical Session #2</b></p> <p style="text-align: center;">Selected Topics in Microwave and Antennas</p> <p style="text-align: center;"><b>Room:</b> <a href="#">JAC-ECC 2021 Virtual Room 2</a></p>	<p style="text-align: center;"><b>Technical Session #3</b></p> <p style="text-align: center;">Selected Topics in Circuits and Systems</p> <p style="text-align: center;"><b>Room:</b> <a href="#">JAC-ECC 2021 Virtual Room 3</a></p>
15:30 – 16:00	<b>Coffee Break</b>		
16:00 – 17:30	<p style="text-align: center;"><b>Technical Session #4</b></p> <p style="text-align: center;">Selected Topics in Biomedical Engineering and Applications</p> <p style="text-align: center;"><b>Room:</b> <a href="#">JAC-ECC 2021 Virtual Room 1</a></p>	<p style="text-align: center;"><b>Technical Session #5</b></p> <p style="text-align: center;">Selected Topics in Communications</p> <p style="text-align: center;"><b>Room:</b> <a href="#">JAC-ECC 2021 Virtual Room 2</a></p>	<p style="text-align: center;"><b>Technical Session #6</b></p> <p style="text-align: center;">Selected Topics in Artificial Intelligence</p> <p style="text-align: center;"><b>Room:</b> <a href="#">JAC-ECC 2021 Virtual Room 3</a></p>

## Day 2: Tuesday, December 14, 2021

Times	Activity\Session	
<b>9:00 – 10:00</b>	<b>Connection Setup</b>	
<b>10:00 – 10:45</b>	<p style="text-align: center;"><b>Keynote Session 4</b>  <b>Chairs:</b> Prof. Masaaki Suzuki, E-JUST, Egypt, Prof. Sameh Nada, E-JUST, Egypt, and Prof. Ahmed El-Mahdy, E-JUST, Egypt  <b>Room:</b> <a href="#">JAC-ECC 2021 Virtual Room 1</a>  <b>Keynote #4:</b> Dr. Ahmed N. Tantawy, Strategy Advisor and Former Scientist, Inventor, and Global Business Leader, USA  <b>“Developing a High Impact Research and Innovation Strategy for Africa”</b></p>	
<b>10:45 – 11:30</b>	<p style="text-align: center;"><b>Keynote Session 5</b>  <b>Chairs:</b> Prof. Elsayed Elrabaie, Menoufia University, Egypt, Prof. Ehab Badran, Arab Academy of Science and Technology, Egypt, and Prof. Mohammed Sayed, E-JUST, Egypt  <b>Room:</b> <a href="#">JAC-ECC 2021 Virtual Room 1</a>  <b>Keynote #5:</b> Prof. Gamal Fahmy, Assiut University, Assiut, Egypt  <b>“Micro Movement of Facial Muscles in Video Signals for Different Applications”</b></p>	
<b>11:30 – 12:15</b>	<b>Coffee Break</b>	
<b>12:15 – 13:00</b>	<p style="text-align: center;"><b>Keynote Session 6</b>  <b>Chairs:</b> Prof. Osamu Muta, Kyushu University, Japan, Prof. Khaled Y. Youssef, Beni-Suef University, Egypt, and Dr. Ahmed H. Abd El-Malek, E-JUST, Egypt  <b>Room:</b> <a href="#">JAC-ECC 2021 Virtual Room 1</a>  <b>Keynote #5:</b> Dr. Kenji Kanai, Waseda Research Institute for Science and Engineering, Japan  <b>“A Novel Virtualization of IoT Infrastructure and its Use Cases”</b></p>	
<b>13:00 – 14:30</b>	<p><b>Technical Session #7</b>  <b>Selected Topics in Signal, Image, and Video Processing</b>  <b>Room:</b> <a href="#">JAC-ECC 2021 Virtual Room 2</a></p>	<p><b>Technical Session #8</b>  <b>Selected Topics in Biomedical Engineering and Applications</b>  <b>Room:</b> <a href="#">JAC-ECC 2021 Virtual Room 3</a></p>
<b>14:30 – 15:00</b>	<b>Coffee Break</b>	
<b>15:00 – 15:45</b>	<p><b>Technical Session #9</b>  <b>Selected Topics in Signal, Image, and Video Processing</b>  <b>Room:</b> <a href="#">JAC-ECC 2021 Virtual Room 2</a></p>	<p><b>Technical Session #10</b>  <b>Selected Topics in Circuits and Systems</b>  <b>Room:</b> <a href="#">JAC-ECC 2021 Virtual Room 3</a></p>

# Next Generation Wireless Networks in Smart Cities Workshop

**Day 2: Tuesday, December 14, 2021**

Times	Activity\ Session
12:30 – 13:00	<b>Connection Setup</b>
13:00 – 13:45	<p style="text-align: center;"><b>Next Generation Wireless Networks in Smart Cities Workshop Session # W1</b></p> <p>Chairs: Prof. Mohammed Abo-Zahhad, E-JUST, Egypt, Prof. Ahmed Khattab, Cairo University, Egypt, and Dr. Ahmed H. Abd El-Malek, E-JUST, Egypt</p> <p style="text-align: center;"><b>Room:</b> <a href="#">JAC-ECC 2021 Virtual Room 1</a></p> <p><b>Invited Speaker #1:</b> Prof. Mohamed Abdelraheem, Assiut University, Assiut, Egypt  <b>“AssIoT IoT: A Remotely Accessible Testbed for IoT Applications”</b></p>
13:45 – 14:30	<p style="text-align: center;"><b>Next Generation Wireless Networks in Smart Cities Workshop Session # W2</b></p> <p>Chairs: Prof. Hossam Shalaby, E-JUST, Egypt, Prof. Mona Shokair, Menoufia University, Egypt, and Prof. Osamu Muta, Kyushu University, Japan</p> <p style="text-align: center;"><b>Room:</b> <a href="#">JAC-ECC 2021 Virtual Room 1</a></p> <p><b>Invited Speaker #2:</b> Prof. Maha Elsabrouty, E-JUST, Alexandria, Egypt  <b>“5G and B5G Research Directions and Practical Implementation on Testbeds”</b></p>
14:30 – 15:00	<b>Coffee Break</b>
15:00 - 15:45	<p style="text-align: center;"><b>Next Generation Wireless Networks in Smart Cities Workshop Session # W3</b></p> <p>Chairs: Prof. Tanemasa Asano, Kyushu University, Japan, Dr. Samir Elsaygheer, E-JUST, Egypt, and Dr. Ahmed H. Abd El-Malek, E-JUST, Egypt</p> <p style="text-align: center;"><b>Room:</b> <a href="#">JAC-ECC 2021 Virtual Room 1</a></p> <p><b>Invited Speaker #3:</b> Prof. Gunes Karabulut Kurt, Polytechnique Montréal, Montreal, QC, Canada  <b>“On the Security of Cognitive Cities: A Cyber-Physical Systems Perspective”</b></p>
15:45 – 16:15	<b>Coffee Break</b>
16:15 – 17:00	<p style="text-align: center;"><b>Next Generation Wireless Networks in Smart Cities Workshop Session # W4</b></p> <p>Chairs: Prof. Ayman El-Sayed, Menoufia University, Egypt, Prof. Walid Gomaa, E-JUST, Egypt, and Prof. Maha Elsabrouty, E-JUST, Egypt</p> <p style="text-align: center;"><b>Room:</b> <a href="#">JAC-ECC 2021 Virtual Room 1</a></p> <p><b>Invited Speaker #4:</b> Prof. Rami Abielmona, Vice President of Research &amp; Engineering, Larus Technologies, Ottawa, Canada  <b>“All-Domain Awareness According to AI/ML-Driven Big Data Analytics”</b></p>

# TECHNICAL SESSION 1

**Day 1, December 13, 2021 Time: 14:00-15:30**

**Selected Topics in Signal, Image & Video Processing,** Room: [JAC-ECC 2021 Virtual Room 1](#)  
**Chair:** Prof. Sherif Kishk, Mansoura University, Egypt, Prof. Ashraf A. M. Khalaf, Minia University, Egypt,  
and Dr. Moataz Abdelwahab, E-JUST, Egypt

Order	Paper No.	Authors	Paper Title
1	5	Gamal Fahmy	Detection of Micro Movements of Facial Muscles in Facial Videos
2	6	Aya Saad, Kloud Rafaat, Ahmed Soltan and M. Saeed Darweesh	Accelerated Edge Detection Algorithm for High Speed Applications
3	8	Retaj Yousri, Mohamed Mostafa, Rawane Yasser, Mahmoud Shawki, Ahmed Khaled, Ziad Mostafa, Ahmed Soltan and M. Saeed Darweesh	A Real-Time Approach Based on Deep Learning for Ego-Lane Detection
4	9	Garas Gendy, Hazem Mohammed, Nabil Sabor and Guanghui He	A Deep Pyramid Attention Network for Single Image Super-resolution
5	23	Islam Eldifrawi, Mohammed Abo-Zahhad, Moataz Abdelwahab and Ahmed Abdelmalek	New Face Recognition Algorithm Adopting Wide Fast Embedded Capsule Networks with Reduced Complexity and Preserved Accuracy

# TECHNICAL SESSION 2

**Day 1, December 13, 2021 Time: 14:00-15:30**

**Selected Topics in Microwave and Antennas,** Room: [JAC-ECC 2021 Virtual Room 2](#)  
**Chair:** Prof. Ahmed M. Attiya, Electronics Research Institute, Egypt, Prof. Ehab K. I. Hamad, Aswan University, Egypt, and Prof. Adel Bedair, E-JUST, Egypt

Order	Paper No.	Authors	Paper Title
1	12	Roshdy Abdelrassoul, Mohamed El Harmil, Moustafa Abd El Wahab, Mohamed Zaghloul and Mohamed El Ghamry	SATCOM on-the-Move Antenna Tracking Survey
2	37	Abdel-Aziz Hassanin and Nariman Bauomy	Estimation of the Quality and Ability of Radar Tomographic Image Reconstruction Technique
3	41	Asmaa Farahat, May Aboelhassan and Khalid Hussein	Quad-Band Patch Antenna for Future Generations of Mobile Handsets
4	63	Anas Zainud-Deen and Hend Malhat	Time-Modulated Plasma ME-dipole Planar Arrays Synthesis for Beam-Shaping Patterns Using PSO
5	64	Anas Zainud-Deen and Hend Malhat	Multi-Beam Radiation in Time-modulated SIW-DRA linear array

# TECHNICAL SESSION 3

**Day 1, December 13, 2021 Time: 14:00-15:30**

**Selected Topics in Circuits and Systems,**

**Room: [JAC-ECC 2021 Virtual Room 3](#)**

**Chair:** Prof. Hesham F. A. Hamed, Russian University, Egypt, Prof. Fathi Farag, Zagazig University, Egypt, and Prof. Mostafa I. Soliman, E-JUST, Egypt

Order	Paper No.	Authors	Paper Title
1	1	Ahmed Lutfi Elgreatly, Ahmed Dessouki, Hassan Mostafa, Rania Abdalla and Elsayed Elrabaie	A 4 GS/s 3-bit Highly Linear Time-Based Analog-to-Digital Converter for Massive MIMO Systems
2	15	Khadiga Hares, Mohamed Atef, Usama Sayed and Safwat Ramzy	4 ps Resolution Time-to-Digital Converter Implementation Utilizing LUTs
3	30	Ahmed Sayed, Maher Abdelrasoul and Hala Abdel-Kader	FPGA Based Hardware Accelerator for Sorting Data
4	31	Ahmed Sayed, Maher Abdelrasoul and Hala Abdel-Kader	Index and Sort Algorithm Based on FPGA for Sorting Data
5	53	Khalil Elkhamisy, Hamdy Abdelhamid, Salah Elagooz and El-Sayed El-Rabaie	The Effects of surface plasmon polariton on Silicon Thin Film Solar Cell Array

# TECHNICAL SESSION 4

**Day 1, December 13, 2021 Time: 16:00-17:30**

**Selected Topics in Biomedical Eng. & App.,**

**Room: [JAC-ECC 2021 Virtual Room 1](#)**

**Chair:** Prof. Ahmed Ragab Elbiely, Cairo University, Egypt, Prof. Amira S. Ashour, Tanta University, Egypt and Prof. Sabah M. Ahmed, E-JUST, Egypt

Order	Paper No.	Authors	Paper Title
1	4	Abdelgawad Abdelsamei, Fathi E. Abd El-Samie, Ayman M.Brisha and Ahmed S.Ali	Control of Robot Arm Based on EOG Signals
2	14	Omar Tarek, Omar Magdy and Ayman Atia	Yoga Trainer for Beginners Via Machine Learning
3	33	Sara Abdelbaset, Mohamed A. Eldesoky, Mohamed T. El-Wakad and Ahmed M. Soliman	An Efficient Algorithm for Analysis of Handwriting Task for the Detection of Parkinson's disease
4	35	Yosuke Imamura, Nuren Abedin, Luo Sixian, Shaira Tabassum and Ashir Ahamed	Missing Value Imputation for Remote Healthcare Data: A Case study of Portable Health Clinic System
5	38	Khaled Waly, Amal Eldesoky and Mohamed Tarek Elwakad	Zinc-Magnesium alloy as a degradable bone plate
6	48	Aya Taghian, Mohammed Abo-Zahhad, Mohamed Sayed and Ahmed Abdel-Malek	Virtual, Augmented Reality, and Wearable Devices for Biomedical Applications: A Review

# TECHNICAL SESSION 5

**Day 1, December 13, 2021 Time: 16:00-17:30**

**Selected Topics in Communications,**

**Room: [JAC-ECC 2021 Virtual Room 2](#)**

**Chair:** Prof. Magdy M. S. Elsoudani, Cairo University, Egypt, Prof. Moawad I. Dessouky, Menoufia University, Egypt, and Prof. Maha Elsabrouty, E-JUST, Egypt

Order	Paper No.	Authors	Paper Title
1	2	Helmy Milad, Nabil Abd-Rabou, Hala Mohamed and Aya Hossam	Performance analysis of Integrating Wireless Sensor Network with Li-Fi Wireless Communication Technology using OptiSystem Simulation Tool
2	29	Hamdy El-Sayed, Shereen Refaay, Samia Ali and Moumen El-Melegy	Chain Based Leader Selection using Neural Network in Wireless Sensor Networks protocols
3	32	Osama Elnahas, Ahmed Nasser and Babur Jalal	Data-driven based positioning technique for UAV Aided NOMA system
4	40	Donia Mohamed, Osama Elgandour, Ahmed Magdy and Ahmed Nasser	Data-driven Based Technique for Joint Power Allocation and User Pairing in NOMA System
5	54	Shahd Thabet, Abdelhamied Ateya and Mohammed Abo-Zahhad	Mobile Edge Computing-Based Radio Access Network for Tactile Internet
6	55	Amer Albarqi and Hany Hussein	Binary Block-Based Neural Network Decoder for F-GSM Signal Detection

# TECHNICAL SESSION 6

**Day 1, December 13, 2021 Time: 16:00-17:30**

**Selected Topics in Artificial Intelligence,**

**Room: [JAC-ECC 2021 Virtual Room 3](#)**

**Chair:** Prof. Hussein H. Ali, Alexandria University, Egypt, Prof. Mohammed Kayed, Beni-Suef University, Egypt, and Prof. Amin Shoukry, E-JUST, Egypt

Order	Paper No.	Authors	Paper Title
1	19	Badrya Dahy, Mamdouh Farouk and Khaled Fathy	ASSD:Arabic Semantic Similarity Dataset
2	20	Hakim Azeroual and Samya Bouhaddour	Analysis of UNSW-NB15 Datasets using Machine Learning Algorithms
3	21	Sara Dakrory, Bahgat Abdelhamid Abdelatif, Mohammed Kayed and Abdelmgeid Ali	Extracting Geographic Addresses from Social Media using Deep Recurrent Neural Networks
4	34	Ahmed Hosny, Alaa Khamis, Lobna Said and Ahmed Radwan	Vulnerable Road Users Detection and Tracking using YOLOv4 and Deep SORT
5	49	Sally Elghamrawy and Shehab Edin Ibrahim	Audio Signal Processing and Musical Instrument Detection using Deep Learning Techniques
6	50	Alaa Khalifa, Rowayda Sadek and Marwa Abdel Elfattah	Detecting Digital Stimulant music Using Bidirectional Deep Long Short Term Memory

# TECHNICAL SESSION 7

**Day 2, December 14, 2021 Time: 13:00-14:30**

**Selected Topics in Signal, Image & Video Processing,**

**Room: [JAC-ECC 2021 Virtual Room 2](#)**

**Chair:** Prof. Elsayed Mostafa Saad, Helwan University, Egypt, Prof. Fathi E. Abd El-Samie Menoufia University, Egypt, and Dr. Moataz Abdelwahab, E-JUST, Egypt

Order	Paper No.	Authors	Paper Title
1	16	Ahmed A. Asaker, Zeinab F. Elsharkawy, Sabry Nassar, Nabil Ayad, O. Zahran and Fathi E. Abd El-Samie	A Novel Iris Cryptosystem Using Elliptic Curve Cryptography
2	24	Cristina Ghandour, Walid El-Shafai and Sayed El-Rabaie	Medical Image Fusion Based on Weighted Least Square Optimization and Deep Learning Algorithm
3	25	Cristina Ghandour, Walid El-Shafai and Sayed El-Rabaie	Comparative Study between Different Image Fusion Techniques Applied on Biomedical Images
4	26	Salma Zakzouk, Mohamed Ehab, Silvana Atef, Retaj Yousri, Rania Moustafa and M. Saeed Darweesh	Rice Leaf Diseases Detector Based on AlexNet
5	36	Ahmed El-Sayed, Shaimaa Lazem and Mohamed Abougabal	An Improved Emotion-based Analysis of Arabic Twitter Data using Deep Learning

# TECHNICAL SESSION 8

**Day 2, December 14, 2021 Time: 13:00-14:30**

**Selected Topics in Biomedical Eng. & App.,**

**Room: [JAC-ECC 2021 Virtual Room 3](#)**

**Chair:** Prof. Elsayed Elrabaie, Menoufia University, Egypt, Prof. Hossam el-din Moustafa, Mansoura University, Egypt, and Dr. Samir Elsagheer, E-JUST, Egypt

Order	Paper No.	Authors	Paper Title
1	28	Ahmed El-Sayed, Shaimaa Lazem and Mohamed Abougabal	An Arabic Egyptian Dialect COVID-19 Twitter Dataset (ArECTD)
2	45	Laila Abbas, Soha Samy, Reem Ghazal, Ayman M. Eldeib and Sherif H. Elgohary	Contactless Vital Signs Monitoring for Public Health Welfare
3	46	Mohammed Abo-Zahhad, Aya Taghian, Mayar Abdelgawad, Nora Atef and Sarah Zeineldeen	Remote Monitoring System Dedicated To COVID-19 Patients Healthcare
4	56	Mohammed Abo-Zahhad, Mohammed S. Sayed, Ahmed Abdel-Malek, Abdelrahman Fawaz, Ahmed A. Zakaria, Ahmed E. Wahdan, Moaz Elsayed and Aya Taghian	An IoT-based Smart Wearable System for Remote Health Monitoring
5	57	Ahmed El-Hossiny, Walid Al-Atabany, Osama Hassan, Ahmed Soliman and Sherif A. Sami	A robust CNN classification of whole slide thyroid carcinoma images



# TECHNICAL SESSION 9

**Day 2, December 14, 2021 Time: 15:00-15:45**

**Selected Topics in Signal, Image & Video Processing,**

**Room: [JAC-ECC 2021 Virtual Room 2](#)**

**Chair:** Prof. Duc-Tan Tran, Phenikaa University, Vietnam, Prof. Masoud Alghoniemy, Alexandria University, Egypt, and Dr. Rami Zewail, E-JUST, Egypt

Order	Paper No.	Authors	Paper Title
1	47	Lawrence Ngugi, Mohammed Abo-Zahhad and Moataz Abdelwahab	Towards Leaf Disease Recognition from Individual Lesions Using Deep Learning Techniques
2	51	Yasser Ashraf Saleh, Ahmed Abdallah, Abdelhaleem Osman, Ezz El-Din Nehad and Mohamed Fanni	Autonomous Detection of Stair Dimensions for the Motion Planning of Stair Climbing Robots
3	59	Abdel-Aziz Hassanin and Nariman Bauomy	Tomographic Image Reconstruction using Inverse Synthetic Aperture Radar Methods

# TECHNICAL SESSION 10

**Day 2, December 14, 2021 Time: 15:00-15:45**

**Selected Topics in Circuits and Systems,**

**Room: [JAC-ECC 2021 Virtual Room 3](#)**

**Chair:** Prof. Mohamed Elsaid Nasr, Tanta University, Egypt, Prof. Mohamed Abbas, Assiut University, Egypt and Prof. Mohammed Sayed, E-JUST, Egypt

Order	Paper No.	Authors	Paper Title
1	58	Shogo Mutou, Akihiro Ikeda, Hiroshi Ikenoue and Tanemasa Asano	Evaluation of Temperature at SiC Surface During Pulsed Excimer Laser Irradiation
2	60	Chung-Hsiang Wang and Fu-Chiung Cheng	Ambient Energy Harvesting Chips for IoT End Devices: Review
3	65	Abdelrahman Dawood and Fathi Farag	A VERY HIGH SPEED, HIGH RESOLUTION DYNAMIC CURRENT COMPARATOR

## **Zoom Links:**

JAC-ECC 2021 Virtual Room 1: <https://us02web.zoom.us/j/83664343632>

JAC-ECC 2021 Virtual Room 2: <https://us02web.zoom.us/j/88450686174>

JAC-ECC 2021 Virtual Room 3: <https://us02web.zoom.us/j/84483002734>