

2021 International Conference on Computing, Electronic and Electrical Engineering (ICE Cube), FICT, BUIITEMS, Quetta, Pakistan

Schedule

Day 1: Tuesday, October 26 2021

Opening Ceremony & Keynote Talks

Venue: Orange Hall

Timings: 11:00 a.m. – 12:45 p.m. (GMT + 5h)

11:00 a.m.	Arrival of Chief Guest
11:05 a.m. – 11:10 a.m.	Recitation of Holy Quran
11:10 a.m. – 11:15 a.m.	Welcome Note by Conference Secretary
11:15 a.m. – 11:20 a.m.	Opening Remarks by Conference Chair Keynote : Dr. Faisal F. Khan
11:20 a.m. – 12:05 p.m.	"A case for precision medicine in Peshawar: where data, signals and patterns meet in biology and medicine. Keynote : H.E. Mrs. Androulla Kaminara
12:05 p.m. – 12:35 p.m.	"EU – Pakistan cooperation and the opportunities available for Pakistan from digitalisation"
12:35 p.m. – 12:45 p.m.	Address by Chief Guest

Refreshments

Venue: Sir Syed Academic Block Corridor

Timings: 12:45 p.m. – 1:15 p.m. (GMT + 5h)

Parallel Session 1

Venue: Pink Hall & Orange Hall

Timings: 1:15 p.m. – 2:35 p.m. (GMT + 5h)

Session: Computing and Intelligent Systems

Session Chair : Dr. Syed Attique Shah

Venue: Pink Hall

1:15 p.m. – 1:35 p.m.	"Adaptive Security for Collaborative Services in Smart Cities" Invited Speaker (Virtual) : Dr. Sufian Hameed
1:35 p.m. – 1:50 p.m.	Paper_56: Autonomous Driving Test Method Based on Digital Twin: A Survey. Ashfaq Niaz, Muhammad Usman Shoukat, Yanbing Jia, Samiullah Khan, Fahim Niaz and Muhammad Usama Raza
1:50 p.m. – 2:05 p.m.	Paper_63: Prediction and Analysis of Covid-19 Positive Cases Using Deep Learning Model. Muhammad Farhan, Sohail Jabbar and Muhammad Rehman Shahid
2:05 p.m. – 2:20 p.m.	Paper_85: Identification of growth stages of crops using mobile phone images and machine learning. Rahima Memon, Mohsin Memon, Naeem Mahoto and Muhammad Owais Raza
2:20 p.m. – 2:35 p.m.	Paper_141: Mispronunciation Detection in Articulation Points of Arabic Letters using Machine Learning. Javeria Farooq and Dr. Muhammad Imran

Session: Digital Signal Processing
Session Chair : Dr. Syed Ali Hassan
Venue: Orange Hall

1:15 p.m. – 1:35 p.m.	“The 6G Wireless Networks: What to Expect and How to Excel” Invited Speaker (Physical) : Dr. Syed Ali Hassan
1:35 p.m. – 1:50 p.m.	Paper_13: Towards Fully Automated Face Verification. Ali Murtaza, Qamar Sarfraz, Syed Ahmed Afzal, Muhammad Ibrahim Syed, Khurram Khan and Zahid Mahmood
1:50 p.m. – 2:05 p.m.	Paper_92: A Survey on AI-based ECG, PPG, and PCG Signals Based Biometric Authentication System. Hira Shahid, Afeefa Aymin, Ancuța Nicoleta Remete, Sumair Aziz and Muhammad Umar Khan
2:05 p.m. – 2:20 p.m.	Paper_97: Electrocardiograph Based Obstructive Sleep Apnea Diagnoses. Muhammad Jawad Ghafoor, Sajid Ahmed and Kashif Riaz
2:20 p.m. – 2:35 p.m.	Paper_104: Classification of Pulmonary Viruses X-ray and Detection of COVID-19 Based on Invariant of Inception-V3 Deep Learning Model. Zubair Saeed, Misha Urooj Khan, Ali Raza, Hareem Khan, Javaria Javed and Aqsa Arshad

Lunch Break

Venue: Sir Syed Academic Block Corridor
Timings: 2:35 p.m. – 3:45 p.m. (GMT + 5h)

Parallel Session 2

Venue: Pink Hall, Orange Hall & Purple Hall
Timings: 3:45 p.m. – 5:20 p.m. (GMT + 5h)

Session: Communication Theory and Systems
Session Chair : Dr.Zartash Afzal Uzmi
Venue: Pink Hall

3:45 p.m. – 4:05 p.m.	“Supporting Low-Latency Mobile Edge Applications via Control Plane Interventions”. Invited Speaker (Physical) : Dr.Zartash Afzal Uzmi
4:05 p.m. – 4:20 p.m.	Paper_36: Visible Light Communication (LI-FI Technology). Asjad Raza, Haider Mehdi, Zakir Hussain, Muhammad Arif and Shabbir Hussain
4:20 p.m. – 4:35 p.m.	Paper_38: Customizable Digital Control System For Domestic Application With Iot Capability. Muhammad Naeem, Yasir Salam, Ahmad Azeem, Ashar Sattar, Ali Sufyan and Faisal Salam
4:35 p.m. – 4:50 p.m.	Paper_42: Ebg-Backed Wearable Antenna For 5.8 GHz ISM Applications. Ayesha Saeed, Asma Ejaz and Yasar Amin
4:50 p.m. – 5:05 p.m.	Paper_45: The Intelligent Transportation Systems With Advanced Technology Of Sensor And Network. Muhammad Tanveer Riaz, Sheikh Muhammad Aaqib, Saeed Ahmad, Sundas Amin, Haider Ali, Sabir Husnain and Sidra Riaz
5:05 p.m. – 5:20 p.m.	Paper_47: Investigation of Electrical Properties of Epoxy Resin Composite with the Surface Modification of Sio2 Nanoparticles. Muhammad Tanveer Riaz, Aurang Zaib, Muhamamad Zeeshan Khan, Sidra Riaz, Saeed Ahmad, Haider Ali and Muhammad Mustafa Qureshi

Session: Electronic Devices, Circuit Design and Applications

Session Chair : Dr. Syed Mudassir

Venue: Orange Hall

3:45 p.m. – 4:05 p.m.	“Applications of functional safety in industrial human-robot collaboration” Invited Speaker (Virtual) : Dr. Muhammad Abdelawwad
4:05 p.m. – 4:25 p.m.	“Feature based image processing and security” Invited Speaker (Virtual) : Dr. Uzair Aslam Bhatti
4:25 p.m. – 4:40 p.m.	Paper_15: A bidirectional DC-DC bipolar converter for power transmission network. Laraib Saeed, Muhammad Yasir Ali Khan, Hamid Karim and Emad Alhani
4:40 p.m. – 4:55 p.m.	Paper_16: Design of a phase disposition PWM technique for reduced switch asymmetric 31-level inverter. Muhammad Yasir Ali Khan, Haoming Liu, Emad Alhani and Hamid Karim
4:55 p.m. – 5:10 p.m.	Paper_31: Broadband Printed/Elliptical Slot Antenna for Wireless Communication using Proximity Feeding Technique. Naeemullah, Sadiq Ullah, Ashfaq Ahmad and Dong You Choi
5:10 p.m. – 5:25 p.m.	Paper_106: Nanotechnology (45 NM) based low power and high performance 4x4 multiplier based on six transistors (6T) full adder & 2T XNOR gate. Misha Urooj Khan, Muhammad Zeeshan, Usama Gulzar, Muhammad Muneeb , Zeeshan Abbasi and Usman Babar Abbasi
5:25 p.m. – 5:40 p.m.	Paper_125: An on-chip reconfigurable multi-layer perceptron and recurrent neural network processor for speech recognition. Junaid Hussain Muzamal, Anne Kwong and Muhammad Asghar
5:40 p.m. – 5:55 p.m.	Paper_154: Design and experimental validation of a small-scale prototype active aerostatic thrust bearing. Muhammad Tanveer Riaz, Waheed Ur Rehman, Haider Ali, Sabir Husnain, Guiyun Jiang, Ehtisham Lodhi, Sheikh Muhammad Aaqib and Muhammad Mustafa Qureshi

Session: European Union Panel Discussion

Moderator : Dr. Bushra Naeem

Venue: Purple Hall

3:45 p.m. – Onwards	“Women & Digitisation”
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Session 3

Venue: Pink Hall

Timings: 5:20 p.m. – 6:40 p.m. (GMT + 5h)

Session: Information Systems and Services & Network and Distributed Systems

Session Chair : Dr. Muhammad Waqas

Venue: Pink Hall

5:20 p.m. – 5:40 p.m.	“Secure emergency information dissemination in vehicular networks” Invited Speaker (Physical) : Dr. Muhammad Waqas
5:40 p.m. – 5:55 p.m.	Paper_101: Adaptability of Automated Information Systems by the Development Sector in Developing Countries: A Case Study. Bilal Ahmed, Bushra Haq, Kamran Ali and Mazhar Iqbal
5:55 p.m. – 6:10 p.m.	Paper_127: Cluster-Based Association Rule Mining for an Intersection Accident Dataset. Mahtab Shahin, Soheila Saeidi, Syed Attique Shah, Minakshi Kaushik, Rahul Sharma, Sijo A. Peious and Dirk Draheim
6:10 p.m. – 6:25 p.m.	Paper_26: Predictive Maintenance and Internet of Things. Zehra Jahangeer Khan
6:25 p.m. – 6:40 p.m.	Paper_78: Energy Efficiency Maximization in RIS-assisted Wireless Networks. Muhammad Ahsan, Sonain Jamil, Muhammad Tauseef Ejaz and Muhammad Sohail Abbas

Gala Dinner

Venue: Takatu Lodges, BUITEMS

Timings: 8:00 p.m. – 10:00 p.m. (GMT + 5h)

Day 2: Wednesday, October 27 2021

Keynote Talks

Venue: Orange Hall

Timings: 9:30 a.m. – 11:15 a.m. (GMT + 5h)

9:30 a.m. – 10:15 a.m.	Keynote (Virtual) : Prof. Dr. Josef Börcsök "Future Oriented Cyber Physical Safety Systems on Chip"
10:15 a.m. – 11:15 a.m.	Keynote (Virtual) : Prof. Dr. Dirk Draheim "Blockchains: Money for Nothing or Something for Everything?"

Refreshments

Venue: Sir Syed Academic Block Corridor

Timings: 11:15 a.m. – 11:45 a.m. (GMT + 5h)

Parallel Session 1

Venue: Pink Hall, Orange Hall, Purple Hall & HBL-4 Computer Lab

Timings: 11:45 a.m. – 1:55 p.m. (GMT + 5h)

Session: Electrical Energy System

Session Chair : Dr. Faisal Khan Uthmanzai

Venue: Pink Hall

11:45 a.m. – 12:05 p.m.	"Advances in Flux Switching Machine" Invited Speaker(Physical) : Dr. Faisal Khan Uthmanzai
12:05 p.m. – 12:25 p.m.	"Contactless Sensing for enabling in home monitoring" Invited Speaker (Virtual): Dr. Qammer Hussain Abbasi
12:25 p.m. – 12:40 p.m.	Paper_34: Current Controlled Robust Four-Switch Buck-Boost DC-DC Converter. Qudrat Ullah, Xuanlyu Wu and Umar Saleem
12:40 p.m. – 12:55 p.m.	Paper_35: Integration of Electric Vehicles in Smart Grid and Manage Power with Demand Response. Abdul Haseeb Bhutta and Muhammad Yousif
12:55 p.m. – 1:10 p.m.	Paper_53: Design and Analysis of E-Core Modular and Complementary Fault Tolerant Field Excited Flux Switching Linear Machines. Shahid Hussain, Faisal Khan, Wasiq Ullah, Basharat Ullah, Bakhtiar Khan and Muhammad Qasim
1:10 p.m. – 1:25 p.m.	Paper_83: Performance Analysis of Droop Control with Virtual Impedance in Parallel Operation of Microgrid in Islanded Mode. Muhammad Muzammil Farooqi, Abasin Ulasyar, Waleed Ali, Haris Sheh Zad and Abraiz Khattak
1:25 p.m. – 1:40 p.m.	Paper_91: Performance Investigation of Novel 8-Slot/10-Pole Single Phase Outer Rotor Flux Switching Machine. Naseer Ahmad, Hamid Ali Khan, Irfan Sami, Surat Khan, Zahoor Ahmad and Faisal Khan
1:40 p.m. – 1:55 p.m.	Paper_153: Impact of Impulsive load Scenario on Isolated Mini-Grid and its Neutralization with BESS. Asad Mujeeb, Mazhar Ali, Chaoxu Mu, Nabeel Rasheed, Tahir Khan and Hameed Ullah

Session: Sustainable Development & Society
Session Chair : Habibullah Khan Nasar
Venue: Orange Hall

11:45 a.m. – 12:05 p.m. “Mainstreaming, Acceleration and Policy Support (MAPS) for SDGs in Balochistan”
Invited Speaker (Physical): **Habibullah Khan Nasar**
Paper_7: IoT Based Tap-Water Supply Alert System – An Application of Machine-to-Machine (M2M) Communication. Rao Raees Alam Khan, Faizan ur Rehman, Syed Saeed Jaffer, Syed Shoaib Hussain Zaidi and Sajid Ahmed

12:05 p.m. – 12:20 p.m. **Paper_17:** Smart Baby Incubator. Faique Ahmed, Ali Sufyan, Shazil Hussain, Ahad Rehman, Sundas Amin and Yasir Salam

12:20 p.m. – 12:35 p.m. **Paper_52:** Design and Development of IoT Based Aeroponics Growbox. Maaz Ahmed, Aliza Farrukh, Meshal Iqbal Shah, Ayesha Jamil, Imtiaz Hussain Kalwar and Asad Kamran

12:35 p.m. – 12:50 p.m. **Paper_62:** An Effective MPPT Controller for Power Optimization of PMSG Based Wind Turbine. Ali Shan Sayed, Mazhar Hussain Baloch, Ali Asghar Memon, Munsif Ali Jatoi, Baqir Ali Mirjat and Aftab Ali Samejo

12:50 p.m. – 1:05 p.m. **Paper_138:** Two-step Feature Selection for Predicting Mortality Risk in COVID-19 Patients. Saira Mustafa, Aatka Ali, Humayun Salahuddin and Muhammad Umar Chaudhry

Session 1: Tutorial 1
Venue: Purple Hall

12:00 p.m. – 1:30 p.m. “The Nexus of Beyond 5G and 6G Networks: Opportunities and Challenges”
Trainer: **Dr. Syed Ali Hassan**

Session 1: Tutorial 2
Venue: HBL-4 Computer Lab

12:00 p.m. – 1:30 p.m. “Recent Internet of Things Trends in Smart Agriculture”
Trainer: **Prof. Dr. Faisal Karim Shaikh**

Lunch Break
Venue: Sir Syed Academic Block Corridor
Timings: 1:55 p.m. – 3:05 p.m. (GMT + 5h)

Parallel Session 2
Venue: Purple Hall, HBL-4 Computer Lab & Pink Hall
Timings: 3:05 p.m. – 4:55 p.m. (GMT + 5h)

Session 2: Tutorial 1
Venue: Purple Hall

3:00 p.m. – 4:30 p.m. “The Nexus of Beyond 5G and 6G Networks: Opportunities and Challenges”
Trainer: **Dr. Syed Ali Hassan**

Session 2: Tutorial 2
Venue: HBL-4 Computer Lab

3:00 p.m. – 4:30 p.m. “Recent Internet of Things Trends in Smart Agriculture”
Trainer: **Prof. Dr. Faisal Karim Shaikh**

Session: Emerging Engineering and Technology Trends

Session Chair : Dr. Hamayoun Yousaf Shahwani

Venue: Pink Hall

3:05 p.m. – 3:25 p.m.	“Towards a greener tomorrow: Steps beyond 5G wireless networks” Invited Speaker (Virtual) : Prof. Navrati Saxena
3:25 p.m. – 3:40 p.m.	Paper_51: A Compact Study of Recent Trends of Challenges and Opportunities in Integrating Internet of Things (IoT) and Cloud Computing. Muhammad Ishaq, Muhammad Hammad Afzal, Shehla Tahir and Kifayat Ullah
3:40 p.m. – 3:55 p.m.	Paper_80: Hate Speech and Offensive Language Detection from Social Media. Vildan Mercan, Akhtar Jamil, Alaa Ali Hameed, Irfan Ahmed Magsi, Sibghatullah Bazai and Syed Attique Shah
3:55 p.m. – 4:10 p.m.	Paper_81: Using Machine Learning To Predict Patient’s Admission Trends in Hospital. Qaisar Khan and Syed Attique Shah
4:10 p.m. – 4:25 p.m.	Paper_89: Sentiment Analysis for COVID-19 Tweets Using Recurrent Neural Network (RNN) and Bidirectional Encoder Representations (BERT) Models. Ayşenur Topbaş, Akhtar Jamil, Alaa Ali Hameed, Syed Muzafar Ali, Sibghatullah Bazai and Syed Attique Shah
4:25 p.m. – 4:40 p.m.	Paper_122: Decision Support System for forecasting the trends in Energy Sector of Pakistan: Multivariate Modeling with Socio-economic and Environmental Factors. Muhammad Bilal Hasan, Jawad Yousaf, Nokhaiz Tariq Khan, Javed Aslam and Chaudhary Muhammad Ehtisham
4:40 p.m. – 4:55 p.m.	Paper_140: Learning Predictive Models for Underground Coal Mine Environment Using Sensor Data. Ali Gul, Waheed Noor, Junaid Babar, Ali Nawaz and Syed Owais Athar

Closing Ceremony

Venue: Orange Hall

Timings: 4:30 p.m. – 5:30 p.m. (GMT + 5h)

4:30 p.m. – 4:35 p.m.	Arrival of the Chief Guest
4:35 p.m. – 4:40 p.m.	Recitation of the Holy Quran
4:40 p.m. – 4:45 p.m.	Conference Roundup - Technical Program Committee Chair
4:45 p.m. – 5:00 p.m.	Platinum Sponsor Talk (DHA) - Brigadier Akhtar Subhan
5:00 p.m. – 5:10 p.m.	Talk by Vice President, Telenor - Mr. Waqas Aman Ullah
5:10 p.m. – 5:20 p.m.	Remarks by Honorable Chancellor (Governor Balochistan)
5:20 p.m. – 5:30 p.m.	Remarks by Vice Chancellor, BUITEMS

Refreshments

Venue: Sir Syed Academic Block Corridor

Timings: 5:30 p.m. (GMT + 5h)