



3<sup>rd</sup> International Conference on Electrical, Communication and Computer Engineering (ICECCE 2021)

12-13 JUNE 2021 Kuala Lumpur / Malaysia

## **CONFERENCE PROGRAM BOOKLET**

IEEE Conference Record No: 52056



Warning: All timings in the program are as per Malaysia Time (GMT+8) Convert your local presentation time from <u>https://www.timeanddate.com</u>

		12 June 202	1	
	ROOM A	ROOM B	ROOM C	ROOM D
10.40-11.00	Welcome Talk on behalf of Organizing Committee: - Prof. Dr. Mardeni Bin Roslee -Prof. Dr. Amin Badshah - Prof. Dr. Nadeem Ahmed Sheikh			
11.00-13.00	Parallel Session 1A: Neural Networks, Deep Learning, and Intelligent Systems	Parallel Session 1B: Power Generation and Renewable Energy Systems	Parallel Session 1C: Networks Security and Reliability	Parallel Session 1D: Mixed Topics
13.00-13.30		BREAKFAST / L	UNCH / DINNER	
13.30-14.00	Plenary Session 1: Keynote Speakers - Prof. Dr. Mardeni Bin Roslee			
14.00-15.45	Parallel Session 2A: Neural Networks, Deep Learning, and Intelligent Systems	Parallel Session 2B: Power Generation and Renewable Energy Systems	Parallel Session 2C: Intelligent Robotics and Control Systems	Parallel Session 2D: Mixed Topics
15.45-16.00		TEA B	BREAK	
16.00-16.30	Plenary Session 2: Keynote Speakers - Prof. Dr. Victor Chang			
16.30-18.00	Parallel Session 3A: Power Generation and Renewable Energy Systems	Parallel Session 3B: Advanced Electronics	Parallel Session 3C: Antennas, Propagation and Radar Systems	Parallel Session 3D: Wireless Communication Systems and Technologies
18.00-18.15		TEA B	BREAK	
18.15-20.15	Parallel Session 4A: Neural Networks, Deep Learning, and Intelligent Systems	Parallel Session 4B: Power Generation and Renewable Energy Systems	Parallel Session 4C: Networks Security and Reliability	Parallel Session 4D: Software Engineering

		13 June 202	1	
	ROOM A	ROOM B	ROOM C	ROOM D
11.00-11.30	Plenary Session 3: Keynote Speakers - Prof. Dr. Patrick S. P. Wang			
11.30-13.00	Parallel Session 5A: Neural Networks, Deep Learning, and Intelligent Systems	Parallel Session 5B: Signal and Image Processing Techniques	Parallel Session 5C: Advanced Electronics	Parallel Session 5D: Intelligent Robotics and Control Systems
13.00-13.30		BREAKFAST / LU	JNCH / DINNER	
13.30-15.15	Parallel Session 6A: Neural Networks, Deep Learning, and Intelligent Systems	Parallel Session 6B: Power Generation and Renewable Energy Systems	Parallel Session 6C: Mixed Topics	
15.15-15.30		TEA B	REAK	
15.30-16.00	Plenary Session 4: Keynote Speakers - Dr. Fazel Mohammadi			
16.00-17.45	Parallel Session 7A: Neural Networks, Deep Learning, and Intelligent Systems	Parallel Session 7B: Mixed Topics	Parallel Session 7C: Mixed Topics	
17.45-18.00		TEA B	REAK	
18.00-19.45	Parallel Session 8A: Antennas, Propagation and Radar Systems	Parallel Session 8B: Signal and Image Processing Techniques	Parallel Session 8C: Wireless Communication Systems and Technologies	
19.45-20.00		TEA B	REAK	
20.00-20.30	Closing Session: Prof. Dr. Mardeni Bin Roslee Dr. Yunus UZUN, Dr. Shafqat Ullah Khan Dr. Athar Waseem			



Session 00: Opening Session – Welcome Talk on behalf of Organizing Committee

Room A

10:40-11:00

Prof. Dr. Mardeni Bin Roslee Prof. Dr. Amin Badshah Prof. Dr. Nadeem Ahmed Sheikh

## PARALLEL SESSIONS 1

Parallel Session 1A: Neural Networks, Deep Learning, and Intelligent Systems Session chair: Hafizza Abdul Ghapar Room A **14** Automatic Essay Scoring for Indonesian Akmal Ramadhan Arifin Prima Dewi Purnamasari, Anak Short Answers using Siamese Manhattan Long Agung putri Ratna Short-Term Memory Buldan Muslim, Charisma Juni 62 72 Hours Ahead Prediction of Ionospheric Kumalasari, Nurrohmat Widjajanti, TEC using Radial Basis Function Neural Asnawi Networks Nur Athirah Zailan, Anis Salwa 94 YOLO-based Network Fusion for Riverine Mohd Khairuddin, Uswah Floating Debris Monitoring System Khairuddin, Akira Taguchi Nor Aziah Amirah Nor, Uswah Khairuddin, Rubiyah Yusof, Nik 95 Esophagus Detection Using Deep Learning Mohamad Aizuddin Nik, Ridzuan Method 11.00-13.00 Yunus Hafizza Abdul Ghapar, Anis 96 New Feature Extraction for Wood Species Salwa Mohd Khairuddin, Azlin Recognition System via Statistical Properties of Ahmad Line Distribution Anthony B. Villa, Rogie P. Jacinto, **197** Determination of Citrullus Lanatus "Sweet-16" Ripeness Using Android-Based Michell Ann A. Ramos, Stephen Paul L. Alagao Application 236 An Adaptation of Deep Learning Nor'asnilawati Salleh Nurulhuda Firdaus Mohd Azmi, Siti Technique In Orbit Propagation Model Using Sophiayati Yuhaniz Long Short-Term Memory Arsh Agarwal, Aryan Singhal, 295 FA-GAN: High quality face aging Anmol Srivastava, Piyush Tewari

#### BREAKFAST / LUNCH / DINNER/TEA BREAK



Parallel Session 1B: Power Generation and Renewable Energy Sy	stems
Session chair: Zahid Ullah	

Session chair			
Room B			
	Rafiq Asghar, Kaleem Ullah, Zahid Ullah, Athar Waseem, Nauman Ali, Kamran Zeb Z. Ullah, R. Asghar, N. Ali, A. Waseem, A. Khan, <b>T. Mujahid</b> ,	<ul> <li>111 Assessment of the performance and shortcomings of common electric vehicle battery technologies</li> <li>114 Digital Signal Processing for Power Quality</li> </ul>	
	B. Khan, S. M. Ali, C. A. Mehmood	Enhancement within Smart Grid	
	<mark>Hao Wu</mark> , Xiaojun Fu, Shengdong Hu	<b>198</b> A 650V Enhancement Mode GaN HEMT Device with Field Plate for Power Electronic Applications	
11.00-13.00	<mark>Amil Daraz</mark> , Dr. Engr Suheel Abdullah Malik, Dr. Athar Waseem	<b>210</b> Genetic Algorithm based I-P controller for superheated steam temperature control system	
	Dewan Mahnaaz Mahmud, Fardeen Mahbub, <mark>Farhan</mark> <mark>Tasnim</mark> , MD. Zilan Uddin Saif, Siam Hasan Khan	<b>232</b> A Review on Solar and Biomass Energy for Overcoming the Energy Scarcity of Bangladesh and its Prospects	
	<mark>Jiayi Fan</mark> , YongKeun Lee	<b>290</b> Copper Loss Reduction of Torque Sharing Function in Switched Reluctance Motor by Division of Commutation Region	
	<mark>Jiayi Fan</mark> , YongKeun Lee	<b>291</b> Extending Maximum Speed of Torque Sharing Function Method in Switched Reluctance Motor	
	Luu Huu Vinh Quang	<b>322</b> Assessing the Transient Stability Under The Impact Of Double Shot Alr To Rank The Power Buses In Multi Machine Power Systems	
BREAKFAST / LUNCH / DINNER/TEA BREAK			
S			



Parallel Session 1C: Networks Security and Reliability Session chair: <mark>Aisha Zahid Junejo</mark>			
	Roo Quoc-Dung Ngo, Huy-Trung Nguyen, Viet-Dung Nguyen, Cong-Minh Dinh, Anh-Tu phung, Quy-Tung Bui	m C 37 Adversarial Attack and Defense on Graph- based IoT Botnet Detection Approach	
	Tran Haoang Hai, <mark>Le Hai Nam</mark>	77 A Practical Comparison of Deep Learning Methods for Network Intrusion Detection	
	Tomoaki Ukezono	89 Resistance for Side-Channel Attack by Virtual Dual-Rail Effect	
11.00-13.00	Chung T. Kong	<b>151</b> Hacking CCTV by changing time	
	<mark>Aisha Zahid Junejo</mark> , Dr. Manzoor Ahmed Hashmani, Dr. Abdullah Alabdulatif	<b>163</b> Blockchain Privacy Preservation by Limiting Verifying Nodes' During Transaction Broadcasting	
	<mark>Jun O Seo</mark> , Sathiamoorthy Manoharan, Ulrich Speidel	<b>242</b> Automatic Detection of Storage-based Covert Channels	
	<mark>Jun O Seo</mark> , Sathiamoorthy Manoharan, Ulrich Speidel	<b>272</b> Feasibility Evaluation of Long-Distance Network Timing-based Covert Channels	
	<mark>Yang Qin</mark> , Masaaki Kondo	<b>328</b> Federated Learning-Based Network Intrusion Detection with a Feature Selection Approach	
BREAKFAST / LUNCH / DINNER/TEA BREAK			
Tea Break			

Parallel Session 1D: Mixed Topics Session Chair: <mark>Mardeni Bin Roslee</mark>			
	Roo	m D	
	Jung Yoon, <mark>Yvonne Yeo</mark>	<b>59</b> Memory Hardware Quality Requirements for Hybrid Multi Cloud Computing	
	<mark>Abdul Mu'iz Maidi</mark> , Pg. Emeroylariffo Abas, Feroza Begum	88 Highly Sensitive Photonic Crystal Fiber Sensor for Liquid Detection	
	Mohd Zainal Bin Nurdin, Zubaida Yusoff, Mardeni Roslee, Shaiful Jahari Hashim, Azah Syafiah Mohd Marzuki	<b>115</b> High Bandwidth Hybrid Supply Modulation Using Totem Pole Configuration for Envelope Tracking Applications	
	<mark>Ida</mark> , Hamdan Gani, Muhammad Faisal, Rosnani	<b>238</b> Optimal Auto Calling Algorithm For Real- Time Condition Reporting By Corruption Handling Officer	
11.00-13.00	<mark>Subrata Kumar Das</mark> , Mohammad Zahidur Rahman	<b>264</b> A Compression Technique for Electronic Health Data through Encoding	
	<mark>Neramitr Chirakanphasisarn</mark> , Thadsanee Thongkanluang	<b>304</b> Measurement of Muscle Stimulation and Hot Compression for Rehabilitation	
	Unan Yusmaniar Oktiawati, Muhammad Nur Fajri Alfata, Fahmizal, Spetia Dini Rahayu, Ahmad Fauzi Ridwa, Dani Yudha Kusuma, Christian Vidia Hari Permana	<b>334</b> Development of Monitoring System of Furnace Temperature for Fire Resistance Test	
	<mark>Ariunobolor Purvee</mark> , Otgonchimeg Choidorj	<b>403</b> Optimization of Input Values of Simulated Motors Using Grey Relational Analysis	
BREAKFAST / LUNCH / DINNER/TEA BREAK			



## PLENARY SESSION 1

Plenary Session 1: Keynote Speaker		
Room A		
		-382- Radio Resource Allocation for
13:30-14:00	Prof. Dr. Mardeni Bin Roslee	Interference Management in Device to
		Device (D2D) 5G Networks

## PARALLEL SESSIONS 2

#### Parallel Session 2A: Neural Networks, Deep Learning, and Intelligent Systems Session chair: Kubra Tas

### <mark>Chiao-Shing Lin</mark>, Mohammed Yunus Abdul Gaffar, Jarryd Son, Simon Winberg

Efsa Cakur, Gursel Baltaoglu, Asir Furkan Kayacik, Berkan Ozcan, Mehmet S. Aktas

Kubra Tas</mark>, Eyup Onder, Mehmet S. Aktas

<mark>Alperen Mollaoglu</mark>, Gursel Baltaoglu, Efsa Cakur, Mehmet S. Aktas

14.00-15.45 Ahlem Drif, Houssem Eddine Zerrad, Hocine Cherifi

#### <mark>Saheed Salahudeen</mark> Abdullahi<mark>,</mark> Sun yiming,

Shamsuddeen Hassan, Abdulrasheed Mustapha, Ahmad Muhammad Aminu, AbdulKadir Abdullahi, Musa Bello, Saminu Mohammad Aliyu Waqas Arshad, Muhammad

Ali, Muhammad Mumtaz Ali, Arifa Javed, Saddam Hussain

 Room A

 ed

 on,

 **71** Dynamic Hand Gesture Recognition using Doppler Sonar and Deep Learning

83 Real-Time Fraud Prediction On Streaming Customer-Behaviour Data

86 On the Implicit Feedback Based Data Modeling Approaches for Recommendation Systems

**87** Outlier Detection on Streaming Customerbehavior Data with Unsupervised Learning Methods

**93** Context-Awareness in Ensemble Recommender System Framework

**179** Deep Sequence Models for Text Classification Tasks

**213** Multi-Class Text Classification: Model Comparison And Selection

### BREAKFAST / LUNCH / DINNER/TEA BREAK



Parallel Session 2B: Power Generation and Renewable Energy Systems Session chair: Abeer Farouk Al-Attar			
		m B	
	Umar Musa, Abdullahi A.Mati. Abdullahi A. Mas'ud, Gaddafi S. Shehu, Ricardo Albarracin- Sachez, Johantan M.Rodriguez- Serna	27 Modeling and Analysis of Electric Field Variation across Insulation System of a MV power Cable	
	<mark>Kassimi Youghourta</mark> , Guettaf Abderrazak, Ali Arif	<b>53</b> 6/4 SRM electromagnetic modeling and control by using Finite element method	
	<mark>Mohammad Mominur</mark> Rahman <mark>,</mark> Ghazi A. Ghazi, Essam A. Al-Ammar, Wonsuk Ko	<b>183</b> Techno-Economic Analysis of Hybrid PV/Wind/Fuel-Cell System for EVCS	
14.00-15.45	Abdulbari Ali Mohamed FREI, Muhammet Tahir GUNESER	<b>216</b> Optimal Accommodation of DERs in Practical Radial Distribution Feeder for Techno- Economic with Artificial Bee Colony Algorithm	
	Abdulbari Ali Mohamed FREI, Muhammet Tahir GUNESER	<b>217</b> A Huristic Method Base For Optimum Placement Of Distributed Energy Resources In Practical Radial Distribution Feeder	
	Majid. S. M. Al-Hafidh, Omar Sh. Al-Yozbaky, Azhear. S. Al- Fahadi	<b>248</b> A New Approach to Reconfiguration of Electric Distribution Networks	
	Abeer Farouk Al-Attar	276 Optimizing Mechanical and Physical Properties of Phosphorus Pentoxide as Solid Electrolyte	
BREAKFAST / LUNCH / DINNER/TEA BREAK			
Tea Break			

# Parallel Session 2C: Intelligent Robotics and Control Systems

Session chair: Aleem khailq				
Room C				
	<mark>Muhammad Hamza Ali</mark> , Muhammad Salman Kabir	<b>24</b> Design and Development of an Unmanned Ground Vehicle with Serial Manipulator and its Control Mechanism		
	Zaharuddeen Haruna, Muhammed B. Mu'azu, Yusuf S. Abubakar, Emmanuel A. Adedokun	49 Path Tracking Control of Four Wheel Unmanned Ground Vehicle using Optimized FOPID Controller		
	<mark>Joao Vitor Assmann</mark> , Marcelo Gotz, Ivan Muller, Achim Rettberg	90 Distributed Embedded Platform for Controllers Following the Supervisory Control Theory		
14.00-15.45	<mark>Serigne Modou DIOUF</mark> , Ibrahima GUEYE, Abdoulaye KEBE, Moustapha DIOP	<b>113</b> Comparative study of conventional PID and fuzzy logic controllers applied to an electric oven		
	<mark>Corneliu Andrei NAE</mark> , Ioan Dumitrache	265 Adaptive Driving Models for Intelligent Traffic Cyber Phyisical Systems		
	Samer Mutawe, <mark>Mohammad</mark> Hayajneh, Suleiman BaniHani	<b>316</b> Robust Path Following Controllers for Quadrotor and Ground Robot		
	<mark>Ossama Ammari</mark> , Khalid El majdoub, Rachida Baz, Abderrahim Taouni	381 Longitudinal modelling of Electric Vehicle driven by a BLDC In-Wheel Motor based on Pacejka tire model		
BREAKFAST / LUNCH / DINNER/TEA BREAK				



Parallel Session 2D: Mixed Topics Session chair: <mark>Mohamad Huzaimay Jusoh</mark> Room D			
	<mark>Egils Ginters</mark> , Jagadeesh Chakkaravarthy Revathy	33 Attributes of Digital Technologies and Related Impacts on Sustainability Assessment	
	<mark>Pedro Juan Roig</mark> , Salvador Alcaraz, Katja Gilly, Carlos Juiz	<b>46</b> Applying multidimensional geometry to basic fog computing designs	
	Pedro Juan Roig, jJulio Jornet, Adolfo Albaladejo, Juan Carlos Hernandez	<b>47</b> <i>Remote surveillance system in isolation for Covid-19</i>	
14.00-15.45	Chaib Ras Amira, Bouzerara Ramdane, Bouzeria Hamza, Aissaoui Meriem, Mammeri Imen	98 Genetic algorithm approach of HB-RPC for adaptive power quality improvement in railway traction chain	
	Rasoul Sadeghi, Bruno Correia, Emanuele Virgillito, Antonio Napoli, Nelson Costa, Joao Pedro, Vittorio Curri	<b>120</b> Comparison of Transceiver and C+L Band Upgrades: Network Traffic and Energy Assessment	
	Emanuele Virgillito, Andrea Castoldi,Stefano Straullu, Rosanna Pastorelli, Vittorio Curri	<b>121</b> QoT Computation for 100G Lightpaths Routed on 10G-loaded Dispersion-Managed Network Segments	
	Honggang Kuang, Qian Wang, Xiong Liu, Wenyan Gan, Decheng Cao	<b>191</b> Research on Super hydrophobic Modification and Characteristics of Plexiglass Surface	
BREAKFAST / LUNCH / DINNER/TEA BREAK			



## PLENARY SESSION 2

Plenary Session 2: Keynote Speaker			
Room A			
Prof. Dr. Victor Chang	<b>Title-</b> The AI–based Data Science and Analytics services		
	Room		

# PARALLEL SESSIONS 3

Parallel Session 3A: Power Generation and Renewable Energy Systems			
Session chair	: Ingmar Leibe		
	Roo	m A	
	<mark>Muhammad Umar Siddiqui</mark> , Sajid Ali, Sikandar Khan, Sadaqar Ali, Mamon M. Horoub	<b>401</b> Optimum Tilt Angles of Solar Collectors in Saudi Arabia	
	bernard Tonderayi Mangara	<b>421</b> Revisiting some computation methods for estimating the parameters of the Weibull Distribution	
16.20 19 00	<mark>Mirza Batalovic</mark> , Selma Grebovic, Mirza Matoruga, Sead Berberovic	<b>435</b> Modeling of Partial Discharge Activity inside the Defects in Power Cable using COMSOL Mph-Matlab Software Platform	
16:30-18.00	Habib Conrad Sotiman Yotto, Patrice Koffi Chetangny, Sossou Houndedako, Jacques Aredjodoun, Didier Chamagne, Gerald Barbier, Antoine Vianou	<b>455</b> Estimation and forecasting electricity load in Benin: using econometric model ARIMA/GARCH	
	Dr. Nassipkul Dyussembekova, Dr. Ingmar Leibe, M.Eng. Michelle Mustroph, Prof. DrIng. Reiner Schutt	<b>461</b> Possibilities for grid friendly system integration of renewables through power electronic based devices in the electrical energy supply	
BREAKFAST / LUNCH / DINNER/TEA BREAK			



Parallel Session 3B: Advanced Electronics Session chair: Tobias Scheipel		
	Roo	m B
	<mark>Kentaro Hori</mark> , Daichi Mochizuki, Yosimi Kikuchi, Hiroyuki Wakiwaka, Makoto Sonehara, Toshiro Sato	<b>45</b> Effects of Magnetic Pole Arrangement on Braking Torque of Eddy Current Brakes
	<mark>Oliver Niebuhr</mark> , Anna Gutnyk	<b>48</b> Pronunciation engineering: Investigating the link between jaw-movement patterns and perceived speaker charisma using the MARRYS cap
16:30-18.00	<mark>John Xavier Toledo</mark> , Jennibeth Gatal, John Imperial	70 Configurable Precision IEEE 754-2019 Floating-Point Square Root IP using CrossLink- NX FPGA
	<b>Tobias Scheipel</b> , Marcel Baunach	80 papagenoReQ: Generation of Embedded Systems from Application Code Requirements
	<mark>Mathangi R</mark> , N. E. Alias, Afiq Hamzah, M.L.Peng Tan, Mathan. N.	<b>127</b> Performance Analysis of an Efficient Montgomery Multiplier using 7nm FinFET and Junctionless FinFET
	BREAKFAST / LUNCH	/ DINNER/TEA BREAK
Per Break		

### Parallel Session 3C: Antennas, Propagation and Radar Systems Session chair: Shafqat Ullah

Session chair: Sharqat Ullan				
Room C				
	<mark>Syed Hamza Faisal</mark> , Hamza Abbasi, Saleem Shahid, Shahryar Saleem	<b>55</b> Multi-Band Antenna with L-U-E Slots for WiMAX and WLAN Applications		
	Tauriq Latief, Simon Winberg, Amit Mishra	<b>67</b> The Design of a Two-element Radio Interferometer Using Satellite TV Equipment		
16:30-18.00	<mark>Nurhan Kahyaoglu</mark> , Ugur Celtekligil, Oral Erdogan, Metin Cavdar	<b>75</b> Development of a Brushless DC (BLDC) Motor Driven Retractable Sonar Antenna (RESA) System Design by means of Hydrodynamic Analysis		
	Aykut Cinay, Erol Kurt, <mark>Kayhan</mark> <mark>Celik</mark>	<b>101</b> Design and Implementation of a 2.4 GHz Yagi-Uda Antenna and Dependence of the Antenna Parameters to the Structural Parameters		
	<mark>Emtiaz Ahmed Mainul</mark> , Dr. Md. Faruque Hossain	<b>132</b> A Miniaturized Triple Band DGS Implantable Antenna for Biotelemetry		
BREAKFAST / LUNCH / DINNER/TEA BREAK				

Tea Break

Parallel Session 3D: Wireless Communication Systems and Technologies Session chair: Omar Alzoubi		
		m D
	<mark>Jingwei Wu</mark> , Benqing Guo, Huifen wang, Haifeng Liu	<b>314</b> A 2.4 GHz 87 uW Low-Noise Amplifier in 65nm CMOS for IoT applications
16:30-18.00	P Venkata Naveen Kumar, Yashwanth D, Venkata Rakesh J, P Veerakarthik, <mark>Shanidul</mark> Hoque	<b>337</b> <i>Link Maintenance Probability for Pool based Spectrum Handoff in Cognitive Radio Networks</i>
	Haifeng Liu, Benqing Guo, Huifen Wang, <mark>Jingwei Wu</mark>	<b>340</b> A Ka-band Vector-Sum Phase Shifter in 65nm CMOS for Phased Array Receivers
	Mohd Shafarudin Osman, Azizul Azizan, Khairul Nizam Hassan, Hadhrami Ab. Ghani, Noor Hafizah Hassan, Fitri Yakub, Salwani Mohd Daud, Liza Abdul Latiff	<b>373</b> BLE-based Real-time Location System Integration with Hospital Information System to Reduce Patient Waiting Time
	Mohammad Tawhid Kawser, <mark>Md. Monzurul Haque</mark> , Md. Samiur Rahman, Zubayer Kabir Eisham	<b>398</b> Estimation of Outdoor to Indoor Loss Variation Pattern within 5G Spectrum and Loss Model Comparison
	Omar Alzoubi	<b>413</b> <i>Improving the Performance of MIMO</i> <i>Mobile-to-Mobile Fading Channel Simulators</i> <i>Using New Parameterization Methods</i>
BREAKFAST / LUNCH / DINNER/TEA BREAK		



# PARALLEL SESSIONS 4

Parallel Session 4A: Neural Networks, Deep Learning and Intelligent Systems			
Session chair: Muhammad Imtiaz Room A			
	<mark>Bipasha Kundu</mark> , Dr. Desineni Subharram Naidu	<b>20</b> <i>Classification and Feature Extraction of</i> <i>Different Hand Movements from EMG Signal</i> <i>using Machine Leaning based Algorithms</i>	
	<mark>Gulnur Ozturk Sahinkaya</mark> , Damla Erek, Hilal Yaman, Mehmat S. Aktas	<b>40</b> On the Data Analysis Workflow for Predicting Customer Churn Behavior in Cargo and Logistics Sectors: Case Study	
	<mark>Daniel Abujabra Merege</mark> , Rafael Pillon Almeida	<b>44</b> <i>Natural Language Processing to forecast</i> 2020 <i>Chilean national plebiscite results: a</i> <i>Daoura project</i>	
	<mark>Omer Yigit Astepe</mark> , Ali Seymen Alkara	<b>50</b> Predicting Maintenance Priority with AI	
18.15-20.15	<mark>Ulku F. Gursoy</mark> , Muhammet Kurulay, Mehmet S. Aktas	<b>56</b> <i>Customer Churn Behavior Predicting Using</i> <i>Social Network Analysis Techniques: A Case</i> <i>Study</i>	
	<mark>Doruk Eren Aktas</mark> , Memet S. Aktas	<b>63</b> Sequential Rule Mining on the Student Behavior Data of an E-Learning Platform in the Field of Financial Sciences: Case Study	
	<mark>Yasmeen shaher AlsIman</mark> , Anas Abu Taleb	<b>64</b> Exchanging Digital Documents Using Blockchain Technology	
	Tanmay U. Sane, Tanuj U. Sane	<b>431</b> <i>Artificial Intelligence and Deep Learning applications in Crop Harvesting Robots - A Survey</i>	
BREAKFAST / LUNCH / DINNER/TEA BREAK			
P Ten Break			

Parallel Session 4B: Power Generation and Renewable Energy Systems	5
Session chair: Gama Ali	

Room B		
	Horacio M. Frene, Carlos D. Arrojo, Ricardo Dias, <mark>José C.</mark> <mark>Scaramutti</mark>	<b>286</b> Mechanical stresses of electromagnetic origin Effects produced by three-phase short-circuit currents on a rigid busbar system
	<mark>Valentyn Isaiev</mark> , Oleh Velychko	<b>21</b> <i>Characterization of Three-Phase Calibrator for Traceable Measurement of Voltage Unbalance</i>
	Muhannad Alshareef	<b>65</b> A New Protection Scheme for Low Voltage DC Microgrids
18.15-20.15	Basma Gamal Mahmoud, Shady H. E. Abdel Aleem, Mahmoud Sayed	<b>74</b> <i>Sine-Cosine Algorithm for Optimal</i> <i>Capacitor Allocation in Distribution Systems</i> <i>Operating Under Non-Sinusoidal Conditions</i>
	<mark>Gama Ali</mark> , Hamed H. Aly, Timothy Little	<b>108</b> A Modified Ant Lion Optimization Technique for Economic Emission Dispatch Including Biomass
	<mark>Gama Ali</mark> , Hamed H. Aly, Timothy Little	<b>109</b> Using HOMER software to investigate, size and apply renewable energy sources in a convention center in Sabratha, Libya
	Ana Carolina Martinazzo Kanitz, Euler Ribeiro, Marcos Aurelio Izumida Martins, Kleber Duarte Tomaz, Silvia de Francisci	<b>279</b> <i>Hot Spot Analysis in Asset Inspections in The Electricity Distribution Area</i>
	<mark>Rodrigo Trentini</mark> , R¨udiger Kutzner, Lutz Hofmann	<b>3</b> Modeling of regulated power systems based on the Electromechanical Energy Approach for assessing small signal stability
BREAKFAST / LUNCH / DINNER/TEA BREAK		



Parallel Session 4C: Networks Security and Reliability Session chair: Muhammad Ilyas		
	Roo	m C
	Simon Winberg, Subha Singh	<b>25</b> <i>Real-Time Event-driven Air Quality</i> <i>Inspection Framework for City-wide Pollution</i> <i>Level Monitoring</i>
18.15-20.15	Sabryna Vendramin Fernandes, Tiago Rabelo Chaves, Marcos Aurelio Izumida Martins, Ricardo O. Brandao, Amadeu F. Macedo, Kennedy A. Martins	<b>142</b> <i>Study of the Primary Substation Digitalization</i>
	<mark>Menachem Domb</mark> , Guy Leshem	<b>202</b> <i>Rain Attenuation Prediction for 2.4-</i> <i>72GHz using LTSM, an artificial recurrent</i> <i>neural networks technology</i>
	<mark>Tariq Emad Ali</mark> , Ameer Hussein Morad, Mohammed A. Abdala	<b>212</b> <i>Efficient Private Cloud Resources Platform</i>
	<mark>Turki Basher Alshammari</mark> , Ayedh S. alanazi	<b>300</b> Security Threats Against the Internet of Things at Home
	<mark>Jitendra Goyal</mark> , Dr. Mushtaq Ahmed, Dr. Dinesh Gopalani	<b>380</b> <i>Empirical Study of Standard Elliptic</i> <i>Curve Domain Parameters for IoT Devices</i>
	<mark>Hasan Mohamed Marah</mark> , Jawad Rashid Khalil, Asem Elarabi, Muhammad Ilyas	<b>476</b> DMVPN Network Performance Based on Dynamic Routing Protocols and Basic IPsec Encryption
BREAKFAST / LUNCH / DINNER/TEA BREAK		
Pen Break		

Parallel Session 4D: Software Engineering			
Session chair:	Maged Mikhail		

Session chain. Maged Mikhain		
Room D		
	Alipbayev K.A, Yermoldina G.T, Bapishev A.M, <mark>Aden A.E</mark>	<b>102</b> Modernization of the information and analytical system of the crash areas of the Baikonur cosmodrome during the controlled descent of the spent stage of the launch vehicle
	Apiwe Hotele, <mark>Simon Winberg</mark> , Ludwig Schwardt	<b>107</b> <i>Immersion Cooling Monitoring and</i> <i>Prediction System for Meerkat Radio</i> <i>Astronomy Imager</i>
	<mark>Maged Mikhail</mark> , Vu Duong, Damian Podgorski	<b>330</b> The New Solution for Robotics Education
18.15-20.15	<mark>Yudi Guzman</mark> , Alexis Tavara, Rodolfo Zevallos, Hugo Vega	<b>352</b> <i>Implementation of a Bilingual</i> <i>Participative Argumentation Web Platform for</i> <i>collection of Spanish Text and Quechua Speech</i>
	Joao Paulo Delgado Preti, Adriano Neres Araujo Souza, Evandro Cesar Freiberger, Tiago de Almeida Lacerda	<b>367</b> Monolithic to Microservices Migration Strategy in Public Safety Secretariat of Mato Grosso
	<mark>Ivan Ostheimer</mark> , Mario Hercog, Bojan Bijelic, Denis Vranjes	<b>284</b> Efficient Integration Model of MAS and Blockchain for emergence of Self-Organized Smart Grids
	<mark>Michał Rogala</mark> , Jakub Gajewski	<b>51</b> <i>Numerical and experimental analysis of bent tubular elements filled with porous material</i>
BREAKFAST / LUNCH / DINNER/TEA BREAK		





## 13 June 2020

PLENARY SESSION 3

Plenary Session 3: Keynote Speaker

Room A

11:00-11:30

Prof. Dr. Patrick S. P. Wang

**Title**- Intelligent Pattern Recognition (IPR) and Applications to Imaging

## PARALLEL SESSIONS 5

### Parallel Session 5A: Neural Networks, Deep Learning and Intelligent Systems Session chair: Mudassir Khan

Room A		
11.30-13.00	<mark>Md. Ferdous</mark> , Sk. Md. Masudul Ahsan	<b>303</b> <i>Multi-Scale Safety Hardhat Wearing</i> <i>Detection using Deep Learning: A Top-Down</i> <i>and Bottom-Up Module</i>
	Josh Daniel L. Ong, Erinn Giannice T. Abigan, Luis Gabriel A. Cajucom, Patricia Angela R. Abu, Ma. Regina Justina E. Estuar	<b>333</b> <i>Transfer Learning in Ensemble</i> <i>Convolutional Neural Networks Toward the</i> <i>Detection of Microscopic Fusarium Oxysporum</i>
	Abdelsalam Hamdi Abdelaziz, Yee Kit Chan, Voon chet koo	<b>344</b> Enhancement for License Plate Recognition using Image Super Resolution technique
	Mustafa Abbas Abbood Albadr, Sabrina Tiun, Masri Ayob, Taj-Aldeen Naser Abdali, Aymen Fadhil Abbas	<b>348</b> Extreme Learning Machine for Automatic Language Identification Utilizing Emotion Speech Data
	<mark>Ashwathy Bhooshan</mark> , Hari V S	<b>377</b> <i>Recurrent Neural Network Estimator for Stock Price</i>
	Qianyu Cao, Weihong Han	<b>11</b> <i>Key Technologies and Application of Big Data Analysis</i>
BREAKFAST / LUNCH / DINNER/TEA BREAK		

Tea Break

# Parallel Session 5B: Signal and Image Processing Techniques

Session chair: Maria Murad			
Room B			
11.30-13.00	<mark>Koki Takenaka</mark> , Kenji Ozawa	<b>32</b> <i>Suppression of Multiple Noises with</i> <i>Different Directions of Arrival Using</i> <i>Instantaneous Spectral Subtraction</i>	
	<mark>Anila Faraz khan</mark> , Abdul Jalil, Ihsan ul Haq, Syed Ihtesham Hussain Shah	<b>43</b> Automatic Localization of Macula and Identification of Macular Degeneration in Retinal Fundus Images	
	Maria Murad, Abdu Jalil, Muhammad Bilal, Shahid Ikram, Ahmad Ali, Khizer Mehmeed, Baber Khan	<b>72</b> <i>Gaussian-Radial Under-Sampling Based</i> <i>CSMRI Reconstruction Using A Modified</i> <i>Interpolation Approach</i>	
	<mark>Shinichi Sugahara</mark> , Mikio Mori	<b>250</b> <i>Feasibility of using Air-conducted and</i> <i>Bone-conducted Sounds Transmitted through</i> <i>Eyeglasses Frames for User Authentication</i>	
	Muhammad Yudhi Rezaldi, Budi Nugroho, Siti Kania Kushadiani, Abdurrakhman Prasetyadi, Agus Men Riyanto, Nuraini Rahma Hanifa, Ambar Yoganingrum	<b>379</b> A Systematical Review of the Tsunami Hazards Modelling	
B Tea Break			

### Parallel Session 5C: Advanced Electronics Session chair: Zubaida Yusoff

Room C			
	<mark>Guoxiang Sun</mark> , Lanxi Li, Weidong Ding, Saikang Shen	<b>167</b> Bipolar Solid-State LTD Based on Push- pull Circuit	
	<mark>Saikang Shen</mark> , Guoxiang Sun, Weidong Din, Lauxi Li	<b>168</b> Design and Application of Repetitive Nanosecond Pulse Generator Based on Avalanche Transistors	
	Fajar Suryawan	<b>207</b> FPGA-based Geometric Test Pattern Generator	
11.30-13.00	<mark>Bui Duc An</mark> , Nguyen Hoai Phong, Le Minh Phuong	<b>306</b> Designing a High Efficiency Flyback LED Driver with Unity Power Factor	
	<mark>K Sarangam</mark> , N bheema rao	<b>433</b> A Second-Order Switched Capacitor Passive Sigma Delta Modulator with Bootstrapped Switches in FinFET Technology	
	<mark>Khirullah Abdul Hamid</mark> , Maria Abu Bakar, Azman Jalar, Aiman Hakim Badarisman	<b>324</b> Incorporation of big data in package corrosion problem-solving methodology in the semiconductor	
Tea Break			

## Parallel Session 5D: Intelligent Robotics and Control Systems Session chair: Muhammad Ashraf

Room D			
	Guoxi Xu, Xiaoran Gong	<b>6</b> Research on the Forces of the Landing Stage of Recoverable Rockets Based on Machine Learning Methods	
	<mark>Dan Zhu</mark> , Yang Jiang	<b>230</b> Thruster Fault Diagnosis in Autonomous Underwater Vehicle Based on Bayesian network	
	Duc Tran Minh, <mark>Phuoc Vo Tan</mark>	<b>257</b> Flatness-Based Single Tank Water Level Control Under Actuator Constraint	
11.30-13.00	An Truong-Duc-Duy, <mark>Phuoc Vo</mark> <mark>Tan</mark>	<b>258</b> A Python Framework for Model-Based Design, Commission and Monitor the Thermal Process	
	Chen Zheng, Looi, <mark>Danny Wee</mark> <mark>Kiat</mark> , Ng	<b>370</b> A Study on the Effect of Parameters for ROS Motion Planer and Navigation System for the Navigation of an Indoor Robot	
	<mark>Kadda Mostefaoui</mark> , Youcef Dahmani, Bendaoud Mebarek, Mohamed Goucem	<b>368</b> Using NN-DEVS approach for modelling and simulation of imperfect systems: Application to the reactive navigation of Autonomous Robot	
	Tead	B Break	

# PARALLEL SESSIONS 6

Parallel Session 6A: Neural Networks, Deep Learning, and Intelligent Systems Session chair: Muhammad Arif Khan		
	Roo	m A
	<mark>Sulayman Ahmed</mark> , Mondher Frikha, Taha Darwassh Hanawy Hussein, Javad Rahebi	<b>360</b> Face Recognition System using Histograms of Oriented Gradients and Convolutional Neural Network based on with Particle Swarm Optimization
	<mark>Aleksey Zelenov</mark> , Vladimir Krylov	<b>365</b> Deep active inference in control tasks
	Alexander Demidovskij	<b>422</b> <i>Exploring Neural Turing Machines</i> <i>Applicability in Neural-Symbolic Decision</i> <i>Support Systems</i>
13:30-15.15	<mark>Imral Gungor</mark> , Bulent Gursel Emiroglu, Sait Ali Uymaz, Mustafa Servet Kiran	<b>424</b> An Application of Tree Seed Algorithm on Optimizing 50 and 100 Dimensional Numeric Functions
	<mark>Zair Bouzidi</mark> , Abdelmalek Boudries, Mourad Amad	<b>443</b> Enhancing Crisis Management because of Deep Learning, Big Data and Parallel Computing Environment: Survey
	<b>Taha Darwassh Hanawy</b> Hussein <mark>,</mark> Mondher Frikha, Sulayman Ahmed, Javad Rahebi	<b>457</b> <i>Ambulance vehicle routing using BAT Algorithm</i>
	Dimitris Ziouzios, Nikolaos Baras, Minas Dasygenis, Constantinos Tsanaktsidis	<b>475</b> Enhancing Technological Development Using Novel Internet of Things Solutions: The Smart-Bin Project
BREAKFAST / LUNCH / DINNER/TEA BREAK		
B Tea Break		

### Parallel Session 6B: Power Generation and Renewable Energy Systems Session chair: Mukesh Kumar

Room B			
	Hanane Yatimi, <mark>Youness</mark> <mark>Ouberri</mark> , Rim Marah, Elhassan Aroudam, Sara Chahid	<b>259</b> Design of an Incremental Conductance Maximum power point tracking Controller based on Automation PLC for PV Applications	
	Tonushree Dutta, Md. Tawsif Rahman Chowdhury, Anowarul Azim	<b>349</b> Enhancement in Optical and Electrical Properties of Si and GaAs Solar Cells Using Metal-oxide Anti-reflective Coatings	
13:30-15.15	<mark>Thiruvenkadam Srinivasan</mark> , Se-Myong Chang, In-Ho Ra	<b>374</b> Economic Emission Dispatch with the Presence of Large Scale Wind and PV Plants Considering Valve Point Effects and Variable Demand	
	<mark>Fabliha Ahmed</mark> , Tareq Aziz	<b>383</b> A Trajectory Sensitivity Index Based Approach to Accelerate Post-Fault Voltage Recovery in Microgrid	
	Konstantinos Fiorentzis, Alexandros Paspatis, Antonis Tsikalakis, Emmanuel Karapidakis	<b>386</b> Utilization of Demand Side Generation in Secondary and Tertiary Reserve Mechanisms of Island Power Systems	
	<mark>Mukesh Kumar</mark> , Ram Krishan	<b>399</b> <i>Non-Linear Auto-Regressive Modeling</i> <i>based Day-ahead BESS Dispatch Strategy for</i> <i>Distribution Transformer Overload</i> <i>Management</i>	
BREAKFAST / LUNCH / DINNER/TEA BREAK			

Tea Break

### Parallel Session 6C: Mixed Topics Session chair: Fatimah Zahra Ali

Room C			
13:30-15.15	<mark>Irina Golub</mark> , Evgeny Boloev	<b>208</b> Determination of Losses in Distribution Networks by Smart Meter Measurements	
	Sanchari Deb	<b>227</b> A Novel Data Driven Methodology for Charging Hotspots Computation for the city of Helsinki	
	<mark>Yasir Aljumah</mark> , Syed Sohail Ahmed	<b>234</b> A Novel Approach to Get Awareness in Saudi Arabia Regarding Phishing Attacks	
	Stephan Sprenger, <mark>Andreas</mark> <mark>Funck</mark> , Jaclyn Balthasar, Torsten Lubenow	<b>239</b> <i>Improving thermal and chemical stabilities of electronic epoxies using polysiloxane copolymers</i>	
	Saleh K. Ahmad, <mark>Riyadh Z.</mark> <mark>Sabry</mark> , Chandima Gomes	<b>294</b> <i>Improving the grounding system by adding bentonite to reduce the potential distribution</i>	
	Fehmida Usmani, <mark>Ihtesham</mark> Khan, Mehek Siddiqui, Mahnoor Khan, Muhammad Bilal, M Umar Masood, Arsalan Ahmad, Muhammad Shahzad, Vittorio Curri	<b>389</b> Evaluating Cross-feature Trained Machine Learning Models for Estimating QoT of Unestablished Lightpaths	
	Suleyman Adak, <mark>Hasan Cangi</mark> , Ahmet Serdar Yilmaz	<b>254</b> Thevenin Equivalent of Solar PV Cell Model and Maximum Power Transfer	
BREAKFAST / LUNCH / DINNER/TEA BREAK			



# PLENARY SESSION 4

Plenary Session 4: Keynote Speaker			
	Roo	m A	
15:30-16:00	Dr. Fazel Mohammadi	<b>Title</b> - Cyber-Physical Systems Security for Smart Grid Infrastructure	
	PARALLEL S	SESSIONS 7	
	on 7A: Neural Networks, Deep : Ahmet Anil MUNGEN	Learning, and Intelligent Systems	
	Roo	m A	
	<mark>Zahra Soltani</mark> , Kresten Kjaer Soerensen, John Leth, Jan Dimon Bendtsen	<b>214</b> Robustness analysis of PCA-SVM model used for fault detection in supermarket refrigeration systems	
	Fatima Zahra EL bouni, Tareq EL hariri, <mark>Chaime Zouitni</mark> , Ilham Ben Bahya, Hafida EL aboui, Aziza EL Ouaazizi	<b>218</b> Bird Image Recognition And Classification Using IBM Cloud And Cnn	
16.00-17.45	<mark>Fahad Radhi Alharbi</mark> , Denes Csala	<b>219</b> Short-Term Solar Irradiance Forecasting Model Based on Bidirectional Long Short-Term Memory Deep Learning	
	<mark>Rafed Adnan Jaleel</mark> , Iman Mohammed Burhan, Ahlam Mohaisen Jalookh	<b>267</b> A Proposed Model for Prediction of COVID-19 Depend on K-Nearest Neighbors Classifier: Iraq Case Study	
	<mark>Ahmet Anil MUNGEN</mark> , Iclal CETIN TAS	<b>285</b> An Investigation about Traffic Prediction by Using ANN and SVM Algorithms	
	<mark>Ashhadul Islam</mark> , Samir Brahim Belhaouari	<b>353</b> <i>Class Aware Auto Encoders for Better Feature Extraction</i>	
	Mazhar B Tayel, <mark>Ahmed F. Kishk</mark>	<b>320</b> Proposed Deep Learning Classification and Ultra-Wide Band Tensors for Localization of Breast Tumor	
BREAKFAST / LUNCH / DINNER/TEA BREAK			
Pea Break			

### Parallel Session 7B: Mixed Topics Session chair: Beatriz Batista Cardoso

Room B			
16.00-17.45	Roman Volianskyi, Vitaliy Kuznetsov, Valeriy Kuznetsov, Oleksandr Ostapchuk, Viktor Artemchuk, Nina Volianska	<b>129</b> <i>Modeling of Dynamical Objects with</i> <i>Hypercomplex Numbers for Railway Non</i> <i>Traction Consumers with Renewable Energy</i> <i>Sources</i>	
	Oleksiy Bobrov, Valeriy Kuznetsov, Oleksandr Romanovskyi, Dmytro Tsyplenkov, <mark>Vitaliy Kuznetsov</mark> , Oleksandr Ostapchuk, Petro Hubskyi	<b>130</b> <i>Optimum parameters of electromechanical system model "electrical grid-drive-compressor-pneumatic network"</i>	
	Vasyl Stopkin, Valeriy Kuznetsov, <mark>Vitaliy Kuznetsov</mark> , Anatolliy Nikolenko, Mykola Babyak, Petro Hubskyi	<b>135</b> <i>Model of Two-Mass Electric Drive of DC Electric Locomotive with the Full Order Observer</i>	
	Beatriz Batista Cardoso, Leticia Lagni Dagnese, Marcos Aurelio Izumida Martins, Kleber Duarte Tomaz, Silvia de Francisci	<b>144</b> The use of GPR technologies for utility mapping in underground distribution grid conversion – Brazil use case	
	Daniel Hufnal, <mark>Theodore</mark> <mark>Johnson</mark> , Caglar Yilderim, Damian Schofield	<b>271</b> <i>Impact of VR and Desktop Gaming on Electroencephalogram (EEG) Ratings</i>	
	<mark>Eluwumi Buraimoh</mark> , Ritesh Ajoodha, Kershree Padayachee	<b>280</b> <i>Importance of Data Re-sampling and Dimensionality Reduction in Predicting Student's Success</i>	
	<mark>Mohamed Elsakhawy</mark> , Michael Bauer	<b>30</b> <i>Performance Analysis of Serverless</i> <i>Execution Environments</i>	
BREAKFAST / LUNCH / DINNER/TEA BREAK			



### Parallel Session 7C: Mixed Topics Session chair: Tiago Sutili

Room C			
16.00-17.45	<mark>Hasneen Zaman</mark> , Narottam Das	<b>342</b> Analysis for the Improvement of IEC 61850 Based Substation Communications Using OPNET	
	Nael hussein, Kamaruzzaman Seman, Fitri Maya Puspita, Khairi Abdul Rahim, Mus'ab Sahrim	<b>412</b> <i>Improved Model of Internet Pricing</i> <i>Incentive Mechanism based on Multi bottleneck</i> <i>Links in Multi QoS Networks</i>	
	<mark>Savio S.H</mark> Tse, Ming-Chyuan Low	<b>464</b> Online Searching for 3-Dimensional Data in Sublinear Time	
	Shahzad Alam, Muhammad Umar Masood, <mark>Ihtesham</mark> Khan, Arsalan Ahmad, Salman Ghafoor, Vittorio Curri	<b>405</b> <i>Modeling Off-line Routing and Spectrum</i> <i>Allocation Problem in Elastic Optical Network</i>	
	Lorant Andras Szolga, <mark>Mihai</mark> <mark>Boca</mark>	<b>438</b> LED Display for Timetables Controlled by IoT	
	<mark>Lubabalo Buwa</mark> , Zelalem Shibeshi, Alferdo Terzoli	<b>460</b> An application to support end-users of wi-fi hotspots in the township of Makhanda	
	Tiago Sutili, Pedro Ferreira Pinto Neto, Fabio Donati Simoes, Sandro Marcelo Rossi, Gabriel Junco Suzigan, Rafael Carvalho Figueiredo	<b>338</b> Unrepeatered Optical Systems Design based on Iterative Channel Pre-Emphasis Optimization	
BREAKFAST / LUNCH / DINNER/TEA BREAK			



## PARALLEL SESSIONS 8

### Parallel Session 8A: Antennas, Propagation and Radar Systems Session chair: Smrity Dwivedi

Room A

Utkarsh Gupta, <mark>Smrity Dwivedi</mark>

Kaushallya Adhikari, <mark>Tyler</mark> Trosclair

<mark>M. Asfar Saeed</mark>, Umaima Ahmed

18.00-19.45 Nurhaifa Alya Roslan, Anis Afrina Amiruddin, Ezri Mohd, Noorsaliza Abdullah

#### Solomon Mingle

Mounia Djoudi<mark>,</mark> Mohamed Lamine Tounsi, Noureddine Ababou, Mustapha C.E. Yagoub **181** Frequency Reconfigurable Antenna UsingMetamaterial Split Ring Resonators for Smart Applications

**203** *Minimum Norm Method for Linear and Planar Sparse Arrays* 

**301** Rectangular loop mm-Wave antenna for wearable applications

**315** Complementary Folded Arm (CFA) Split Ring Resonator for Dielectric Material Characterization

**446** Frequency Scannable Leaky-Wave Antenna Design for Remote Vital Signs Radar Application at 60 GHz Band

**462** Analysis of Electromagnetic Properties of EBG Structures for Directional Planar Antennas

#### **BREAKFAST / LUNCH / DINNER/TEA BREAK**



Parallel Session 8B: Signal and Image Processing Techniques

Room B			
18.00-19.45	<mark>Iyad F. Jafar</mark> , Khalid A. Darabkh	<b>76</b> An Improved Reversible Data Hiding Algorithm for Image Contrast Enhancement	
	Giuseppe Bonifazi, Giuseppe Capobianco, <mark>Riccardo</mark> Gasbarrone, Silvia Serranti	<b>15</b> Cold chain maintenance evaluation of pre- cooked pasta by Visible and Short Wave InfraRed Spectroscopy	
	<mark>Harmandeep Singh Gill</mark> , Baljit Singh Khehra	<b>139</b> <i>Minimum</i> cross Entropy Thresholding based apple image segmentation using Teacher Learner Based Optimization Algorithm	
	Bilal Djmal Eddine Cherif, Azeddine Bendiabdellah, Sara Seninete	<b>255</b> Induction Motor Diagnosis with Broken Rotor Bar Faults Using DWT Technique	
	<mark>Muhammad Salman Kabir</mark> , Ikechi Kalu Ndukwe, Engr. Zainab Shahid Awan	<b>391</b> Deep Learning Inspired Vision based Frameworks for Drone Detection	
	Saman Saadizadeh	<b>417</b> Breast Cancer Detection in Thermal Images Using GLRLM Algorithm	
	<mark>Daniel Sartori</mark> , Kaushallya Adhikari	<b>245</b> Product Processing for Tapered Sparse Arrays	
BREAKFAST / LUNCH / DINNER/TEA BREAK			



### Parallel Session 8C: Wireless Communication Systems and Technologies Session chair: Aleem Khalig

Session chair: Aleem Khaliq		
	Roo	m C
	<mark>Augustine O. Nwajana</mark> , Eugene A. Ogbodo, Ifueko I. Imasuen	<b>81</b> Formulation for Energy Distribution in T- Junctions for Diplexer Design
	Eugene A. Ogbodo, <mark>Augustine O.</mark> Nwajana	84 A Bandpass Filter Using Edge Coupled and Direct Coupled Techniques
	<mark>Arian Nowbahari</mark> , Luca Marchetti, Mehdi Azadmehr	<b>246</b> A Delay-Based Wake-Up Receiver for Wireless Sensor Networks
18.00-19.45	<mark>Fadi Elghitani</mark> , Eman Serag, Ibrahim Fayed	<b>357</b> WiFi Performance Estimation for Voice Services
	Feriel Guidoum, Mohamed Lamine Tounsi, Tan-Phu Voung, Noureddine Ababou, Mustapha C.E. Yagoub	<b>366</b> Design of FSS Filter for 5G applications
	<mark>Nyandika,</mark> Kimwele, Okeyo	<b>388</b> Handover Enhancement in wireless communication-Based Train Control System
	Mikko Vehkapera, Mika Hoppari, Jani Suomalainen, Jussi Roivainen, Seppo J. Rantala	<b>397</b> Testbed for Local-Area Private Network with Satellite-Terrestrial Backhauling
BREAKFAST / LUNCH / DINNER/TEA BREAK		



# **CLOSING SESSION**

Session 00: C	Session 00: Closing Session – Closing Remarks by Conference Chairs		
	Room A		
20:00-20:30	Prof. Dr. Mardeni Bin Roslee, Multimedia University, Malaysia Dr. Yunus UZUN, Aksaray University, Turkey Dr. Shafqat Ullah Khan, University of Buner, Pakistan Dr. Athar Waseem, International Islamic University, Pakistan		
Dr. Athar Waseem, International Islamic University, Pakistan Hope to see you "physically" next time Upcoming Conference Please note that IEEE Approved 7 <sup>th</sup> International Conference on Engineering and Emerging Technologies - ICEET 2021 ( <u>www.iceet.net</u> ) will take place in Istanbul, Turkey. on 27-28 October, this year.			

Thank you very much for your contributions.

