

# INTERNATIONAL CONFERENCE ON FUTURE TRENDS IN SMART COMMUNITIES (ICFTSC2022)

Technical Session 1: 1<sup>st</sup> December 2022 (Thursday), 08.00-10.00 am, Room No. 10

Paper ID	Title/Authors
177	Adopting Electrical Remote Operation and Intelligent-based System at Offshore Installation <i>Wan Sadik Hakim Wan Ibrahim, Wan Umikalthum Wan M Nowalid, Mohd Faizal Hamdan, Azam Syah Monzaid</i>
1031	Impact of New Enhanced Dispatch Arrangement (NEDA) mechanism on the cost efficiency of generation of Malaysian Representative System <i>Previnsha Naidu Poornachendran, Renuga Verayiah</i>
413	Extended Lifetime of IoT Applications using Energy Saving Schemes <i>Adam Khalid, Usha Saktivel, Senthilkumaran Thangamuthu, Micheal Drieberg, Patrick Sebastian, Azrina Abd Aziz, Hai Hiung Lo</i>
22	Investigation of Full-Order State Output Feedback Controller on DC-DC Converter Rapid Load Current Change <i>Nor Zaihar Yahaya, Oladimeji Ibrahim, Temitope Ibrahim Amosa, Nordin Saad, Sheikh Tanzim Meraj</i>
129	Measuring Power Consumption of Insertion Sort to Establish Power Consumption Dependency on Execution Time and Memory Allocation <i>Umar Mahmud, Shariq Hussain</i>
1022	Photovoltaics Performance Evaluation using IoT Technology <i>Melvinder Singh Balbir Singh, Taib Ibrahim, Nursyarizal Mohd Nor</i>

Technical Session 1: 1<sup>st</sup> December 2022 (Thursday), 08.00-10.00 am, Room No. 11

Paper ID	Title/Authors
362	Effect of thickness of the poly(vinyl alcohol) passivation layer on ambipolar characteristics of Graphene Field-Effect Transistor <i>Nadia Norhakim, Huzein Fahmi Hawari, Zainal Arif Burhanudin</i>
136	Emotion Based Chatbot Using Deep Learning <i>Nurlaila Rosli, Nelson Chai Zhen Faan, Yek Nai Liang, Alexander Chai Min Jie, Lo Woon Chze</i>
367	Explainable Deep Learning Model for Cardiac Arrhythmia Classification <i>Waleed Ali, Maged Nasser, Talal Abdullah, Mohd Soperi Zahid, Tang Tong Boon</i>
264	General framework of geometric simplification for mitigating cybersickness <i>Ruding Lou, Frédéric Mérienne, Dominique Bechmann</i>
279	Novel Feature Engineering for Heart Disease Risk Prediction Using Optimized Machine Learning <i>Karna Vishnu Vardhana Reddy, Irraivan Elamvazuthi, Azrina Abd Aziz, Sivajothi Paramasivam, Hui Na Chua, S. Pranavanand</i>
322	Sensitivity Analysis of the Effective Reproduction Number in a Sarawak Rabies Epidemic Model <i>Nur Asheila Abdul Taib, Jane Labadin</i>
45	The Influence of Audio Sensory Input on the Anxiety Level of the VR Users <i>Mahdijeh Sadat Moosavi, Marcus Yung Chong, Missainul Ainul Khairiyah Mohd Nazri, Frédéric Merienne, Christophe Guillet, Dayang Rohaya Awang Rambli, Suziah Sulaiman</i>

Technical Session 2: 1<sup>st</sup> December 2022 (Thursday), 03.45-05.45 pm, Room No. 10

Paper ID	Title/Authors
158	Intelligent Offloading Decision and Resource Allocation for Mobile Edge Computing <i>Omar Baslaim, Azlan Awang</i>
92	Concept Drift Scenarios in Electrical Load Forecasting with Different Generation Modalities <i>Idris Ismail, Syed Muslim Jamil, Fakhizan Romlie, Kamaluddeen Usman Danyaro</i>
186	Development of Gas Flow Characteristic Prediction For Industrial Flow Meter Using Long Short-Term Memory (LSTM) <i>Rahimi Zaman Jusoh @ Rashid, Ahmad Muizuddin Talib, Mohd Faizal Mustafa, Idris Ismail, Mohamad Naufal Mohamad Saad, Azlan Awang, Muhd Safwan Zahari</i>
379	Forecasting of Wind Turbines Generated Power With Missing Input Variables <i>Sunder M, Abisbek R, Monalisa Maiti, Kishore Bingi, Arun Mozhi Devan Panneer Selvam, Maher Assaad</i>
217	Uncertainty Calculations for Industrial Gas Flow Meter <i>Mohd Faizal Mustafa, Ahmad Muizuddin Talib, Rahimi Zaman Jusoh, Idris Ismail, Azlan Awang, Mohamad Naufal Mohamad Saad, Nur Syafiqah Mustafar</i>
133	Design of Miniaturized S-band High Isolation Strip-line Circulator for 5G Application <i>Khim Sokha, Sovuthy Cheab, Socheatra Soeung, Guan Shen Ng, Rothna Pec</i>

Technical Session 2: 1<sup>st</sup> December 2022 (Thursday), 03.45-05.45 pm, Room No. 11

Paper ID	Title/Authors
380	Explainable Artificial Intelligence On Deep Reinforcement Learning Based Maximum Power Point Tracking For Photovoltaic Systems <i>Pei Seng Tan, Tong Boon Tang, Eric Tatt Wei Ho</i>
34	Disassociation of Visual-proprioception feedback to Enhance Endotracheal intubation <i>Mahdijeh Sadat Moosavi, Jacob Williams, Christophe Guillet, Frédéric MERIENNE, Jee Cecil, Michael Pickett</i>
81	Real Time Electrical Transient Analyzer Program (ETAP RT) Improvement for Gas Processing & Utilities (GPU) plant, PETRONAS Gas Berhad <i>Nur Mohd Fadzi Nordzi, Azwanizam Che A Rahman, M Rahmat Mat Tahir</i>
89	Guide to Induction Motor Real Time Analytics <i>Mohd Hamdan Kamarul Baharaini, Awanizam, Helmy Halim</i>
105	Investigating the Impact of Illumination and Viewpoint Variations on Transformer-based Person Re-identification <i>Patrick Sebastian, Temitope Amosa, Lila Izhar, Oladimeji Ibrahim</i>
123	Comparative analysis of different parameters used for optimization in the process of speaker and speech recognition using deep neural network <i>Suresh Kumar Natarajan, Syed Abdul Rahman Al-Haddad, Faisal Arif Ahmad, Mohd Khair Hassan, Raja Kamil, Syarif Azrad, Mohammed Nawfal Yahya, June Francis Macleans, Pratishtha Prashant Salvekar</i>

**Technical Session 3: 2<sup>nd</sup> December 2022 (Friday), 08.00-10.30 am, Room No. 11**

Paper ID	Title/Authors
28	Optimal Node Placement and Congestion Reduction in an Industrial Wireless Mesh Network using HHO Algorithm <i>Hakim Abdulrab, Fawnizu Azmadi Hussin, Azlan Awang, Idris Ismail, P Arun Mobzi Devan, Hussein Shutari</i>
76	mm-Wave RSS Evaluation for Distance Estimation in Urban Environments <i>Yaser Awadh, Azlan Abd Aziz, Geok Tan</i>
40	Elliptic Curve Cryptography for the Security of Insecure Internet of Things <i>Naqash Khan, Azlan Awang</i>
111	Multi-sensor IF Estimation based on Time-frequency and Spatial Filtering <i>Nabeel Ali Khan, Sadiq Ali, Ateeq-ur Rehman</i>
262	Energy Management Algorithm in Wireless Sensor Networks for Pipeline Monitoring <i>Lukman Ayinla, Azrina Abd Aziz, Michael Drieberg, Azubogu Austin, Temitope Amosa</i>
349	High Rejection Highpass Filter For Wideband Applications <i>Socheatra Soeung, Wei Yang See, Sovuthy Cheab, Guan Shen Ng</i>
357	Low Frequency Underwater Acoustic Modelling Based on Deep Learning <i>Azhagumurugan R, Porkumaran K, Nayanatara C, Sai Ganesh CS, Aouthithiye Barathwaj SR Y, Haariharan N C</i>
378	Improved Whale Optimization Algorithm for Optimal Network Coverage in Industrial Wireless Sensor Networks <i>Arun Mozhi Devan Pannecer Selvam, Rosdiazli Ibrahim, Madiab Binti Omar, Kishore Bingi, Hakim Abdulrab, Fawnizu Azmadi Hussin</i>
1003	Design and Simulation of Butler Matrix For 5G Applications <i>Sanitha R, Vijayanand S, L.Rangaiah, Usba, Sanjay P, Sanjay P Mudaliar</i>

**Technical Session 4: 2<sup>nd</sup> December 2022 (Friday), 04.15-05.45 pm, Room No. 1**

Paper ID	Title/Authors
343	Design and Development of PV Powered Intergrated DC - DC Converter Fed Multilevel Inverter for Standalone Application <i>Prathibanandhi K, Meeenakshi B, Porselvi T, Azhagumurugan R, Chithra V</i>
297	Pipeline Vibration-based Piezoelectric Energy Harvester (PEH) – Mathematical Modelling & Design Analysis <i>Wan Nabila Mohd Fairuz, Mohamad Radzi Ahmad, Illani Mohd Nawi</i>
345	Flexible IOT Based DSM-DG Strategy Adopted For Benefit Maximization In a Power System Network <i>Nayanatara Chandrasekaran, P sharmila, P Shanmugapriya, M Suresh Kumar, Ramani Kannan, R Azhagumurugan</i>
211	THD Analysis of Output Voltage and Current for IGBT Based Cyclo-Inverter Circuit <i>Md Mahmudul Hasan, Md. Abdul Malek, Ramani Kannan, Muhammad Abdul Goffar Khan, K. Porkumaran</i>
360	Design of an Efficient LED Driver Using Non Ideal Boost Converter For Lighting Applications <i>Thirupura Sundari K, Kannan Renganathan, Ramani Kannan, A Jeyadharshini, P Mahalakshmi, R Vaitheeswari</i>
370	Design and Development of an Estimate Controller For a Fusion Tank System <i>Sanjeevi Gandhi A, Porkumaran K, Jeeva C, Kothai R, Ramani Kannan K</i>

**Technical Session 4: 2<sup>nd</sup> December 2022 (Friday), 04.15-05.45 pm, Room No. 11**

Paper ID	Title/Authors
229	Anomaly Prediction and Remaining Useful Life (RUL) for Alternator Health Monitoring System <i>Lin Yong Wong, Norashikin Yahya, Nazim Hamid, Suhaila Badarol Hisham</i>
58	Performance Evaluation of an Asynchronous MAC Protocol in Wireless Sensor Network <i>Chung Yee Haw, Azlan Awang, Fawnizu Azmadi Hussin</i>
430	Hemodynamic Response Asymmetry of the Prefrontal Cortex During Cognitive Load Task <i>Maged Al-guraishi, M Naufal M Saad, Christophe Guillet, Frederic Merienne</i>
515	Efficient Convolution Neural Network Architecture for Recognition of Occluded Faces from Images <i>Shashidhar V, Balakrishna R</i>
440	Multispectral Image Analysis for Crop Health Monitoring System <i>Amelia Sarah Abdul Rahman, Patrick Sebastian, Lila Iznita Izhar</i>
477	Enhancements to PERCLOS Algorithm for Determining Eye Closures <i>Muhammad Ammar Zulkarnanie, Kiranraj Siva Shanmugam, Nasreen Badruddin</i>

**Poster Session: 1<sup>st</sup> – 2<sup>nd</sup> December 2022, 08.00-05.00 pm**

Paper ID	Title/Authors
490	Hand Gesture-based Control of Autonomous UAV for Mobile Disinfectant Dispenser <i>Khairil Danish Khairil Anwar, Saiful Azrin bin Mohd Zulkifli, Ghulam E Mustafa Abro</i>
68	Detection of Alzheimer's Disease using Dynamic Functional Connectivity Patterns in Resting-State fMRI Technique <i>Mohammed Isam Al-Hiyali, Norashikin Yahya, Ibrahima Faye, Alishba Sadiq</i>
70	Variance Analysis on Functional Connectivity of Resting-state fMRI Signals in Alzheimer's Disease Patients <i>Alishba Sadiq, Norashikin Yahya, Tong Boon Tang</i>
464	Ambipolar characteristics of sludge-extracted asphaltene-based organic field-effect transistor <i>Nur Khairin Nadhirah Saifudin, Sundarajoo Thulasiraman, Zayyan Rafi Kesuma, Nadia Norhakim, Zainal Arif Burhanudin</i>