

2023 IEEE 8th International Conference on Recent Advances and Innovations in Engineering (ICRAIE 2023)

**Kuala Lumpur, Malaysia
2-3 December 2023**



**IEEE Catalog Number: CFP2337W-POD
ISBN: 979-8-3503-1552-3**

**Copyright © 2023 by the Institute of Electrical and Electronics Engineers, Inc.
All Rights Reserved**

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

****** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP2337W-POD
ISBN (Print-On-Demand):	979-8-3503-1552-3
ISBN (Online):	979-8-3503-1551-6

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: (845) 758-0400
Fax: (845) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

CURRAN ASSOCIATES INC.
proceedings
.com

TABLE OF CONTENTS

TRACK 1: COMPUTER SCIENCE ENGINEERING/INFORMATION TECHNOLOGY **PARALLEL SESSION I**

Sales Promotion Mobile Application Using Augmented Reality	1
<i>Nur Atiqah Sia Abdullah, Amelia Natasha Dora Anak Ulan, Marshima Mohd Rosli</i>	
Classification of Malaria in Red Blood Cell Microscopic Images Using Deep Learning with EfficientNet Architecture and SVM	7
<i>Rangga Anugrah, Korediamto Usman, Ledy Novamizanti</i>	
Robust Reversible Image Watermarking Based on Independent Embedding Domain and Pixel Value Ordering	13
<i>Ledy Novamizanti, Andriyan Bayu Suksmono, Donny Danudirdjo, Gelar Budiman</i>	
Detection of Diabetic Retinopathy (DR) Severity from Fundus Photographs Using Swin Transformer	19
<i>Rajasekhar Kommaraju, M. S. Anbarasi</i>	
OCEANS-6 : Character Trait, Age Demographic Analysis and Sexist Speech Detection of Dialogues.....	25
<i>Charvi Bannur, Chaitra Bhat, Sai Shruthi Shashidhar, Suraj R Gautham, Ankitha C, Mamatha H. R.</i>	
Adaptive Time Method for Fall Detection in Elderly.....	31
<i>Safa Hussein Mohammed, Yangyu Fan, Guoyun Lv, Shiya Liu</i>	
Implementation of Cloud Gaming Using the Chrome Remote Desktop Method.....	36
<i>Harisma Dita Ansyar, Abdul Wahid, Mustari Lamada, Jumadi Mabe Parenreng</i>	
Investigating IoT-LoRa Technology for the Underwater System Application.....	42
<i>Jonathan Panangian Christopher, Sito Dewi Damayanti, Muhammad Suryanegara</i>	
Supplier Selection Incorporating Weights of Criteria Using an Order Preference by Similarity Method and Interval-Valued Intuitionistic Fuzzy Sets	46
<i>Lazim Abdullah, Norliana Mohd Najib, Noor Azzah Awang</i>	
Found It! Object Tracker Mobile Application	53
<i>Nasrul Arsyad Hamidi, Azhar Abdul Aziz, Afiza Ismail, Anitawati Mohd Lokman</i>	
UiTMBusTracker Mobile Application of Bus Transportation Tracker for UiTM Students.....	59
<i>Muhammad Irfan Nazmi Mohamad Nazri, Afiza Ismail, Azhar Abdul Aziz, Suzana Zambri</i>	
Device Authentication Via Chess Move-Generated Keys and ECC Diffie-Hellman Key Exchange Integration	65
<i>Priyanka More, Sachin Sakhare</i>	

PARALLEL SESSION II

A Comparative Analysis of Multivariate and Univariate Time-Series Forecasting for Oil Production.....	71
<i>Adityapati Rangga, Dadang Syarif Sihabudin Sahid, Yohana Dewi Lulu Widyasari</i>	

Resin-Based Classification of Plastic Bottles Waste Using CNN Architectures	77
<i>Mariyatul Qibthiyah, Radon Dhelika</i>	
Secure Mobile Login Using Three-Layer Graphical User Interface (GUI) Authentication.....	83
<i>Nor Shahniza Kamal Bashah, Muhammad Arif Aiman Khairul Niza, Norjansalika Janom</i>	
Revisit the COVID-19 Pandemic as a Catalyst Towards Digital Transformation in Malaysia Higher Education Institutions.....	90
<i>Wan Faezah Abbas, Mohd Naz' Ri Mahrin, Nurazean Maarop</i>	
A Model Transformation Approach for Converting a Trait-Based Model to a Markov Chain Model.....	96
<i>Nur Diana Madinah Binti Ab Hadi, Azlan Ismail, Norizan Mat Diah, Mastura Md Saad</i>	
Linux Forensic Analysis and Extraction Tool.....	103
<i>Muhammad Zul Akmal Bin Shafiee, Fakariah Hani Binti Mohd Ali, Nurul Huda Binti Nik Zulkipli</i>	
Challenges in Federated Learning for Resource-Constrained IoT Environments: Energy Efficiency, Privacy, and Statistical Heterogeneity	108
<i>Muhammad Umair, Wooi-Haw Tan, Yee-Loo Foo</i>	
Network Intrusion Detection Using Dynamic Weighted Aggregation Federated Learning.....	114
<i>Muhammad Umair, Wooi-Haw Tan, Yee-Loo Foo</i>	
Privacy-Focused Edge AI-on-IoT with Federated Learning.....	120
<i>Sauryadeep Pal, Wooi-Haw Tan, Yee-Loo Foo</i>	
Machine Learning-Based Model for Enhanced Quantitative Precipitation Estimates (QPE) from Radar Images Extracted Features	126
<i>Noor Shazwani Osman, Wardah Tahir</i>	
A Log Aggregation Design Criteria for Robust SIEM (Security Information and Event Management) in Enhancing Threat Detection	131
<i>Mohsen Bin Mohamad Hata, Mohamad Yusof Bin Darus, Muhammad Zul Akmal Bin Shafiee, Elvisianah Petrus, Yasmin Athira Jamian</i>	
Treat Assessment Framework in Analysing Network Threat Occurrence	137
<i>Norkhushaini Awang, Ganthan A-L Narayana Samy, Noor Hafizah Binti Hassan</i>	
Order Picking System Simulation Model Considering Picking Method and Picker Route to Improve Warehouse Performance	143
<i>Muhammad Faisal Ibrahim, Prita Meilanasari, Maulin Masyito Putri, Fahd Han Bey Ardafan, Hikmah Sekarningtyas</i>	
Adaptation of UEQ+ for UX Evaluation of Mobile Banking Applications on Digital Platforms	149
<i>Muhammad Rafiudin Razlat, Zainura Idrus, Ahmad Afif Ahmarofi, Jahaya Abdul Hamid, Zanariah Idrus</i>	
Comparison of Various Colorization Techniques for MRI Brain Tumor Segmentation Using Convolutional Neural Networks.....	155
<i>Akmal Shafiq Badarul Azam, Abdul Kadir Jumaat, Shafaf Ibrahim</i>	
Utilising the YOLOv3 Algorithm for the Student Posture Recognition System in Classroom Settings.....	161
<i>Mohamad Nazmi Zharfan Nazaruddin, Nor Afirdaus Zainal Abidin, Raihah Aminuddin, Khyrina Airin Fariza Abu Samah, Asma Zubaida Mohamed Ibrahim, Syarifah Diyanah Yusoh, Nur Nabilah Abu Mangshor, Siti Diana Nabilah Mohd Nasir</i>	

ANN Approach to Predict the Responses of 64 Bits XOR APUF with High Accuracy	167
<i>Jobeda J Khanam, Kevin A Cavicchi</i>	
Exploring the Effectiveness of Video-Based Learning in Trading Cryptocurrency, Foreign Exchange and Stock Market	172
<i>Muh Ihsan Sakaruddin, Reyvaldo, Erwin Halim, Davin Fauzan Ma'Rifatullah</i>	
Performance Evaluation of Xception Networks and Short-Time Fourier Transform Spectrograms for Motor Imagery Classification	179
<i>Cagatay Murat Yilmaz, Bahar Hatipoglu Yilmaz</i>	
Is Human Factors Being Studied in Software Testing?: Review of the Literature	184
<i>Nursyuhaila Yahaya, Nor Shahida Mohamad Yusop, Marshima Mohd Rosli</i>	
Fake News Detection Regarding COVID-19 Tweets Using Machine Learning Approaches	190
<i>Muhammad Hazimmuddin Hussin, Yuzi Mahmud, Nurul Izzah Mohd Hanafiah, Zan Azma Nasruddin, Nor Hapiza Mohd Ariffin, Murat Ince, Fatih Ahmet Senel</i>	
The Influence of Features and Factor on Continuous Usage Intention in Indonesia's National Health Insurance Application	196
<i>Reyvaldo Reyvaldo, Muh Ihsan Sakaruddin, Davin Fauzan Ma'Rifatullah, Erwin Halim, Placide Poba-Nzao</i>	
NOTOG: An Android App for Detecting and Reading Arabic Texts for Vision Impaired People.....	202
<i>Saadeh Z. Sweidan, Khalid A. Darabkh, Yara H. Ahmad, Tuga M. Hasan</i>	
An Engaging Android App for Arabic-Speaking Autistic Kids	208
<i>Saadeh Z. Sweidan, Khalid A. Darabkh, Aya M. Khawaldeh, Shaym K. Hamed Salameh</i>	
Enhanced Barangay Information Management System with Residency Certificate Issuance.....	214
<i>Lily Anne Dela Cruz, Cyril Joyce Balilia, Ertie Abana, Lyanna Pagulayan, Jaye-Em Mebaña, Diane Jenalyn Datul, Jay Alheizen Acoba</i>	
BitLanguage: A Java Language Learning App	221
<i>Diane Jenalyn Datul, Ertie Abana, Kurt Christian Lopez, Danzelle Rae Bajet, Lily Anne Dela Cruz, John Kenneth Jacinto</i>	
Deepfake Technology: Negative Impacts, Mitigation Methods, and Preventive Algorithms	227
<i>Nicholas Hernan Gonzales, Albert Louis Lobian, Federigo Matthew Hengky, Muhammad Rendra Andhika, Said Achmad, Rhio Sutoyo</i>	
Building Prediction Model for Detecting Cyberbullying Using TikTok Comments	232
<i>Bunga Aura Prameswari, Haliza Syafa Oktaviani, Titus Rangga Wicaksono, Biben Pieter Leonard, Said Achmad, Rhio Sutoyo</i>	
Development of a New Synergistic Cyber Security Awareness Model for the Elderly in Malaysia (SCSAM-Elderly).....	239
<i>Nurul Alieyah, Alya Geogiana Buja, Nor Masri Sahri, Rabiah Ahmad, Shekh Faisal Abdul Latip, Nurul Fadly Habidin, Mohamad Yusof Darus, Mohd Shahril Hussin, Saharudin Saat</i>	
BISINDO Hand-Sign Detection Using Transfer Learning	247
<i>David Joan, Vincent Vincent, Kevin Jason Daniel, Said Achmad, Rhio Sutoyo</i>	
Experiments on IndoBERT Implementation for Detecting Multi-Label Hate Speech with Data Resampling Through Synonym Replacement Method	254
<i>Michael Adriel Darmawan, Nathanael William Boentoro, Kevin Christian Surya, Rhio Sutoyo</i>	

A Comparative Study of HiveQL and SparkSQL Query Performance in a Cluster Environment.....	261
<i>Muhammad Hafiz Yahya, Azlan Ismail</i>	

PARALLEL SESSION III

An Improved RC4 Algorithm Based on Multi Chaotic Map for Image Encryption.....	267
<i>Rinaldi Munir</i>	
A Provisional Study of Data Mining Classification Algorithms in Predicting Credit Card Defaulters Using Weka Tools.....	273
<i>Nur Fadhlin Sakina Rosdi, Nur Shafiqah Ibrahim, Intan Hajariah Shamsudin, Sofanita Mutalib, Shuzlina Abdul-Rahman</i>	
Transforming Laundry Services: A User-Centric Approach to Streamlined Operations and Customer Satisfaction.....	278
<i>Isumail Kalo, Mohd Talmizie Amron</i>	
Secured QR Scanner (SQR) Based on Query Method.....	283
<i>Nur Sahira Aziyan Mohd Sabri, Noorhayati Mohamed Noor, Zolidah Kasiran</i>	
Enhancing Web Application Penetration Testing with a Static Application Security Testing (SAST) Tool.....	289
<i>Mohamad Yusof Darus, Muhammad Farhan Bin Bolhan, Aditya Kurniawan, Yohan Muliono, Chrisando Ryan Pardomuan, Mohsen Mohamad Hata</i>	
The Security Awareness of Social Media Users	295
<i>Andi Alkila Aurelia Firjatullah M, Anderes Gui, Drajad Wiryawan, Ridho Bramula Ikhsan, Ernawaty, Lianna Sugandi</i>	
Exploring Factors Influencing Intradialytic Hypotension and Hypertension in Small-Instances Hemodialysis Data: A Data Profiling Approach	300
<i>Azlin Ahmad, Mohamad Naqiuddin Mohd Zaini, Ezzatul Akmal Kamaru-Zaman, Rashidi Saidin</i>	
Formant Analysis of Diphthong for Standard Malay Language and Northern Regions' Dialects.....	306
<i>Muhammad Izzad Ramli, Nursuriati Jamil, Hafiz Omar, Rafizuddin Ramly</i>	
Driving Alert Application Based on Facial Expression Using Landmark Algorithm	313
<i>Muhammad Ayman Rahman, Muhammad Izzad Ramli, Syed Mohd Zahid Syed Zainal Ariffin, Nursuriati Jamil, Hafiz Omar, Rafizuddin Ramly</i>	
User Requirements of Elderly Companion Travel Mobile Application Using Personas	318
<i>Siti Zahidah Zulkaflī, Nor Shahida Mohamad Yusop, Marshima Mohd Rosli</i>	
Linear and Nonlinear Predictive Models for Manila City's Condition and People Satisfaction	324
<i>Christ John L. Marcos, Mellicynt M. Mascariola, Vanessa Angela D. Sales, Alex Mikaela M. Samonte, Kylie Arnold L. Uy, Laurenz Edward A. Martinez</i>	
Assessment of Respondents' Responses in Advancing Quantitative Key Performance Indicators for Construction Project Management Systems: Utilization of Neural Network Fitting and Clustering	328
<i>Christ John L. Marcos, Justine Ray C. Magundayao, Kristine Joy G. Franco, Ira Jean Roge Fay S. Bautista</i>	
Scalable Indoor Wi-Fi Positioning Algorithm Using Cluster-Based Local Estimators	332
<i>Tinh Pham, Nam Nguyen, Tung Pham, Hoang Bui</i>	

ROC Based Performance Evaluation of Machine Learning Classifiers for Multiclass Imbalanced Intrusion Detection Dataset	338
<i>Md. Salman Mohosheu, Fatin Abrar Shams, Md. Abdullah Al Noman, Samiur Rashid Abir, Al-Amin</i>	
Hybrid LBPH-SVM for Face Recognition of Class Attendance	344
<i>Muhammad Nasim Abdul Rahim, Siti Rafidah M Dawam, Mazura Mat Din, Taniza Tajuddin, Shaifizat Mansor, Noor Rasidah Ali</i>	
Assessing Web Performance of Malaysian University Website	349
<i>Mohd Lezam Lehat, Nor Fauziah Abu Bakar, Azura Abdul Jamil, Ct Munnirah Niesha Mohd Shafee, Palaniappan Shamala, Suhanah Rosnan</i>	
Biomolecular Analysis of Soil Samples and Rock Imagery for Tracing Evidence of Life Using a Mobile Robot.....	354
<i>Shah Md Ahasan Siddique, Ragib Tahshin Rinath, Shakil Mosharrof, Syed Tanjib Mahmud, Sakib Ahmed</i>	
Machine Learning-Based Edge Caching for Video Streaming in 5G Networks.....	360
<i>Abderrahmane Benmimoune</i>	
Improving the Accuracy of Online Game Recommendations: A Content-Based Filtering Approach Utilizing Cosine Similarity Matrix	365
<i>Ainul Hazeeq Imran Abd Rouf, Norzilah Musa, Ismassabah Ismail</i>	
Classification of Malocclusion Using Convolutional Neural Network and Knowledge-Based Systems.....	371
<i>Fatin Anis Natasya Mohd Sabri, Azliza Mohd Ali, Aida Nur Ashikin Abd Rahman, Mohd Amir Mukhsin Zurin, Aftah Syakirah Abdul Salam, Nur Amirah Che Din</i>	
Saie'i Ritual Tracking System Using Geo-Fencing Technique.....	375
<i>Muhammad Syakir Zainuddin, Suzana Ahmad, Norizan Mat Diah, Marina Ismail, Norharziana Yahaya Rashdi</i>	
Framework of Metaverse Educational Learning of Virtual Reality Environment in Improving Current Learning Problem.....	381
<i>Siti Hazyanti Mohd Hashim</i>	
Prediction Exercise on Rehabilitation for Chronic Disease: A Review	391
<i>Nurul Izah Md Salleh, Norizan Mat Diah, Suzana Ahmad, Nasiroh Omar, Zainura Idrus, Sharifalillah Nordin</i>	
Evaluation of Web Application Vulnerability Scanners Using SQL Injection Attacks.....	397
<i>Ramadan Yacin Ibrahim, Marshima Mohd Rosli</i>	
Water Quality Classification Using Machine Learning	403
<i>Fikri Firas Tajul Arifin, Zanariah Idrus, Shamimi A. Halim, Ahmad Afif Ahmarofi, Khairul Adilah Ahmad</i>	
Prediction of Powerplant Performance by Machine Learning Technique	409
<i>Fergyanto E. Gunawan, Rahmanda Wulandari, Dian Wahyuningtyas, Mohammad Asrol</i>	
Comparative Analysis of Machine Learning Algorithms Through Visualizations	414
<i>Mohammad Hafiz Ismail, Tajul Rosli Razak, Noorfaizalfarid Mohd Noor, Azlan Abdul Aziz</i>	
Optimizing Ergonomics in Mobile Device Design: Enhancing User Comfort and Usability	419
<i>Unice G. Lopez, Dave Christian M. Toribio, Pol Brian G. Castro, Marianito P. Gallego</i>	

Comparative Analysis of Regression Techniques for Software Effort Estimation	425
<i>Puguh Jayadi, Khairul Adilah Binti Ahmad</i>	
Influential Factors Affecting the Adoption of Quick Response Code in Indonesian Standard for Digital Payments	431
<i>Anderes Gui, Nelly Nelly, Yuvaraj Ganesan, Denise Brigitte Kristalin, Aisyah Zahra Mayada, Adinda Rahmi</i>	
Fruit Detection and Recognition Using Faster R-CNN with FPN30 Pre-trained Network	436
<i>Muhammad Izzat Roslan, Zaidah Ibrahim, Nur Aina Khadijah Adnan, Norizan Mat Diah, Nur Azima Alya Narawi, Yunifa Miftachul Arif</i>	
Outbound Innovation Strategic Plan for Malaysian SMEs in the Software Industry: An Operational Research Framework	442
<i>Soffri Yussof, Syed Nasirin Syed Zainol Abidin</i>	
Simplified Artificial Neural Network Configuration in R Programming for Predictive Modelling	446
<i>Tajul Rosli Razak, Hasila Jarimi, Emy Zairah Ahmad</i>	
Diet Recommendation Expert System for Hypertension Patients	452
<i>Hadirah Khan Muhd Hafeez Khan, Sharifalillah Nordin, Mohd Ramadan Ab Hamid</i>	
Corpus-Based Sequence to Sequence with Luong Attention Mechanism for Ilocano to English Translation	458
<i>Christian Jay B. Andres, John Kenneth M. Jayme, Hewlett Francee G. Fontiveros, Jansen Lloyd Gabilan Macabangun, Jay M. Ventura, Bryan Urita</i>	
The Influence of Virtual Reality on User Intention in Indonesia Tourism Industry	462
<i>Eunike Charista, Nicholas Christopher, Anderes Gui, Richard Wijaya</i>	

TRACK 2: ELECTRONIC & COMMUNICATION ENGINEERING
PARALLEL SESSION I

UVFil: An Automated Air Filter System for Poultry Farms Using UV Light Treatment	468
<i>Ryan John G. Dagatan, Daisy Mae F. Elizon, Nathalie Beatrice E. Moreno, Michelle Anne G. Tumarong, Nicole D. Umali, Marianito P. Gallego, Ma. Elena A. Noriega</i>	
Squeezed Light Generation Across Dual Octaves with Single-Mode Multichannel Waveguides	474
<i>Rafael Julius, Mohammad Zulkarnain Khan Bin Zulkifeli, Abdel-Baset M. A. Ibrahim</i>	
UAV Swarm Communication Reliability Prediction Using Machine Learning	479
<i>Reuben Yaw Hui Lim, Joanne Mun Yee Lim, Boon Leong Lan, Patrick Wan Chuan Ho, Nee Shen Ho, Thomas Wei Min Ooi</i>	
Optimization of Multi-Channel Quartz Crystal Microbalance for Gas Sensing Application	485
<i>Ahmad Anwar Zainuddin, Soumik Bhattacharjee, Aliza Aini Md Ralib, Nurain Sufti Sabreena Mohd Sukri, Saidatul Izyanie Binti Kamarudin, Krishnan Subramaniam, Dini Handayani, M. Reyasudin Basir Khan, Nik Nor Muhammad Saifudin</i>	
Performance of Routing Protocol for Low-Power and Lossy Networks in Heterogeneous Traffic Load Wireless Sensor Networks	491
<i>Ansar Jamil, Natasha Amira Abdul Rauf, Abang Muhamad Zaid Abang, Fauziahanim Che Seman, Farhana Ahmad Po'Ad</i>	
Influence of YouTube as Coding Language Learning for Academic Achievement	497
<i>Kevin Kosasih, Erwin Halim, Nely, Fifilia</i>	

PARALLEL SESSION II

IoT-Enabled Automatic Plant Watering System	503
<i>Nur Husna Damia Mohamad Razam, Siti Sara Rais</i>	
Development of an Anodic Aluminum Oxide Membrane for a Wearable Hemodialysis Machine	509
<i>Om Prakash Gujela, Suneel Kumar, Vidhatri Gujela</i>	
E-Pet: Regulating the Weight of the Dogs Through Automation and IoT Utilizing Calorie Tracker	513
<i>Shane Kelly N. Amoroso, Hans Patrick Q. Carlos, Mark Vincent H. Santelices, John Christian R. Valencia, Engr. Ma. Elena A. Noriega, Marianito P. Gallego</i>	
AICanHear: Assistive Alerting Device for Deaf and Hard-Of-Hearing People (DHH)	519
<i>Ria Garnette A. Buhat, Coleen B. Capuno, Redgienald Allen D. De Guzman, Mekaella D. Pascua, Dara Joyce S. Tan, Marianito P. Gallego, Ma. Elena A. Noriega</i>	
Design and Performance Analysis of Dielectric Modulated MoTe ₂ Junction-Less Tunnel FET Based Biosensor	525
<i>Saravana Selvan, Lee Kong Meng, Mukter Zaman, Maheswaran Solayappan, Pratap Nair, Dilip Kumar</i>	
Impacts of Different Altitudes on 5G Performance: A Case Study of a Public Hospital in Central Bangkok	531
<i>Surachai Chatchalermpun, Therdpong Daengsi, Phisit Pornpongtechavanich, Kritphon Phanrattanachai, Pakkasit Sriamorntrakul, Chawin Chukusol</i>	
On-Chip Self-test Solutions for ADC Survey and Analysis	535
<i>Mohammed Abdulmahdi Mohammedali, Qais Al-Gayem</i>	
Reward-Driven Clustered Federated Learning for DRL Based UAV-RIS Networks	540
<i>Yi Jie Wong, Mau-Luen Tham, Ban-Hoe Kwan, Amjad Iqbal, Ying Loong Lee, Yoong Choon Chang</i>	
Effects of Imperfect Hardware and Energy Harvesting Nonlinearity on Wireless Networks.....	546
<i>Van Khuong Ho</i>	
Mixed Operation in Overlay Networks: Performance Assessment	551
<i>Van Khuong Ho</i>	

TRACK 3: ELECTRICAL ENGINEERING

PARALLEL SESSION I

The Impact of Self-Directed Learning to Intention to Use and Continued Intention of Personalized Learning	556
<i>Sheilline Gabriella, Erwin Halim, Yuliana Lisanti</i>	
Lighting Up Adorsho Char: A Solar PV Based Energy Harvesting System for a Remote Island of Bangladesh	562
<i>Wasifa Rahman Rashmi, Maisha Mumtaz Rahman, Mirza Muntasir Nishat, Fahim Faisal, Ahmad Shafiullah, Sanjida Ali, Muhtadi Haque, E. M. Manwar, Abdimajid Mohammad Hussien</i>	

Sensorimotor Activity Patterns Using Machine Learning: Assessing the Impact of Auditory Timing Perception and Comparing Different Algorithms	569
<i>Zawwad Bin Saif, Nazmus Sakib, Muhammad Adnan, Md. Tanvir Hasan, Mirza Muntasir Nishat, Fahim Faisal, Ahmad Shafiullah, Sanjida Ali</i>	
An Improved Archimedes Optimization Algorithm for Solving Optimization Problems	576
<i>Mohd Ashraf Ahmad, Muhammad Shafiqul Islam, Muhammad Ikram Mohd Rashid</i>	
An Electric Vehicle Control Strategy to Mitigate Load Altering Attacks Against Power Grids.....	581
<i>Mohammad Ali Sayed, Mohsen Ghafouri, Ribal Atallah, Mourad Debbabi, Chadi Assi</i>	
Residential Power Scheduling Under Day-Ahead Market (DAM) Pricing Based on HEMS	587
<i>Sanjay Sahu, Seema Pal</i>	
Performance Comparison of Different Electron Transport Layer for Perovskite Solar Cell with NiO as Hole Transport Layer Using SCAPS 1D	595
<i>Nurbahirah Norddin, Suhaidi Shafie, Muhammad Idzdihar Idris, Xinzhi Liu, Ismail Lawal, Mohd Iskandar Dzulkarnain M. Rumaja, Ahmad Muhajer Bin Abdul Aziz, Rozilawati Mohd Nor</i>	

PARALLEL SESSION II

Rule-Based Self-supervised Learning Non-Intrusive Load Monitoring System for Residential Houses	601
<i>Nimantha Madhushan, Rasanjalee Rathnayake, Ashmini Udhyani, Uditha Wijewardhana, Nishan Dharmaweera</i>	
Energy Performance Indicator (EnPI) Prediction of a Compressed Air System in a Can Manufacturing Factory	607
<i>Muhammad Hafizee Abdul Kadir, Muhammad Aizat Zakaria, Muhamad Aqil Muqri Muhamad Fahmi, Nur Shahida Midi, Siti Hajar Yusoff, Mohd Shahrin Abu Hanifah</i>	
EcoCharge: Innovative Solar and Wind Charging Station Enabled by Solid Waste Contributions	612
<i>Norman Bob Gomez, Jan Piolo Guiao, Mark Francis Pera, Reel Jerin Ignacio, Noel Malana, Jon Michael Magat, Ertie Abana</i>	
Enhanced Cooling System for Round Container: Innovations in Water Beverage Cooling	617
<i>Bonn Jovie Anapi, Kyle Bryan Baccay, Ariel Jake Delfin, Jerome Garcia, Jun Cedrix Tamayao, Francis Nicolas Escobar, Ertie Abana</i>	
Methodology to Prevent Voltage Collapse During on Load Tap Changing Transformer Operation Under Network Contingencies	621
<i>Sarada Devi, Pavan Phani Kumar</i>	

Author Index