

2020 IEEE International Conference on Sustainable Engineering and Creative Computing (ICSECC 2020)

**Cikarang, Indonesia
16-17 December 2020**



**IEEE Catalog Number: CFP20FUB-POD
ISBN: 978-1-7281-7589-8**

**Copyright © 2020 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:	CFP20FUB-POD
ISBN (Print-On-Demand):	978-1-7281-7589-8
ISBN (Online):	978-1-7281-7588-1

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

Comparison of BER Performance for M-ary QAM and PSK on DWT-based OFDM System with PTS Technique Through AWGN Channel	1
<i>Antonius Suhartomo, Vincent Vincent</i>	
Energy Transaction Management in Radial Distribution Networks Considering the Effect of PV, Load and Power Quality	7
<i>Novian Patria Uman Putra, Nasyith Hananur Rohiem, Ahmad Bariq Al Fahri, Adi Soeprijanto, Dimas Fajar Uman Putra</i>	
Graphical Programming Languages for Functional Safety using the example of LabVIEW	14
<i>Nick Berezowski, Markus Haid</i>	
Architectures Based on Blockchain Technology for Information Systems in Public Institutions	20
<i>Igor Aguilar-Alonso, Enith Lévano</i>	
Identification of IT Governance Frameworks and Standards Implemented in Organizations	26
<i>Igor Aguilar-Alonso, Jessica Vergara-Calderón</i>	
Hybrid Artificial Bee Colony for Placement and Sizing Wind Power Plant in Electrical Power System	32
<i>Langlang Gumilar, Wahyu Sapto Nugroho, Mokhammad Sholeh</i>	
Impact of Installing Harmonic Filter on Three Winding Transformer	38
<i>Langlang Gumilar, Mokhammad Sholeh, Wahyu Sapto Nugroho</i>	
Expressive Facial Characters Based on Indonesian Compound Sentence Using Multinomial Naïve Bayes Classifier	44
<i>Aripin Aripin, Wisnu Agastya, Hanny Haryanto, Nur Rokhman, Pratama Bayu Widagdo</i>	
Finite Control Set Model Predictive Control (FCS - MPC) for Single-Phase Hybrid Active Power Filter in Dynamic Loads	52
<i>Asep Andang, Eka Priatna, Ifkar Usrah</i>	
White Box Testing with Basis Path Technique in the Demography Administration Website	57
<i>Ginanjar Wiro Sasmito</i>	
Android Based Heart-rate Monitoring System using ECG Sensor	64
<i>Rosalina, Grace Selina, Rila Mandala</i>	
Predicting the Depression Level of Excessive Use of Mobile Phone: Decision Tree and Linear Regression Algorithm	69
<i>Imrus Salehin, Iftakhar Mohammad Talha, Nazmun Nessa Moon, Mohd. Saifuzzaman, Fernaz Narin Nur, Mariom Akter</i>	
A Design of Autonomous Remote Control Car Using Convolutional Neural Network and Haar-like Features Classifier	75
<i>Andre Muslim, Iksan Bukhori, Antonius Suhartomo</i>	
Performance of Graphite/SiO ₂ Composites as Cathode Electronic Active Layer in Al-Air Batteries	81
<i>H. Aripin, Nurul Hiron, Nundang Busaeri, Firmansyah M S Nursuwars, Linda Faridah, Svilen Sabchevski</i>	

Siamese Network's Performance for Face Recognition.....	86
<i>Steven, Janson Hendryli, Dyah Erny Herwindiati</i>	
Improving Pseudo Relevance Feedback with Term Relationship using Firefly Algorithm	91
<i>Muhammad Fikri Hasani, Rila Mandala</i>	
Artificial Intelligence Approach for Name Classification in Information-Centric Networking-based Internet of Things	97
<i>Cutifa Safitri, Rila Mandala, Quang Ngoc Nguyen, Takuro Sato</i>	
Parameters Optimization of Plasma Arc Cutting Process Using Grey Relational Analysis Method.....	103
<i>A. Sateria, Pristiansyah, I. Dwisaputra</i>	
Abnormal Behavior Detection Based On Optical Flow Features	107
<i>Mesyella, Timotius Ivan Casey, Edward Susanto, Irene Anindaputri Iswanto</i>	
Investigation of Reducing End Detent Force by Modification Design of End Teeth for Linear Induction Motor with Ansys.....	112
<i>Ainil Syafitri, Mk Iwa Garniwa, Ridwan Gunawan</i>	
Data Acquisition and Visualization for Solar Power Battery using IoT Open Source Stack Solution	116
<i>Oetomo Sudjana, Harry Septanto</i>	
Prediction of Rooftop Photovoltaic Adopters in Residential Customer	121
<i>Mahardhika Michael Hamonangan, Nanang Hariyanto</i>	
PD Based Cost Effective and Accurate Calorimeter Temperature Control and Measurement System	128
<i>Muhammad Usman, Muhammad Waseem, Danish Khan, Abdul Manan, Sameeh Ullah, Muhammad Muzaffar Iqbal, Zaid Bin Faheem</i>	
Optimization of Scheduling and Thermal Generation Operations Using Firefly Algorithm.....	133
<i>Wahyu Sapto Nugroho, Arif Nur Afandi, Mokh. Sholihul Hadi</i>	
Design of Fuzzy Logic System for Disinfectant Liquid Monitoring Using the Internet of Things	139
<i>Bagus Wahyu Prakoso, Anifatul Faricha, Dimas Adiputra, Mochamad Fauzan Rasyid, Moch. Bagus Indrastata Purahita, Billy Montolalu</i>	
Analysis and Design of Tourism Recommender System for Religious Destinations of Nepal	145
<i>Tan Wenan, Deepanjali Shrestha, Deepmala Shrestha, Bijay Gaudel, Seung Ryul Jeong</i>	
Performance Comparison Of Semi-Automatic Machine For Mendong Woven Industrial.....	152
<i>Nurul Hiron, Firmansyah M S Nursuwars, Supratman Supratman, Sutisna Sutisna</i>	
Multidocument Summarization using GloVe Word Embedding and Agglomerative Cluster Methods.....	157
<i>Rosalina Rosalina, Rafiqul Huda, Genta Sahuri</i>	
Sneakernet: A Technological Overview and Improvement.....	162
<i>Andika Candra Jaya, Cutifa Safitri, Rila Mandala</i>	
Design of Self-Sustainable Muscle Stimulator Using Piezoelectric Powering.....	167
<i>Md. Rifat Rahman Akash, Tahsin Jahin Khalid, Yousuf Yousuf, Md. Asaf-Ud-Doulah Niloy, M. Tanseer Ali</i>	
Information Systems Usage on Enhancing Port Performance Perceived Service Quality as a Mediating Role: The Case Study of Container Terminals in Tanzania	173
<i>Bakari Omari Bakari, Apol Pribadi Subriadi</i>	

Multi-Criteria Decision Making on Supplier Selection in Supply Chain Network	181
<i>Adi Saptari, Mohamad Toha, Supratman, Isa Bin Halim</i>	
IoT-based Data Acquisition of Clean Water Usage Using NodeMCU.....	188
<i>Erwin Sitompul, Sandi M. Samsudin</i>	
Sleep Deprivation Detection Using Bed Time Prediction Algorithm.....	194
<i>Ronny Juwono, Majesty V. C. Maluenseng</i>	
Visualization of A Three-Dimensional Tree Modeling using Fractal Based on L-System	199
<i>Eka Wahyu Hidayat, Ida Ayu Dwi Giriantari, Made Sudarma, I Made Oka Widyantara</i>	
Mobile Application as Media Monitoring in the Agility Record System (ARS)	204
<i>Firmansyah M S Nursuwars, Acep Irham Gufroni, Nurul Hiron, Rahmi Nur Shofa</i>	
Fighting Hunger in Indonesia with Effective Food Banking System	209
<i>Sandy Darmowinoto, Hadi Suprayitno, Syed Rafi Hossain</i>	
Improving Effectiveness Information Retrieval System Using Pseudo Irrelevance Feedback.....	215
<i>Elvina, Rila Mandala</i>	

Author Index