

2020 International Conference on Electrical Engineering and Informatics (ICELTICs 2020)

**Aceh, Indonesia
27 – 28 October 2020**



**IEEE Catalog Number: CFP20M32-POD
ISBN: 978-1-7281-8200-1**

**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:	CFP20M32-POD
ISBN (Print-On-Demand):	978-1-7281-8200-1
ISBN (Online):	978-1-7281-8199-8

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

2020 International Conference on Electrical Engineering and Informatics (ICELTICs)

Parallel Session 1

<i>IPsec Cryptography for Data Packets Security Within VPN Tunneling Networks Communications</i> Khalid F. Mahmmod (Ninevah University, Iraq), Mohammed M. Azeez (Ninevah University, Iraq), Mohamad A. Ahmed (Ninevah University, Iraq)	1
<i>Optimizing of Synchronous Generator Voltage Stability With CUK Converter as an Excitation Control System</i> Dimas Wahyu Pribadi (Politeknik Elektronika Negeri Surabaya, Indonesia), Endro Wahjono (Politeknik Elektronika Negeri Surabaya, Indonesia), Indra Ferdiansyah (Politeknik Elektronika Negeri Surabaya, Indonesia)	9
<i>A New Method for Finding the Maximum Point of the Output Power of A Solar Panel With Multiple Peaks</i> Muliadi Muliadi, Mul (Syiah Kuala University & Institute of Research Energy and Technology, Indonesia), Ira Sara (Syiah Kuala University, Indonesia)	15
<i>Implementation of Depth Control Using a Blue Robotic Ping Sonar Altimeter and Echo Sounder in Explorer Class ROV</i> Simon Siregar (Telkom University, Indonesia), Muhammad Ikhsan Sani (Telkom University, Indonesia), Ryan Febriansyah (Telokom University, Indonesia), Ulil Ikbal (Telkom University, Indonesia)	20
<i>Prediction of Kovats Retention Indices for Fragrance and Flavor Using Artificial Neural Network</i> Aga Maulana (Universitas Syiah Kuala, Indonesia), Teuku Rizky Noviandy (Universitas Syiah Kuala, Indonesia), Rinaldi Idroes (Universitas Syiah Kuala, Indonesia), Novi Reandy Sasmita (Universitas Syiah Kuala, Indonesia), Rivansyah Suhendra (Universitas Syiah Kuala, Indonesia), Irvanizam Irvanizam (Universitas Syiah Kuala, Indonesia)	25
<i>Model and Simulation to Reduce Covid-19 New Infectious Cases: A Survey</i> Hady Maulanza (Universitas Abulyatama & Universitas Syiah Kuala, Indonesia), Taufik F. Abidin (Universitas Syiah Kuala, Indonesia), Zaki Mubarak (Universitas Syiah Kuala, Indonesia), Asnawi Abdullah (University Muhammadiyah Aceh, Indonesia)	30
<i>Application of the Ordinary Kriging to the Laundry Business Survey Result Data: Number of Items in a Day in Banda Aceh City</i> Marzuki Marzuki (Syiah Kuala University, Indonesia), Irvanizam Irvanizam (Universitas Syiah Kuala, Indonesia), Radhiah Radhiah (Syiah Kuala University, Indonesia), Muhammad Iqbal (Syiah Kuala University, Indonesia)	36
<i>OLI and TIRS Sensor Platforms for Detection the Geothermal Prospecting in Peut Sagoe Volcano, Aceh Province, Indonesia</i> Muhammad Yanis (Syiah Kuala University, Indonesia), Isra Novari (Universitas Syiah Kuala, Indonesia), Nasrullah Zaini (Universitas Syiah Kuala, Indonesia), Marwan Marwan (Syiah Kuala University, Indonesia), Andri Pembonan (Institut Teknologi Sumatera, Indonesia), Nizamuddin Nizamuddin (Syiah Kuala University, Indonesia)	40

Parallel Session 2

<i>Convolutional Neural Network Customization for Parking Occupancy Detection</i> Sayuti Rahman (Doctoral Program, School of Engineering Universitas Syiah Kuala, Indonesia), Marwan Ramli (Syiah Kuala University, Indonesia), Fitri Arnia (Syiah Kuala University, Indonesia), Arnes Sembiring (UniversitasHarapan Medan, Indonesia), Rusdha Muharar (Syiah Kuala University, Indonesia)	46
<i>Multi-Classes Emotion Detection for Unbalanced Indonesian Tweets</i> Laina Farsiah (Indonesia), Yi-Shin Chen (National Tsing-Hua University, Taiwan), Alim Misbullah (Universitas Syiah Kuala, Indonesia)	52
<i>Real Time Human Activity Recognition Using Convolutional Neural Network and Deep Gated Recurrent Unit</i> Rasyid Fajar (Institut Teknologi Sepuluh Nopember, Indonesia), Nanik Suciati (Institut Teknologi Sepuluh Nopember, Indonesia), Dini Navastara (Institut Teknologi Sepuluh Nopember, Indonesia)	58
<i>Deep Learning for Indonesia Standard Industrial Classification</i> Mahendri Dwicahyo (BPS - Statistics Indonesia, Indonesia), Budi Yuniarto (STIS, Polytechnic of Statistics, Indonesia)	64
<i>Mining Indonesia Tourism's Reviews to Evaluate the Services Through Multilabel Classification and LDA</i> Irma Latifatul Laily ILL (Universitas Indonesia, Indonesia), Indra Budi (Faculty of Computer Science & Universitas Indonesia, Indonesia), Aris Budi Santoso (University of Indonesia, Indonesia), Prabu Kresna Putra (Agency for the Assessment and Application of Technology (BPPT) & Center for Regional Resource Development Technology (PTPSW), Indonesia)	70

<i>Indonesia's Districts Mapping Based on the Scores of the 2017 High School National Examination</i> Ridha Ferdhiana (Universitas Syiah Kuala, Indonesia, Indonesia), Melia Hardianti (Universitas Syiah Kuala, Indonesia), Nany Salwa (Universitas Syiah Kuala, Indonesia), Taufik F. Abidin (Universitas Syiah Kuala, Indonesia)	77
<i>Application of Machine Learning to Lightning Strike Probability Estimation</i> Aderibigbe Adekitan (Technische Universität Ilmenau, Germany), Michael Rock (TU Ilmenau, Germany)	82
<i>Graph Representation for VANETs Based on HashMap of ArrayList and Pairs</i> Noor Jallad (Palestine Technical University Kadorie, Palestine), Yousef Daraghmi (Palestine Technical University, Palestine)	91

Parallel Session 3

<i>Optimization Backpropagation Algorithm with Feature Engineering to Predict Building Hourly Consumption Energy</i> Ichwanul Muslim Karo Karo (Telkom University, Indonesia), Fikhri Masri (Telkom University, Indonesia)	96
<i>Augmented Reality for 3D House Design Visualization from Floorplan Image</i> Muhammad Auliaramadani (Institut Teknologi Sepuluh Nopember, Indonesia), Nanik Suciati (Institut Teknologi Sepuluh Nopember, Indonesia), Shintami Chusnul Hidayati (Institut Teknologi Sepuluh Nopember, Indonesia), Hadziq Fabroyir (Institut Teknologi Sepuluh Nopember, Indonesia), Ridho Rahman Hariadi (Institut Teknologi Sepuluh Nopember (ITS) Surabaya Indonesia, Indonesia)	102
<i>Phrase Embedding Based Multi Document Summarization with Reduced Redundancy Using Maximal Marginal Relevance</i> Sakkaravarthy Iyyappan K (National Institute of Technology Tiruchirappalli, India), S. R. Balasundaram (National Institute of Technology, India)	108
<i>Deep Neural Network for Automatic Speech Recognition from Indonesian Audio Using Several Lexicon Types</i> Taufik F. Abidin (Universitas Syiah Kuala, Indonesia), Alim Misbullah (Universitas Syiah Kuala, Indonesia), Ridha Ferdhiana (Syiah Kuala University, Indonesia), Muammar Z Aksana (Universitas Syiah Kuala, Indonesia), Laina Farsiah (Indonesia)	113
<i>Improving Acoustic Models for Dysarthric Speech Recognition Using Time Delay Neural Networks</i> Alim Misbullah (Universitas Syiah Kuala, Indonesia), Hai-Hsing Lin (APrevent Medical Inc., Taiwan), Chia-Yuan Chang (APrevent Medical Inc., Taiwan), Hsiu-Wei Yeh (APrevent Medical Inc., Taiwan), Ko-Cheng Weng (APrevent Medical Inc., Taiwan)	118

Parallel Session 4

<i>A Block-Sparse Signal Recovery Method Based on Adaptive Filtering Framework</i> Lu Liangyou (Southeast University, China), Lenan Wu (Southeast University, China)	122
<i>Developing an Information System to Predict the Shelf Life of Food Products</i> Juwita Juwita (University of syiah kuala, Indonesia), N. m Erfiza (Syiah Kuala University, Indonesia), Viska Mutiawani (Syiah Kuala University, Indonesia), Muhammad Ichsan (Syiah Kuala University, Indonesia)	126
<i>WLAN Based Indoor Localization System for Evacuation of Victims in a Building</i> Viska Mutiawani (Syiah Kuala University, Indonesia), Cut Thifal Nazila (Syiah Kuala University, Indonesia), Kurnia Saputra (Syiah Kuala University, Indonesia)	132
<i>ASENVA: Summarizing Anatomy Model by Aggregating Sensitive Values</i> Widodo Widodo (Universitas Negeri Jakarta, Indonesia), Irma Permata Sari (Universitas Negeri Jakarta, Indonesia), Murien Nugraheni (Universitas Negeri Jakarta, Indonesia)	138
<i>Systematic Review of Issues and Solutions for Security in E-Commerce</i> Resty Kurnia Jamra (Universitas Indonesia, Indonesia), Bayu Anggorojati (Universitas Indonesia, Indonesia), Kautsarina Kautsarina (Universitas Indonesia, Indonesia), Dana I. Sensuse (Universitas Indonesia, Indonesia), Ryan Randy Suryono (Universitas Teknokrat Indonesia, Indonesia)	142