2019 International Conference of Advanced Informatics: Concepts, Theory and Applications (ICAICTA 2019)

Yogyakarta, Indonesia
20-21 September 2019

IEEE Catalog Number: CFP1950Y-POD
ISBN: 978-1-7281-3453-6

Copyright © 2019 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: CFP1950D-POD
ISBN (Print-On-Demand): 978-1-7281-3453-6
ISBN (Online): 978-1-7281-3452-9

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

Table of Contents

Travel Itinerary Recommendation for Real World Point of Interests Using Iterated Local Search 1
Catherine Almira and Nur Ulfa Maulidevi

Improving TensorFlow's Memory Swapping by Prioritizing Earlier Tensors 7
Devin Alvaro and Achmad Imam Kistijantoro

Optimizing Deep Learning for Cyberbullying (Textual) in Indonesian Language 12
Laksmi Anindyati, Ayu Purwarianti and Ade Nursanti

User Interaction Design for Financial Technology Mobile Application using User-Centered Design 17
Saskia Amalia Aryono, Harlili and Dicky Prima Satya

Coreference Resolution System for Indonesian Text with Mention Pair Method and Singleton Exclusion using Convolutional Neural Network 23
Turfa Auliarachman and Ayu Purwarianti

Siamese Similarity Between Two Sentences Using Manhattan's Recurrent Neural Networks 28
Achmad Abdul Aziz, Esmeralda C. Djamal and Ridwan Ilyas

Corpus Text and Acoustic Model Addition for Indonesian-Arabic Code-switching in Automatic Speech Recognition System 34
Rizky Elzandi Barik and Dessi Puji Lestari

Composing Indonesian Paragraph for Biography Domain using Extracive Summarization . 40
Rionaldi Chandraseta and Masayu Leylia Khodra

Improving Bi-LSTM Performance for Indonesian Sentiment Analysis Using Paragraph Vector 45
Ida Ayu Putu Ari Crisdayanti and Ayu Purwarianti

Abstractive Summarization using Genetic Semantic Graph for Indonesian News Articles .. 50
Rachel Sidney Devianti and Masayu Leylia Khodra

Semantic Role Labeling for Generating Template of Indonesian News Sentences 56
Irene Edria and Masayu Leylia Khodra

Aspect and Opinion Terms Extraction Using Double Embeddings and Attention Mechanism for Indonesian Hotel Reviews 62
Jordhy Fernando, Masayu Leylia Khodra and Ali Akbar Septiandri

Sketch-based Deep Generative Models Conditioned on a Background Image 68
Kurei Fujiwara, Yuki Endo and Shigeru Kuriyama

Analysis of Aedes Aegypti Populations Growth and the Effect for Human Populations 74
M. Fikri Hasani and Nugraha P. Utama

Using a Sequence-to-sequence Model for Large-scale Automated ICD Coding 79
Hiroki Hatanaka and Tomoyosi Akiba

Depth Estimation from a Single Image using Multi Stream and Scale Deep Learning 85
Andi Hendra and Yasushi Kanazawa

Action Recognition by Composite Deep Learning Architecture I3D-DenseLSTM 91
Yuri Yudhaswana Joefrie and Masaki Aono

Mobile Robot Path Planning Based on Chaos Generated by Logistic Map 97
Mio Kobayashi

Redesigning The Interaction of Twitter's Content Preferences Feature Using User-Centered Design Approach 103
Stevanno Hero Leadervand, Harlili and Ginar Santika Niwanputri

Deep learning-based Anomaly Detection on Surveillance Videos: Recent Advances 109
Akmalazakia Fatan Derana Marsiano, Indah Soesanti and Igi Ardiyanto

Residential Segregation 115
Marcelinus Henry Menori and Nugraha P. Utama

Implement a Lean UX Model : Integrating Students Academic Monitoring through a mobile app 118
Murein Miksa Mardhia and Ela Dwi Anggraini

A Proposal of Prediction Method Using Word Polarity Information for Future Event Prediction Support System 123
Yoko Nakajima, Keiya Takagi, Michal Ptaszynski, Hirotoshi Honma and Fumito Masui

Model Study of Traffic Congestion Impacted by Incidents 129
Andreas Novian Dwi Triastanto and Nugraha Priya Utama

Design of eLearning Platform for Adult Learner 135
Annisaa Nurhayati and Yoanes Bandung

Design of Translator Android Application for Sign Language and Indonesian using User-Centered Design Approach 141
Candra Hesen Parera

Semantic Segmentation of Paved Road and Pothole Image Using U-Net Architecture 147
Vosco Pereira, Satoshi Tamura, Hidekazu Fukai and Satoru Hayamizu

Improving Performance of YOLOv3 for Vehicle Detection 152
Pratamamia Agung Prihatmaja and Dwi Hendratmo Widyantoro

Orthogonal Non-Negative Matrix Factorization using Ridge Term for Classifying Expressed Gene 158
Diyah Utami Kusumaning Putri

Multidocument Abstractive Summarization using Abstract Meaning Representation for Indonesian Language 163
Verena Severina and Masayu Leylia Khodra

Application of Dynamic Difficulty Adjustment on Evidence-centered Design Framework for Game Based Learning .....
Bias Sekar Avi Shena, Benhard Sitohang and Satrio Adi Rukmono

Improving Joint Layer RNN based Keyphrase Extraction by using Syntactical Features ... 175
Sidik Soleman, Miftahul Mahfuzh and Ayu Purwarianti

Steering Mark: Instructor Annotations on Flipped Learning Preparation Video System ... 181
Shintaro Uchiyama, Hayato Okumoto, Mitsuo Yoshida, Yuko Ichikawa and Kyoji Umemura

Application and Evaluation of Efficient Algorithm for Computing Product of Pairings to 256-bit Secure Pairing-friendly Curves ... 187
Ryota Udani and Koutarou Suzuki

Text Corpus Augmentation to Represent Filled Pause in Indonesian Spontaneous Speech Recognition System ... 193
Candra Bella Vista, Dessi Puji Lestari and Dwi Hendratmo Widyantoro

Log Anomaly Detection Using Adaptive Universal Transformer ... 199
Sergio Wibisono and Achmad Kistijantoro

Multiagent System Development for Cooperative Multiplayer Video Game Using Deep Q-Network ... 206
Reinaldo Ignatius Wijaya and Nur Ulfa Maulidevi

Office Document Search Engine ... 211
Diki Ardian Wirasandi, Saiful Akbar and Fitra Arifiansyah

FPSSD7: Real-time Object Detection using 7 Layers of Convolution based on SSD ... 216
Yuya Yamashige and Masaki Aono

Serious Game on Mobile Learning: A Systematic Literature Review ... 222
Hespri Yomeldi, Yusep Rosmansyah and Budiman Dabarsyah

Transfer Learning from News Domain to Lecture Domain in Automatic Speech Recognition ... 227
Iftitakhul Zakiah and Dessi Puji Lestari

An LSTM-based Spell Checker for Indonesian Text ... 233
Damar Zaky and Ade Romadhony