International Conference on Information Technology and Digital Applications 2016

IOP Conference Series: Materials Science and Engineering Volume 185

Yogyakarta, Indonesia 14 – 16 November 2016

Editors:

Taufiq Hidayat Ari Sujarwo

ISBN: 978-1-5108-3841-3

ISSN: 1757-8981

Printed from e-media with permission by:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2016) by the Institute of Physics All rights reserved. The material featured in this book is subject to IOP copyright protection, unless otherwise indicated.

Printed by Curran Associates, Inc. (2017)

For permission requests, please contact the Institute of Physics at the address below.

Institute of Physics Dirac House, Temple Back Bristol BS1 6BE UK

Phone: 44 1 17 929 7481 Fax: 44 1 17 920 0979

techtracking@iop.org

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

Email: curran@proceedings.com Web: www.proceedings.com

Table of contents

Volume 185

The International Conference on Information Technology and Digital Applications 14–16 November 2016, Yogyakarta, Indonesia

Accepted papers received: 28 February 2017

Published online: 22 March 2017

Preface

011001 OPEN ACCESS

The International Conference on Information Technology and Digital Applications

011002 OPEN ACCESS Peer review statement

Keynote

012001 OPEN ACCESS Cyber Space and Digital Democracy in South Korea

Jin Ro Lee....1

Applications

012002 OPEN ACCESS

Good practices in Local Government - A first overview of Portuguese reality

P. Carvalhosa, F. Portela, J. Machado, M.F. Santos and A. Abelha....15

012003	3
OPEN	ACCESS

Potential fraudulent behaviors in e-procurement implementation in Indonesia

S N Huda, N Setiani, R Pulungan and E Winarko....24

012004

OPEN ACCESS

<u>Power Exercise in the Institutionalization of an eProcurement System in Indonesian</u> Local Government

Fathul Wahid.....30

012005

OPEN ACCESS

Transformation of fraud activities in procurement system in Indonesia

N Setiani, S N Huda, R Pulungan and E Winarko.....40

012006

OPEN ACCESS

Cross-country Analysis of ICT and Education Indicators: An Exploratory Study

Ahmad R Pratama.....48

012007

OPEN ACCESS

The Use of ICT to Support Perpetual Undergraduate Students

N.W. Rahayu and S.N. Huda.....55

012008

OPEN ACCESS

Using Isovist Application to Explore Visibility Area of Hospital Inpatient Ward

M M C Sengke and P Atmodiwirjo.....62

012009)
OPEN	ACCESS

Development of Multi-slice Analytical Tool to Support BIM-based Design Process

P Atmodiwirjo, M Johanes and Y A Yatmo.....68

012010 OPEN ACCESS

The Impact of Islamic Messages on Twitter Towards Moslem Youth

Ahmad Fathan Hidayatullah and Almed Hamzah.....74

012011 OPEN ACCESS

An Expert System for Diagnosis of Sleep Disorder Using Fuzzy Rule-Based Classification Systems

Lala Septem Riza, Mila Pradini, Eka Fitrajaya Rahman and Rasim.....79

012012 OPEN ACCESS

Prediction of Disease Case Severity Level To Determine INA CBGs Rate

Sukma Puspitorini, Sri Kusumadewi and Linda Rosita....85

Software Engineering

012013 OPEN ACCESS

Software Size Estimation Using Activity Point

S Densumite and P Muenchaisri.....91

012014

OPEN ACCESS

Stakeholder Definition for Indonesian Integrated Agriculture Information System (IAIS)

Halim Budi Santoso and Rosa Delima.....99

012015 OPEN ACCESS

Analysis of usability factors affecting purchase intention in online e-commerce sites

R A Perdana and A Suzianti.....106

012016

OPEN ACCESS

Cluster Analysis of Indonesian Province Based on Household Primary Cooking Fuel Using K-Means

S N Huda.....112

012017

OPEN ACCESS

Hierarchical Clustering for Development Equality Analysis: Indonesian Data of Educational Support (2011 – 2014)

Feri Wijayanto.....119

Hard Science and Engineering

012018

OPEN ACCESS

Network gateway security method for enterprise Grid: a literature review

A Sujarwo and J Tan....125

012019

OPEN ACCESS

The Development of Smart Home System for Controlling and Monitoring Energy Consumption using WebSocket Protocol

Niti Witthayawiroj and Pongpon Nilaphruek.....131

012020

OPEN ACCESS

The Hardware-Watchdog for Restart the Data-Logging Module because of Power-Drop in Street Lamps and Public Lamps Energy Saving Project

Kraimon Maneesilp and Jaturapith Krohkaew.....137

012021 OPEN ACCESS

Development of a neuromorphic control system for a lightweight humanoid robot

Michele Folgheraiter, Amina Keldibek, Bauyrzhan Aubakir, Shyngys Salakchinov, Giuseppina Gini, Alessio Mauro Franchi and Matteo Bana.....143

012022

OPEN ACCESS

Bus Stops Location and Bus Route Planning Using Mean Shift Clustering and Ant Colony in West Jakarta

Kenny Supangat and Yustinus Eko Soelistio.....149

012023

OPEN ACCESS

Using multiple linear regression model to estimate thunderstorm activity

W Suparta and W S Putro.....155

012024

OPEN ACCESS

Sugarcane Land Classification with Satellite Imagery using Logistic Regression Model

F Henry, D E Herwindiati, S Mulyono and J Hendryli.....161

012025

OPEN ACCESS

Colour Based Image Processing Method for Recognizing Ribbed Smoked Sheet Grade

Ike Fibriani, Sumardi, Alfredo Bayu Satriya and Satryo Budi Utomo.....167

012026

OPEN ACCESS

Mt. Kelud haze removal using color attenuation prior

N Fresy, Eko M Yuniarno, M S N Supeno and M Hariadi.....172

012027 OPEN ACCESS

Ornament Problem Suppression in Indonesian License Plate Recognition Systems

Samuel Mahatmaputra Tedjojuwono....179

012028 OPEN ACCESS

Outer contour extraction of skull from CT scan images

M A Ulinuha, E M Yuniarno, S M S Nugroho and M Hariadi.....185

012029 OPEN ACCESS

<u>Color Swapping to Enhance Breast Cancer Digital Images Qualities Using Stain</u> Normalization

Izzati Muhimmah, Dhina Puspasari Wijaya and Indrayanti.....191