

International Conference on Information Technology and Engineering Management (ITEM 2019)

IOP Conference Series: Materials Science and Engineering
Volume 648

Belitung, Indonesia
27 - 29 June 2019

ISBN: 978-1-7138-0909-8
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.

This work is licensed under a Creative Commons Attribution 3.0 International Licence.
Licence details: <http://creativecommons.org/licenses/by/3.0/>.

No changes have been made to the content of these proceedings. There may be changes to pagination and minor adjustments for aesthetics.

Printed with permission by Curran Associates, Inc. (2020)

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

ANALYSIS OF CORPORATE GOVERNANCE EFFECT AND CHARACTERISTICS OF COMPANIES ON THE EXISTENCE OF RISK MANAGEMENT COMMITTEE.....	1
<i>Abdillah Arif Nasution</i>	
APPLICATION OF FUEL OIL DISTRIBUTION ROUTE USING FORD ALGORITHM.....	6
<i>I Siregar</i>	
EVALUATION OF THE LEADING WORK CULTURE 5S IN INDUSTRY	11
<i>I Rizkya, N Hidayati, R M Sari, U Tarigan</i>	
INVENTORY PLANNING AT PAINTING SECTION IN THE INDONESIAN AUTOMOTIVE INDUSTRY	17
<i>Muhammad Haikal Sitepu, Dian Pratama Situmorang, Meilita Tryana Sembiring</i>	
DELIVERY LOT SIZE OPTIMIZATION AND SCHEDULE OF SHIPMENT IN DISTRIBUTION CENTRE.....	24
<i>I Rizkya, J Hidayati, M M Tambunan, J Utaminingrum</i>	
IDENTIFICATION OF FERTILIZER QUALITY FACTORS FROM DISTRIBUTORS, RETAILERS AND FARMERS PERSPECTIVE.....	31
<i>Muhammad Haikal Sitepu, Natasya Agnes, Meilita Tryana Sembiring</i>	
DETERMINATION OF PRIORITY SUPPLY CHAIN DISTRIBUTION USING DEMATEL METHOD IN INSTANT NOODLE COMPANY.....	38
<i>I Siregar, J.B. Saedon, Adenan Mohd Shahrman</i>	
MINIMIZATION OF MAKESPAN USING FCFS AND GUPTA METHOD COMPARISON IN MACHINE SPARE PART INDUSTRY.....	43
<i>I Siregar</i>	
THE SUCCESS MODEL OF TQM ON MANAGERIAL PERFORMANCE	48
<i>Fadli</i>	
AUTOMATIC NUMBER PLATE RECOGNITION FOR INDONESIAN LICENSE PLATE BY USING K-NEAREST NEIGHBOR ALGORITHM	53
<i>D Gunawan, W Rohimah, R F Rahmat</i>	
AUTOMATIC REGULATOR DESIGN FOR LIQUIFIED PETROLEUM GAS	60
<i>T H Nasution, R Y Nasution, K A Putri, C F Nasution</i>	
FMEA APPROACH TO ANALYSIS CRUDE PALM OIL QUALITY PARAMETERS.....	65
<i>I Rizkya, K Syahputri, R M Sari, J M Haryono</i>	
DESIGN OF AUTOMATIZATION OF TROLLEY COVER BASED ON MICROCONTROLLER AT MEGA 8535 AS A LEARNING MEDIA AT ATKP MEDAN.....	71
<i>S D Novalina, A Panjaitan, R P Simanjuntak, B Y Tamba</i>	
DETERMINATION OF TOTAL LABOR PLANT 1 USING WORKLOAD ANALYSIS (WLA) METHOD IN COMPOUND FERTILIZER'S INDUSTRY.....	76
<i>Farida Ariani, Khawarita Siregar, Tugiman</i>	

REDUCING WASTE IN SPARE PART PRODUCTION PROCESS WITH LEAN MANUFACTURING APPROACH.....	86
<i>Khawarita Siregar, Farida Ariani, Mangara M Tambunan</i>	
OPTIMIZATION IN CRITICAL WORK CENTER USING THEORY OF CONSTRAINTS.....	94
<i>R M Sari, K Syahputri, I Rizkya, N Siboro</i>	
DESIGN OF A CONVOLUTIONAL NEURAL NETWORK SYSTEM TO INCREASE DIAGNOSTIC EFFICIENCY OF ALZHEIMER'S DISEASE	99
<i>Faransi Al-azdi, R Passarella, A Susanto, C Caroline, RA Dwi Puspa, T W Yudha</i>	
WORKLOAD OF WORKFORCE IN FERTILIZING INDUSTRY: AN ANALYSIS.....	105
<i>Rahmi M. Sari, Ukurta Tarigan, Indah Rizkya, Elvira</i>	
STUDY OF SMS GATEWAY SERVICE APPLICATION AT THE ONE STOP AGENCY OF MEDAN CITY INVESTMENT AND SERVICE FOR LICENSING CUSTOMER SATISFACTION.....	110
<i>M A Nasution, S Y Regif</i>	
ANALYSIS OF THE COMMUNITY SATISFACTION INDEX ON MEDAN RUMAH KITA PUBLIC SERVICE APPLICATION	117
<i>M A Nasution, S Y Regif</i>	
ANALYSIS OF POST-COMBUSTION CONCRETE STUDY WITH THE ADDITION OF SUPERPLASTICIZER.....	125
<i>Rahmi Karolina, Deni Malik</i>	
AUTONOMOUS SURFACE VEHICLE (ASV) OBSTACLE AVOIDANCE USING FUZZY KOHONEN NETWORK (FKN).....	135
<i>R Passarella, A Zarkasi, H Maghfur, Sutarno, K Exsaudi, APP Prasetyo, H Veny</i>	
SEPARATION OF BASIC WORDS IN ANGKOLA BATAK TEXT DOCUMENTS USING ENHANCED CONFIX STRIPPING STEMMER CASE: MANDAILING ETHNIC	143
<i>M A Muchtar, I Jaya, Manguji Nababan, U Andayani, Lisa Noprianti Siregar, Erna B Nababan, Opim S Sitompul</i>	
IMPLEMENTATION OF PORTER STEMMER ALGORITHM TO OBTAIN BASIC WORDS IN TOBA BATAK LANGUAGE DOCUMENTS WITH THE TWO-LEVEL MORPHOLOGICAL METHOD.....	150
<i>M A Muchtar, Erna B Nababan, Manguji Nababan, U Andayani, Tuti Simanjuntak, Opim S Sitompul</i>	
INTERACTIVE LEARNING MEDIA OF THE SOLAR SYSTEM FOR CHILDREN USING KINECT	157
<i>R F Rahmat, N Amalia, S Faza, M A Muchtar, R Budiarto</i>	
IDENTIFICATION OF MELANOMA THROUGH DERMOSCOPY IMAGE USING LEARNING VECTOR QUANTIZATION.....	169
<i>S Purnamawati, R F Rahmat, S Faza, A J Lumbantobing</i>	
CONTRIBUTION OF SOLAR PHOTOVOLTAIC ON THE REDUCTION OF GREENHOUSE GAS EMISSION IN THE INDONESIA POWER SECTOR.....	176
<i>Wilson Nababan, Hendrik V. Sihombing, Hideki Kawai, Himsar Ambarita</i>	
EFFECT OF INTERNAL HEAT EXCHANGER TO THE PERFORMANCE OF VAPOR COMPRESSION CYCLE USING REFRIGERANT R32	182
<i>H V Sihombing, A H Nasution, H Ambarita</i>	

EFFECT OF CHORD LENGTH ON THE PERFORMANCE OF H-DARRIEUS WIND TURBINE WITH NACA 4415 AIRFOIL	189
<i>Indro Pramono, Himsar Ambarita, Koki Kishinami</i>	
VERTICAL STERILIZER DESIGN OF BUILDING PALM OIL PROCESSING PLANT TO COST EFFICIENCY	195
<i>I Rizkya, K Syahputri, Erwin</i>	
DATA ENVELOPMENT ANALYSIS FOR PRODUCTIVITY ON SMALL AND MEDIUM ENTERPRISE: A MEASUREMENT	201
<i>Rahmi M. Sari, Erwin, Khalida Syahputri, Ghassan M. Fattah</i>	
RELATIONSHIP MANAGEMENT ACCOUNTING AND DEVELOPMENT OF INFORMATION TECHNOLOGY	206
<i>Keulana Erwin</i>	
INTERACTION 3D HUMAN ANATOMY OF EAR, NOSE, THROAT USING MIX REALITY	211
<i>M F Syahputra, R F Rahmat, Devira Zahara, M Arfiza Putra Saragih, M Anggia Lubis, M A Muchtar, U Andayani</i>	
3D MODELLING INTESTINE ANATOMY WITH AUGMENTED REALITY FOR INTERACTIVE MEDICAL LEARNING	220
<i>U Andayani, M F Syahputra, M A Muchtar, M Sattar, Santi Prayudani, F Fahmi</i>	
DESIGNING THE QUALITY OF COFFEE BEAN DETECTION APPLICATION USING HUE SATURATION INTENSITY	229
<i>T H Nasution, M Rumansa, Harahap Lukman Adlin</i>	
DESIGNING AN IOT-BASED AIR QUALITY MONITORING SYSTEM	236
<i>T H Nasution, M A Muchtar, A Simon</i>	
COMPARATIVE ANALYSIS OF TECHNICAL EFFICIENCY BETWEEN ORGANIC AND NON-ORGANIC RICE FARMING IN NORTH SUMATERA INDONESIA	241
<i>Rulianda P Wibowo, Ar Raihan, Sumono, Dani Gunawan</i>	
DESIGN OF HARDWARE MODULE FOR THE VEHICLE CONDITION MONITORING SYSTEM BASED ON THE INTERNET OF THINGS	248
<i>F Fahmi, F Nurmayadi, B Siregar, M Yazid, E Susanto</i>	
THE IMPACT OF RISK AND UNCERTAINTY ON IRRIGATION DECISION FOR PADDY PRODUCTION IN NORTH SUMATERA INDONESIA	253
<i>Rulianda P Wibowo, Taufik Rizaldi, Sumono, Ikhsan Siregar</i>	
SUSTAINABILITY ASSESSMENT OF NATURAL RUBBER PRIMARY PROCESSING: A REVIEW	259
<i>Muhammad Haikal Sitepu, Abdul Rahim Matondang, Meilita Tryana Sembiring</i>	
MODELING OF MULTILAYER MMIC COPLANAR WAVEGUIDE LOW PASS FILTER FOR CELLULAR APPLICATION	265
<i>Cakra D. Sedayu, Emerson P. Sinulingga, Syafruddin Hasan</i>	
SMART NATION INITIATIVE: STRATEGY AND IMPLEMENTATION	270
<i>F Fahmi, H Pranoto, MS Lubis</i>	

SIMULATION AND CONTROL OF CLEAN WATER SUPPLY ON CAMPUS TOILETS USING PASSIVE INFRARED RECEIVER SENSOR TECHNOLOGY AND FLOW LIQUID METER	276
<i>U Andayani, Erna B Nababan, Ilhamuddin Hasibuan, B Siregar, F Fahmi</i>	

THE EFFECT OF CLAMSHELL ASH SUBSTITUTION TO THE MECHANICAL PROPERTIES OF CONCRETE	283
<i>Rahmi Karolina, Ade Sri Rezeki, Syahrizal, M.AP. Handana</i>	

Author Index