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# TABLE OF CONTENTS

## **CIVIL & MECHANICAL ENGINEERING**

EXPLORING ARCHITECTURAL STYLE OF GIANYAR AND CREATING BUILDING MATERIAL INNOVATIONS .....	1
<i>Ida Bagus Gede Wirawibawa, I Dewa Gede Agung Diasana Putra</i>	
EVALUATION OF INTERNAL FORCES AND SUPPORT REACTION OF COLUMN AND SHEARWALL IN 15TH BUILDING DESIGN .....	7
<i>D R Wiyono, R Milyardi, Y A Pranata</i>	
APPLICATION OF ANTHROPOMETRY METHODS IN ERGONOMIC CHAIR REDESIGN TO PREVENT FATIGUE A CASE STUDY UKM LESTARI JAYA, TULUNGAGUNG .....	13
<i>Silviana, A Hardianto, D Hermawan, Abdurahman</i>	
A FUZZY BWM METHOD FOR EVALUATING SUPPLIER SELECTION FACTORS IN A SME PAPER MANUFACTURER .....	20
<i>V R B Kurniawan, F H Puspitasari</i>	
DESIGNING OPTIMAL DISTRIBUTION ROUTES USING A VEHICLE ROUTING PROBLEM (VRP) MODEL IN A LOGISTICS SERVICE PROVIDER .....	29
<i>F H Puspitasari, V R B Kurniawan</i>	
HEATING TREATMENT OF AIR IN COMBUSTION CHAMBER FOR THE USE OF MIXTURE ETHANOL AND GASOLINE FUEL.....	35
<i>A A Ikhsani, M N Kustanto, B A Fachri</i>	
THE SIDEWALK STRUCTURING STRATEGY AS ICONIC PEDESTRIAN CASE STUDY: PEDESTRIAN'S BUDI LUHUR UNIVERSITY - JAKARTA .....	41
<i>Dody Kurniawan, Alvin Yulianto</i>	
RISK ALLOCATION MODEL FOR CISUMDAWU TOLL ROAD PROJECTS .....	48
<i>D Setiawan, R Milyardi, T L Ing, C Rizkiana</i>	

## **MATERIAL SCIENCE & MECHANICAL ENGINEERING**

PHYSICAL PROPERTIES OF LIQUID SOAP USING KATUK LEAF EXTRACT (SAUROPUS ANDROGYNUS (L) MERR.) AS AN ALTERNATIVE TO NATURAL SURFACTANTS.....	54
<i>I L P Mursal, V A Hermana, Farhamzah</i>	
FORMULATION AND PHYSICAL EVALUATION OF BODY LOTION PREPARATION OF KACIP FATIMAH (LABISIA PUMILA) ETHANOLIC EXTRACTS AS ANTIOXIDANT .....	60
<i>A H Kusumawati, A Munawaroh, L Fikayuniar</i>	
PHYSICAL STABILITY TEST SUNSCREEN GEL EXTRACTS BLACKBERRY FRUIT (RUBUS FRUTICOSUS L.) .....	69
<i>N Gunarti, I Aisyah, F Lia</i>	
FORMULATION AND PHYSICAL STABILITY TEST OF FACIAL GEL WASH DRAGON FRUIT (HYLOCEREUS POLYRHIZUS) PEEL EXTRACT .....	76
<i>N Yuniarsih, I Lenterani, Farhamzah</i>	

FORMULATION AND ANTIBACTERIAL ACTIVITY TEST OF FOOT SPRAY WITH BELUNTAS LEAF ETHANOL EXTRACT (PLUCHEA INDICA L.) .....	82
<i>Farhamzah, A Herli, I L P Mursal</i>	
CHEMICAL CHARACTERISTICS OF MOTAF SWEET BREAD WITH ADDITION OF TEMULAWAK STARCH .....	88
<i>D Sandri, E Lestari</i>	
PROBIOTIC ACTIVITY AND ANTIBIOTIC SENSITIVITY OF LACTIC ACID BACTERIA ISOLATED FROM HEALTHY BREASTFED NEWBORN BABY FECES.....	94
<i>E Lase, A L Davidson, I N E Lister, E Fachrial</i>	
ELASTIC CROSS-SECTION MODULUS RATIO OF JABON (ANTHOCEPHALUS CADAMBA MIQ.) BOLT-LAMINATED TIMBER BEAMS.....	102
<i>Y A Pranata, A Kristianto, A Darmawan</i>	

## **INFORMATION ENGINEERING & TECHNOLOGY**

THE EFFECT OF E-WOM, BRAND TRUST, AND BRAND AMBASSADOR ON PURCHASE DECISIONS AT TOKOPEDIA ONLINE SHOPPING SITE.....	109
<i>Nurhasanah, Febrina Mahliza, Lucky Nugroho, Yananto Mihadi Putra</i>	
MAPPING THE SPREAD OF COVID-19 IN ASIA USING DATA MINING X-MEANS ALGORITHMS .....	116
<i>N Arminarahmah, A Daengs GS, G W Bhawika, M P Dewi, A Wanto</i>	
DEVELOPMENT OF VIRTUAL REALITY APPLICATION TO INCREASE STUDENT LEARNING MOTIVATION WITH INTERACTIVE LEARNING IN VOCATIONAL EDUCATION.....	123
<i>F I Maulana, A Purnomo</i>	
WEB-BASED DESIGN OF FINANCIAL APPS: CASE OF KOSAN 54 .....	129
<i>D Sari, M Pradana, D W Nugraha, F Oktafani</i>	
NEURAL COLLABORATIVE FOR MUSIC RECOMMENDATION SYSTEM .....	135
<i>Abba Suganda Girsang, Antoni Wibowo, Jason, Roslynlia</i>	
UTILIZATION OF THE BATCH TRAINING METHOD FOR PREDICTING NATURAL DISASTERS AND THEIR IMPACTS .....	140
<i>N L W S R Ginantra, M A Hanafiah, A Wanto, R Winanjaya, H Okprana</i>	
DECISION MAKING ANALYSIS FOR FREE INTERNET QUOTA ASSISTANCE ONLINE LEARNING DURING THE COVID-19 PANDEMIC .....	147
<i>E Budiman, U Hairah</i>	
ANALYSIS OF CUSTOM IOT BASED ELECTRICITY MONITORING SYSTEM .....	154
<i>D Eridani, E D Widiyanto, A R Yulianto</i>	
OPTIMISED GENETIC ALGORITHM CROSSOVER AND MUTATION STAGE FOR VEHICLE ROUTING PROBLEM PICK-UP AND DELIVERY WITH TIME WINDOWS.....	160
<i>M F Ibrahim, F R Nurhakiki, D M Utama, A A Rizaki</i>	
A SURVEY BLOCKCHAIN AND SMART CONTRACT TECHNOLOGY IN GOVERNMENT AGENCIES .....	167
<i>E S Negara, A N Hidyanto, R Andryani, D Erlansyah</i>	

MULTIPLE SMILE DETECTION USING HISTOGRAM OF ORIENTED GRADIENT AND SUPPORT VECTOR MACHINE METHODS .....	174
<i>R Syaputra, D Syamsuar, E S Negara</i>	
E-MONEY ACADEMIC: LESSON FROM LITERATURE VISUALIZING SCIENTOMETRIC POSITIONING (1968-2019).....	182
<i>A Purnomo, M Firdaus, U Hasanah, A V D Sano, M A Prasnowo</i>	
SYSTEMATICS REVIEW ON THE APPLICATION OF SOCIAL MEDIA ANALYTICS FOR DETECTING RADICAL AND EXTREMIST GROUP.....	192
<i>R T Adek, Bustami, M Ula</i>	
IOT-BASED REFRIGERATOR MONITORING SYSTEM.....	200
<i>Mirza Khamali, Wendi Usino</i>	
ELECTRONIC PARTICIPATION TECHNOLOGY ADOPTION MODEL IN INDONESIA: THE ROLE OF GAMIFICATION IMPACT .....	207
<i>D Napitupulu, K Adiyarta, W Windihastuty, T Fatimah</i>	
IDENTIFICATION OF FACTORS AFFECTING ELECTRONIC PARTICIPATION: A LITERATURE REVIEW .....	214
<i>Titin Fatimah, Krisna Adiyarta, Darmawan Napitupulu, Martini</i>	

#### **Author Index**

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# Analysis of Custom IoT Based Electricity Monitoring System

D Eridani<sup>1</sup>, E D Widiyanto<sup>1</sup> and A R Yulianto<sup>1</sup>

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## Abstract

Electricity is a resource that currently exists in various sectors of the community. Each person's electricity needs are different depending on the needs of the electronic equipment used. Excessive use of electronic equipment creates extreme electrical power. Electricity consumption is an issue that discussed since a long ago. This research aims to present a custom electronic sensor to monitor electricity consumption based on the Internet of Things. It also explained the correlation between input and output points from the custom electronic sensor. This research method consists of 4 steps: system requirement, system design, system implementation, and last, testing and analysis. The system developed is able to get the current, voltage, and power data. The data then processed by Arduino UNO and directly send by ESP8266 to Blynk Application on Android smartphones via Internet communication. The voltage testing is done in the voltage and current sensors to get the program's main loop's constant values. The system input value and the Blynk Application value are

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