

International Joint Conference on Science and Engineering (IJCSE 2022)

Advances in Engineering Research Volume 218

Surabaya, Indonesia
10 – 11 September 2022

Editors:

**Hapsari Peni Agustin
Alexandre Maniçoba De Oliveira
Yeni Anistyasari**

**Kiyoshi Ueda
Arie Wardhono
Imami A. T. Rahayu**

ISBN: 978-1-7138-6601-5

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.

Print copyright© (2023) by Atlantis Press (part of Springer Nature)
All rights reserved.
Copyright for individual electronic papers remains with the authors.

For permission requests, please contact the publisher:

Atlantis Press
Van Godewijkstraat 30
3311GX Dordrecht
The Netherlands

contact@atlantis-press.com

Printed with permission by Curran Associates, Inc. (2023)

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

IoT-Based Flow Control System Using Node MCU with PI Controller CHR Tuning Method.....	1
<i>Rifqi Firmansyah, Mustafa M. A. Seedahmed, Alharith Mahmoud, Yuli Sutoto Nugroho, Pressa Perdana Surya Saputra</i>	
Improving Self-Regulated Learning for Student’s Achievement During the COVID-19 Pandemic	11
<i>Tri Wrahatnolo, Bambang Suprianto, I. G. P. Asto Buditjahjanto, Yulia Fransisca</i>	
Performance Analysis of Reheating Furnace on Billet Heating Production of Reinforced Iron	23
<i>Adam Fajar Setiawan, I Made Arsana, Soeryanto Soeryanto</i>	
Factors Affecting Entrepreneurship Intention in Indonesia: Perception of Vocational High School Students	34
<i>Achmad Imam Agung, Rifqi Firmansyah</i>	
Peer-Review Statements	43
<i>Hapsari Peni Agustin, Alexandre Maniçoba De Oliveira, Kiyoshi Ueda, Arie Wardhono, Yeni Anistyasari, Imami A. T. Rahayu</i>	
Learning Outcomes Measurement on Image Processing Subject Using Self Organizing Map Based Fuzzy Logic	45
<i>Lilik Anifah, Unit Three Kartini, Edy Sulisty, Haryanto</i>	
Owner Estimate (OE) and Winning Bid Price of Transportation Infrastructure Tender in Mathematical and Statistical Perspectives.....	57
<i>Purwo Mahardi, Mochamad Firmansyah Sofianto, Mas Suryanto, Gde Agus Yudha Prawira Adistana, Meity Wulandari</i>	
The Implementation of Augmented Reality for WATER Introduction	68
<i>Septian Rahman Hakim, Dodik Arwin Darmawan, Hafizhuddin Zul Fahmi, I. Gde Agung Sri Sidhimantra</i>	
Performance Analysis of Automotive Brakin System in Various Road Conditions	77
<i>Puji Dwi Pangestu, I Made Arsana, Ika Nurjannah, Heru Arizal, Mochamad Arif Irfa I</i>	
Implementation of Agile Education for Study Program Operational Plan Development	87
<i>Dodik Arwin Dermawan, Salamun Rohman Nudin, Hafizhuddin Zul Fahmi, I. Gde Agung Sri Sidhimantra, Septian Rahman Hakim</i>	
Specimen Test Analysis of Different Forms in Process Blackening for Layer Thickness of Surface Coatings and Glossness Level	96
<i>Dyah Riandadari, Arya Sakti, Firman Utama, Ferly Abdi</i>	
Arduino Uno’s PIN Expansion with SPI Communication to Control 4 LCD Display	103
<i>Farid Baskoro, Bambang Suprianto, Lilik Anifah, Aristyawan Putra Nurdiansyah, Miftahur Rochman</i>	
Performance Analysis of Electric Coolers TEC1-12706 and TEC1-12715 with Heatsinks at Semi-Conductor Cooler Boxes	114
<i>Handini Novita Sari, I. Made Arsana, Kukuh Uzia Bramantyo, Mochamad Cholik, Wahyu Dwi Kurniawan, Diastian Vinaya Wijanarko</i>	
Development of Web-Based Personnel Information System on My-HK Unesa	126
<i>Mohamad Sulton Arifin, Muhammad Iqbal Firdaus Nuzula, Nilam Ade Pangestu</i>	

Software-Defined Networking (SDN) Traffic Analysis Using Big Data Analytic Approach.....	138
<i>I. Made Suartana, Ricky Eka Putra</i>	
Analysis of ECSF (E-Learning Critical Success Factor) at Universitas Negeri Surabaya	146
<i>Rindu Puspita Wibawa, Martini Dwi Endah Susanti</i>	
Tracer Study of Alumni Competencies in Civil Engineering Department Universitas Negeri Surabaya	157
<i>Meity Wulandari, Danayanti Azmi Dewi Nusantara, Erina Rahmadyanti, Wahyu Dwi Mulyono</i>	
Crossflow Hydro Turbine with the Interference Blade Improve Turbine Performance.....	170
<i>Priyo Heru Adiwibowo, Soeryanto Soeryanto, Wahyu Dwi Kurniawan, I. Made Arsana</i>	
The Influence of Continuous Professional Development on the Vocational Teachers' Competence to Support the Professional Development of Learner Teachers.....	177
<i>Ismet Basuki, Joko Joko</i>	
Performance Analysis of Electrical Submersible Pumps Type 95-4 Using Nodal Method	189
<i>Wiwit Yuli Saputra, I. Made Arsana, Yunus Yunus, Priyo Heru Adiwibowo, Bellina Yunitasari, Lilik Anifah</i>	
Application of the Civil Service Management Information System and Archives in Optimizing Sustainable Development Goals in Glonggong Village, Dolopo, Madiun	199
<i>Gading Gamaputra, Arzetya Fitri Karimah, Isnaini Fitria Effendi, Naufal Hanif Ramadhan, Laskar Intifada Syaifullah</i>	
Analysis of Chat Application Acceptance as a Means of Communication and Discussion of Schools and Parents on the Learning Process at School	211
<i>Ardhini Warih Utami, Dwi Fatrianto Suyatno</i>	
Analysis of the Tender Cost Budget for Transportation Infrastructure Construction Works in the City of Surabaya	229
<i>Mas Suryanto, Gde Agus Yudha Prawira Adistana, Mochamad Firmansyah Sofianto, Meity Wulandari, Purwo Mahardi</i>	
Development of Digital Literacy Performance Items to Improve Digital Electronics Competence of Vocational School Students	238
<i>Nur Kholis, Bambang Suprianto, Munoto Munoto</i>	
Experimental Investigation of Fuel Consumption in Four-Stroke Engines Using Nickel-Plated Copper Catalytic Converters	247
<i>Warju Warju, Andita Nataria Fitri Ganda, Suprayitno, Jyh-Cheng Yu, Sudirman Rizki Ariyanto, Muhammad Yandi Pratama</i>	
Student Satisfaction Level Analysis on Project-Based Learning Online	254
<i>Rina Harimurti, Ibrohim, Syariffudien Zuhrie</i>	
Preparation and Characterization of TiO ₂ Nanoparticles as Nanofluid in Double Pipe Heat Exchanger.....	262
<i>I Made Arsana, Theodorus Wiyanto, Muhaji Muhaji, Handini Novitasari, Lilik Anifah, Akhmad Saiffudin</i>	
Integrated Real Time Monitoring System as an Effort to Reduce Children's Eyestrain in the Online Learning Process	279
<i>Aye Aye Mon, Lilik Anifah</i>	

Distributed News Crawler Using Fog Cloud Approach	287
<i>I. Gusti Lanang Putra Eka Prisma</i>	
Efforts to Improve Programmable Logic Controller Programming Competence and Its Application on Vocational High School.....	297
<i>Tri Rijanto, Nurhayati Nurhayati, Puput Wanarti Rusimamto, Agus Budi Santoso, Agam Nizar Dwi Nur Fahmi</i>	
Website Development to Support the Implementation of Hangtuh 7 Elementary School Promotion	306
<i>Dodik Arwin Dermawan, Salamun Rohman Nudin, Ig De Agung Sri Sidhimantra, Hafizhuddin Zul Fahmi, Septian Rahman Hakim</i>	

Author Index