



Dr. Susanti, M. Si. <susanti@unesa.ac.id>

REGISTRATION FORM ICRACOS 2021

1 message

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To: susanti@unesa.ac.id

Thu, Oct 7, 2021 at 7:54 AM

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susanti@unesa.ac.id

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susanti@unesa.ac.id

1. ID number of ICRACOS article(ex: ID #....) *

709

2. Paper Title *

FINANCIAL LITERACY VERSUS DIGITAL LITERACY AS PREDICTOR OF STUDENT
ENTREPRENEURS BEHAVIOR IN THE ERA ON THE COVID 19 PANDEMIC

3. List of Authors (first author+co-author) *

SUSANTI, RENNY DWIJAYANTI, HAN TANTRI HARDINI, MOH. DANANG BAHTIAR

4. Whatsapp/Telegram/Line Phone Number/email. (for coordination the similarity
result and e-copyright(especially for IEEE)) *

08123088979


5. (Upload) Camera-Ready Paper in doc/word (The file name include your ID paper number) *

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9. Presenter's name *

SUSANTI, RENNY DWIJAYANTI, HAN TANTRI HARDINI, MOH. DANANG BAHTIAR

10. Presenter's email or phone number *

08123088979

Video guidance

Video requirements:

Video requirements:

1. The presentation delivers in English with a clear sound.
2. Duration: 8-10 minutes
3. The video must have sufficient quality (recommended 720p)
4. Video format is.mp4
5. The video file name should be your ID paper number
6. It is highly recommended to show the talking head (face) during the presentation and start with a short introduction of the presenter
7. Although the presentation of the paper is recorded before the conference day, the presenter must prepare to present at the designated time slot during the video playback as well as the Q&A session on the

day of the conference.
Reference recording video presentation:
Make videos using power point
<https://www.youtube.com/watch?v=D8JV3w4TOVw>
make videos using zoom
<https://www.youtube.com/watch?v=EJUXIL3rHzA> or
make videos using OBS
<https://www.youtube.com/watch?v=zTjVBInEiNI>
The presenter should be alive for Q&A session

11. Upload video presentation (max. 150 MB) .

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Dr. Susanti, M. Si. <susanti@unesa.ac.id>

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SUSANTI, RENNY DWIJAYANTI, HAN TANTRI HARDINI, MOH. DANANG BAHTIAR

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7. Although the presentation of the paper is recorded before the conference day, the presenter must prepare to present at the designated time slot during the video playback as well as the Q&A session on the

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<https://www.youtube.com/watch?v=D8JV3w4TOVw>
make videos using zoom
<https://www.youtube.com/watch?v=EJUXIL3rHzA> or
make videos using OBS
<https://www.youtube.com/watch?v=zTjVBInEiNI>
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11. Upload video presentation (max. 150 MB) .

Submitted files



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12. Upload the youTube link: if the presenter has uploaded the video presentation to the YouTube

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Dr. Susanti, M. Si. <susanti@unesa.ac.id>

Virtual background and time table of ICRCACOS

1 message

ICRCACOS CONFERENCE <icracos@unesa.ac.id>
Bcc: susanti@unesa.ac.id

Thu, Oct 7, 2021 at 12:52 PM

Dear Author

We would like to inform you that the 2021 3rd International Conference on Research and Academic Community Services(ICRCACOS) will be held on October 9, 2021

Here in the attachment file is the timetable and virtual background.

You should complete your registration form.

Thank you for your support and participation

2 attachments



Virtual Background ICRCACOS.jpeg
155K

TIMETABLE ICRCACOS_IEEE_AP 071021_final_bismillah.docx
148K



Dr. Susanti, M. Si. <susanti@unesa.ac.id>

ICRCOS schedule and link

1 message

ICRCOS CONFERENCE <icracos@unesa.ac.id>
Bcc: susanti@unesa.ac.id

Sat, Oct 9, 2021 at 10:34 AM

Universitas Negeri Surabaya proudly present

2021 the 3rd International Conference On Research and Academic Community Services (ICRCOS)

Theme:

“Sustainable Innovation in Research and Community Services for Better Quality of Life towards Society 5”

Saturday, October 9th, 2021

07.15-17.00 WIB

[Keynote Speakers]

- Prof. Auzuir R. De Alexandria, Ph.D, Instituto Federal de Educação, Ciência e Tecnologia do Ceará, Brasil
- Prof. Koh Koon Teck, Ph. D, PESS-NIE Nanyang Technological University Singapore
- Prof. Takeshi Fukusako, Ph. D, Kumamoto University, Japan
- Prof. Subir Kumar Sarkar, Jadavpur University, Kolkata, India

Join us tomorrow morning

Link youtube: <https://youtu.be/MzjnPIXw5cE>

Link zoom:

<https://zoom.us/j/98409224024?pwd=SWRSbW5IMUZKRjlWRDdSYXFFyBIB6dz09>

Meeting ID: 984 0922 4024

Passcode: icracos

<https://icracos.lppm.unesa.ac.id>

email: icracos@unesa.ac.id

2 attachments



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IC **2021** **RACOS**

INTERNATIONAL CONFERENCE ON RESEARCH AND
ACADEMIC COMMUNITY SERVICES

2021 3rd International Conference on Research and Academic Community Services (ICRACOS)

**Sustainable Innovation in Research
and Community Services for
Better Quality of Life towards Society 5**

9th - 10th October 2021
UNIVERSITAS NEGERI SURABAYA

VIRTUAL EVENT
Surabaya-Indonesia

**Welcome Speech of Vice Rector of Universitas Negeri Surabaya
2021 3rd International Conference On Research and Academic Community Services
(ICRACOS)**



Assalamualaikum wr. wb.
Salam Sejahtera
Om Swasti Astu
Namo Budaya
Salam Kebajikan
Good morning from Indonesia

The honorable keynote speakers,
The honorable Vice-Rector I. Universitas Negeri Surabaya,
The honorable IEEE Indonesia Section chair,
The honorable head of research and community services Board Universitas Negeri Surabaya,
The honorable the head of AIPI Center, Universitas Negeri Surabaya,
The honorable organizing committee of ICRACOS 2021,
And distinguished guests, ladies, and gentlemen,

First of all, I would like to welcome you all to the 2021 3rd **International Conference on Research and community services**. I would also like to express my gratitude to all the keynote speakers who have come from such long distances to share their knowledge and experience in a variety of expertise. I believe that your keynote speech will give a significant contribution to all the audience of the conference.

In this special occasion, I would like to welcome the distinguished speakers,

Prof. Auzuir R. De Alexandria, Ph.D

Instituto Federal de Educação, Ciência e Tecnologia do Ceará, Brasil

Prof. Koh Koon Teck, Ph. D

PESS-NIE Nanyang Technological University Singapore

Prof. Takeshi Fukusako, Ph. D.

Kumamoto University, Japan

Prof. Dr. Subir Kumar Sarkar.

adavpur University, Kolkata, India

Dr.-Ing. Wahyudi Hasbi, S.Si, M.Kom

IEEE Indonesia Section chair

Ladies and gentlemen,

As the ministry of research, technology, and higher education of the Republic of Indonesia encourages all universities to increase publication and internationally reputable publishers, our university, under the coordination of the vice-rector of the academic affair has

made plenty of efforts. This conference is clear evidence that UNESA has a strong commitment to contribute positively to the development of human resources and education in Indonesia with its jargon “Satu Langkah di Depan” or “One Step Ahead.

We invite academics, researchers, and practitioners to submit case studies of practice, theoretical papers, empirical studies, and other papers within broad areas that support research and community service program. On this occasion, our conference’s theme is “**Sustainable Innovation in Research and Community Services for Better Quality of Life towards Society 5**”. It is a part of our concern on the contribution of education and science for enhancing nation research and innovation in Indonesia.

The 2021 3rd International Conference on Research and Academic Community Services (ICRACOS 2021) aims to bring academic scientists, research scholars, and practitioners to exchange and share their experiences and research results on all aspects. It also provides a premier interdisciplinary platform for researchers, educators, students, and practitioners to present and discuss the most recent innovations, trends, and concerns, as well as practical challenges, encountered and solutions adopted in Research and Academic Community Services in the field of engineering, science, STEM education, and Social and Humanitarian research.

Hopefully, we all can significantly give more contributions to the nation's advancement in the not-too-distance future. To all of our distinguished guests and participants, AIPI Center, Advisory Board, Organizing Committee, International Scientific Committee, institutions, thank you for being here, welcome, and enjoy the conference.

Wassalamualaikum wr. wb.

Prof Dr. Bambang Yulianto., M.Pd

Vice Rector Academic affairs

Welcome speech from the General Chair 2021 3rd International Conference On Research and Academic Community Services (ICRACOS)



Assalamualaikum wr wb.

The honourable Vice Rectors of Universitas Negeri Surabaya

The honourable Chair of IEEE Indonesian Section

The honourable Keynote speakers

The distinguished guests and participants

It gives me great pleasure to all of the ICRACOS participants, welcome to you to the 2021 3rd International Conference On Research and Academic Community Services (ICRACOS). Due to the COVID-19 ICRACOS conference which is organized by the Institution of Research and Community Services, Universitas Negeri Surabaya, Indonesia hold the conference in the virtual event.. This conference is sponsorship by IEEE MTT/AP chapter Indonesia section and Universitas Negeri Surabaya. The theme of our conference is “ **Sustainable Innovation in Research and Community Services for Better Quality of Life towards Society 5**”.

The ICRACOS article comes from some university domestics and international such as Brazil, Philippines, Japan, Iraq, Srilanka, India, Taiwan, and Australia. We would like to appreciate all of the keynote speakers, reviewers, committees, and participants for support and participation. We would like to give gratitude to the Universitas Negeri Surabaya as the organizer and IEEE MTT/AP chapter Indonesian Section as a sponsorship.

Finally, I wish all participants a successful and enjoyable conference. I hope you will find this program interesting, useful, and stimulating.

Dr. Nurhayati.,ST.,MT

General Chair

KEYNOTE SPEAKERS 1



Prof. Auzuir Ripardo de Alexandria

Address

Federal Institute of Ceará – Rectory, Campus Fortaleza. , Av. Treze de Maio, 2081, Benfica, 60040-531 – Fortaleza, CE – Brazil, Telephone: (85) 33073684, Fax: (85) 8533073711

Academic Background

1993 B. Electrical Engineering Federal University of Campina Grande

1994 B. Computer Science Federal University of Campina Grande

2005 Master's degree Federal University of Ceará

2011 Doctorate Federal University of Ceará

Affiliation

Instituto Federal de Educação Ciência e Tecnologia do Ceará: Fortaleza, CE, Brazil

Biography

Auzuir R. Alexandria has a degree in Electrical Engineering (1993) and a Bachelor's Degree in Computer Science (1994) from the Federal University of Campina Grande, a master's degree (2005), and a doctorate (2011) in Teleinformatics Engineering from the Federal University of Ceará. He is a professor at the Federal Institute of Education, Science, and Technology of Ceará – IFCE, Fortaleza campus, Industry department, since 2003. As a researcher, he works in the fields of Computer Vision, Mobile Robotics, Biomedical Engineering, Artificial Neural Networks, and Industrial Automation, coordinating and guiding several projects. He is the leader of the Computer Simulation research group at IFCE.

Areas of Expertise

Major Area: Engineering / Area: Electrical Engineering.
Major Area: Engineering / Area: Electrical Engineering / Subarea: Industrial Electronics, Electronic Systems and Controls / Specialty: Electronic Automation of Electrical and Industrial Processes.

Major Area: Engineering / Area: Electrical Engineering / Subarea: Computer Vision.

Major Area: Engineering / Area: Electrical Engineering / Subarea: Industrial Electronics, Electronic Systems and Controls / Specialty: Electronic Process Control, Feedback.

Major Area: Engineering / Area: Electrical Engineering / Subarea: Embedded Automation Systems.

Professional Carrier

2016 – Current federal University of Ceara

2005 – Present Federal Institute of Ceará – Rectory

2005 – 2005 Greater Fortaleza Integrated Faculty

2003 – 2005 Federal Institute of Ceará – Rectory

KEYNOTE SPEAKERS 2



Prof. KOH Koon Teck

Address

Physical Education & Sports Science (PESS), NIE5-03-12, 67903690 Email
[:koonteck.koh@nie.edu.sg](mailto:koonteck.koh@nie.edu.sg)

Academic Background

PhD (University of Queensland, Australia)
MEd (Nanyang Technological University, Singapore)
PGDE in Physical Education (Nanyang Technological University, Singapore)
BA (National University of Singapore, Singapore)
DDM (National Institute of Education, Singapore)

Affiliation

Nanyang Technological University, Singapore

Biography

Koon Teck has been a Physical Education (PE) teacher since 1993. He had taught PE at Pre-University and Secondary School levels for 10 years. He was Head of Department (PE/CCA) for 6 years before he joined Co-Curricular Activities Branch, Education Programmes Division as advisor and consultant for sports in 2004. He was the advisor for the North Zone Primary Schools Sports Council and South Zone Schools Sports Council. Also, he was the games advisor for basketball, table tennis, and softball, overseeing the management and organization of the games at all levels for different age groups of students.

Koon Teck is actively involved in Basketball as both a competitive athlete and coach at various levels. His keen research areas are in coaching and teaching in PE and Sport, in particular,

understanding and developing coaches and PE teachers to promote good practices. He has worked with the Singapore senior basketball team as a team manager and sport scientist to achieve a historical medal at the South East Asia Games in 2013 after 34 years where the last medal was won and maintained the same result at the same competition in 2015.

Koon Teck has also developed a keen interest in using sport and PE as a platform to teach values and character explicitly to athletes and students, guided by experiential learning theory. To this end, a structured instructional programme has been developed to assist coaches and PE teachers to achieve this goal. The programme has influenced many coaches/educators and students/athletes beyond Singapore.

Recently, his research interest has extended to the use of Information Communication and Technologies (ICT) to enhance the teaching and learning in PE. To address the lack of specific resources in the teaching and learning of basketball for differentiated learners in the context of pre-service student teachers, he has created image-rich, easy to understand instructional videos with student teachers to promote inquiry learning and post questions during and after lessons.

Since 2002, Koon Teck has involved in Coach Education Programmes. He lectures the theory and technical courses in the National Coaching Accreditation Programme (NCAP) managed by SSC and BAS. Notably, he initiated an integrated NCAP Level 1 Coaching Course for BAS in 2007. It was the first among the NSAs in Singapore, which combined Theory and Technical courses to promote context-specific learning experience for basketball coaches. He has shared the model with local and international practitioners and researchers.

Koon Teck is currently holding a few key appointments at the international and local levels, namely: Executive Board Member, World Association of Basketball Coaches; Chair, FIBA Asia Coaches Committee; FIBA Instructor; Vice President, ASEAN Council of PE and Sport; Executive Board Member, Asia Association of Coaching Science; President, Singapore Physical Education Association; Steering Committee Member, East Zone Centre of Excellence (Sports). He is also the editorial board member for the International Sport Coaching Journal.

Research Interests

Basketball, Coach Education & Development, Coaching, Evaluation of Coaches' Work, Information Communication & Technologies, Pedagogy, Values and Character Development

KEYNOTE SPEAKERS 3



Prof. Takeshi Fukusako

Address

Department of Computer Science & Electrical Engineering , Graduate School of Science & Technology, Kumamoto University
E-mail : fukasako_At_cs.kumamoto-u.ac.jp

Academic Background

1992 B. Eng. Kyoto Inst. of Tech.
1994 M. Eng. Kyoto Inst. of Tech.
1997 Ph.D in Eng. Kyoto Inst of Tech.

Professional Carrier

1994 – 1997 Part-time Lecturer, Osaka Inst. of Tech.
1997 – 2003 Research Associate, Kumamoto University
2003 – 2015 Associate Professor, Kumamoto University
2016 – Present Professor, Kumamoto University

Affiliation

Kumamoto University, Dept. of Computer Science and Electrical Engineering

Biography

Takeshi Fukusako (Senior Member, IEEE) received the B.E., M.E., and Ph.D. degrees in Engineering from Kyoto Institute of Technology, Kyoto, Japan, in 1992, 1994, and 1997, respectively. In 1997, he joined the Kumamoto University, Kumamoto, Japan, as a Research Associate. He is currently working with the Department of Computer Science and Electrical Engineering, Kumamoto University, as a Professor since 2016. From 2005 to 2006, he was a Visiting Researcher at the University of Manitoba, MN, Canada. Furthermore, he was a

Visiting Associate Professor of the City University of Hong Kong, Hong Kong SAR, China, in 2015. His current research interests are mainly design techniques of broadband antennas, circularly polarized antennas, and electrically small antennas and their applications. For the studies, he has accepted many international students and researchers from various countries from such as Indonesia, Thailand, Malaysia, China, Mongolia, and so on. In academic services, he served IEICE Transactions on Communications as an Associate Editor from 2012 to 2016. He is currently an Associate Editor of IEEE Transactions on Antennas Propagation since 2015. In 2014, he served as one of the TPC co-chairs at the 2014 IEEE International Workshop on Electromagnetics: Applications and Student Innovation Competition (iWEM2014). In 2017, he served as one of the general chairs of the IEEE International Conference on Computational Electromagnetics (ICCEM2017). In addition to these conferences, he worked as TPC members in many international conferences. He is also an Administrative Committee (AdCom) Member of IEEE Antennas and Propagation Society (AP-S) from 2019 to 2021. Related to his activities, he received the Distinguished Service Award from IEICE Communications Society in 2016, Outstanding Associate Editor from IEEE AP-S in 2017, and the Director-General Award of Kyushu Telecommunication Bureau, Ministry of Internal Affairs and Communications (MIC) of Japan in 2016, etc. He is a Senior Member of IEEE and also a Senior Member of IEIC

Publication Topics

antenna radiation patterns,electromagnetic wave polarisation,microstrip antennas,broadband antennas,UHF antennas,channel capacity,5G mobile communication,HF antennas,HF radio propagation,MIMO communication,SISO communication,angular momentum,antenna feeds,antennas,coaxial cables,diversity reception,light polarisation,linear antenna arrays,matrix algebra,metamaterial antennas,microstrip couplers,microwave antennas,negative impedance convertors,nondestructive testing,operational amplifiers

KEYNOTE SPEAKERS 4



Prof. Subir Kumar Sarkar

Address

Department of Electronics and Telecommunication Engineering, Jadavpur University, Kolkata, India

E-mail: su_sircir@yahoo.co.in , su_sarkar@hotmail.com , sksarkar@etce.jdvu.ac.in

Academic Background

Post Doctoral Work (devices) : Virginia Commonwealth University (VCU), USA.

Doctor of Philosophy (Ph.D. (Tech)) : Institute of Radio Physics and Electronics, University of Calcutta., 1999.

Master of Technology (M. Tech.) : University of Calcutta

Bachelor of Technology (B. Tech.) : University of Calcutta

Affiliation

Department of Electronics and Telecommunication Engineering, Jadavpur University

Biography

Prof. Subir Kumar Sarkar has completed his B. Tech, M. Tech and PhD (Tech) from Institute of Radiophysics and Electronics, University of Calcutta and Post Doctoral from Virginia Commonwealth University (VCU), USA. He is an eminent Professor, a meticulous guide and an influential researcher with equally balanced administrative responsibilities and associated with academic bodies of thirteen institutes. He was a student of Ramkrishna Mission, Narendrapur, West Bengal.

He has worked around 10 years in industry like Oil and Natural Gas Corporation (ONGC) as Executive Engineer, 29 years in Universities (8 Years in IEST and 21 Years in Jadavpur University) in different capacities. He was the Head of the Department of Electronics and Telecommunication Engineering, Jadavpur University during 2011-2013, coordinator of the Evening course of M. Tech in “VLSI Design and Microelectronics Technology” 2009 – 2013 & 2016- till date and Co-ordinator of IC Design & Fabrication Centre , Jadavpur University from 2016 to till date.

He has authored 6 Engineering text books published by CRC Press USA, Artech House USA, PAN STANFOPRD USA, S.Chand& Company Pvt. Ltd., India. He has already guided 56 PhD scholars (6 more registered and currently working), 21 R&D projects sponsored by different Govt. of India funding agencies have been completed/ongoing, published 711 technical research papers (Journals: 266, Conferences: 445) in archived International/ National journals and peer reviewed conferences. His research Areas include Nanodevices and Low power VLSI circuits, Mobile Ad-hoc Networks (MANET), Wireless Sensor Networks (WSN), RFID and its Applications, Digital Watermarking and Data security, MEMs, NEMs and Gas sensors.

He has 14 foreign trips in several countries like Australia, USA, France, the United Kingdom, Switzerland, Japan, Thailand and Bangladesh as Keynote speaker, Special Guest of Honour and Invited speaker for training, presenting papers and visiting sophisticated laboratories as a part of his collaborative research activities. He has delivered around 118 Plenary/Keynote/ Invited talks, 19 IEEE Distinguished Lectures, and chaired 45 technical sessions in various academic programs in India and Abroad.

He is a Senior Member of IEEE, IEEE Electron Device Society Distinguished Lecturer, Life fellow of The Institution of Engineers(India) and Life fellow of Institution of Electronics and Telecommunication Engineers, Life member of ISTE and Life member of Indian Association for the Cultivation of Science (IACS).

He has received honours and awards: The IEEE Distinguished Lecturer certificate has been awarded to him in recognition to his services & contribution as IEEE EDS Distinguished Lecturer in 2019. He is honoured with Distinguished Scientist Award in 11th International Scientist Awards on Engineering, Science and Medicine from VDGOD Professional Association. He is also honoured with the prestigious IETE – Brig M L Anand Award-2019 for notable expertise in Network domain as evident from his 183 research papers, 20 PG and 18 PhD thesis guidance and publication of two books (CRC Press and Artech House) whose review came in IEEE communication magazine and has been cited 642 times. He is also recipient of Prof. S K Mitra Memorial Award-2019 for one of his research work as the best research oriented paper among all the papers published in IETE Technical Review Journal in the year 2018-2019. He won several School Day prizes for standing amongst the top three ranks of the class, Awarded National Scholarship, Recipient of Deboprasad Ghosal Silver medal, Certificate of Merit at Institution of Engineers, 2005 and 5 best research paper awards.

He has successfully organized two IEEE sponsored International Conferences as Convener (2004) and as General Chair (2012). He also organized another IEEE sponsored International seminar cum Research Colloquium on “MEMS based Sensors and Smart Nanostructured Devices (MSSND-2019)”on 27th &28th December 2019 as General Chair.

Publication Topics

- Nanodevices and Low power VLSI circuits
- Mobile Ad-hoc Networks (MANET)
- Wireless Sensor Networks (WSN)
- RFID and its Applications
- Digital Watermarking and Data security
- MEMs, NEMs and Gas sensors

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TIMETABLE
**2021 3rd International Conference On Research and Academic
Community Services (ICRACOS)**
9th – 10th October 2021

Time (GMT+7)	Activity
07.15 - 08.00	Online Registration
08.00 - 08.05	Opening and Rule Guidance
08.05- 08.10	Listening Indonesia National Anthem
	Listening Mars of Universitas Negeri Surabaya
08.10-08.20	Welcoming session from ICRACOS chair Dr. Nurhayati.,ST.,MT
08.20-08.30	Welcoming session from IEEE IS chair Dr.-Ing. Wahyudi Hasbi, S.Si, M.Kom
08.30- 08.35	Welcome Speech from Rector of UniversitasNegeri Surabaya
08.35- 08.40	Photo session
	PLENARY SESSION I
08.45 - 09.30	Keynote speaker 1 Prof. Auzuir R. De Alexandria, Ph.D Instituto Federal de Educação, Ciência e Tecnologia do Ceará, Brasil
09.30 -10.15	Keynote speaker 2 Prof. Koh Koon Teck, Ph. D PESS-NIE Nanyang Technological University Singapore
10.15 - 11.00	Keynote speaker 3 Prof. Takeshi Fukusako, Ph. D. Kumamoto University,Japan
11.00 - 11.30	Keynote speaker 4 Prof. Dr. Subir Kumar Sarkar Jadavpur University, Kolkata-700 032, India.
11.30 - 12.15	Live Question and Answer for keynote speakers
12.15 - 12.45	Break
12.45 - 13.00	Breakout room
13.00 - 16.30	PARALLEL SESSION (12 breakout room) Room 1-12

PARALLEL SESSION TIMETABLE ICRCOS
Saturday, October 9, 2021

Room 1 (IEEE)
 Moderator : Dr. Hapsari Peni Tjahjaningtyas., M.Si
 Assistant Moderator : Supri

No	Paper ID	Paper Title	Time (GMT +7)
1	696	<i>(Lukman Medriavin Silalahi ,Setiyo Budiyanto)</i> Integration Of Lifting Pump Monitoring System Using ESP32 And Hostinger With Internet Of Things Based	13.15-13.30
2	634	<i>(Mesita Evi Ramadani, Brian Raafi'u Mahirul Mursid, Rizaldy Hakim Ash-Shiddieqy, Alex Taufiqurrohman Zain Ahmad Fauzan 'Adziimaa)</i> Design and Development Of Monitoring System On Carp Farming Ponds As IoT- Based Water Quality Control	13.30-13.45
3	697	<i>(Setiyo Budiyanto ,Lukman Medriavin Silalahi)</i> Development Of Internet Of Things Based Fertigation System For Improving Productivity Of Patchouli Plantation	13.45- 14.00
4	584	<i>(Rini Puji Astutik,Hendra Ari,Winarno, Eliyani,Risma Wahyuni)</i> Wireless Nurse Call System Using IoT Implementation	14.00-14.15
5	694	<i>(Lukman Medriavin Silalahi ,Setiyo Budiyanto)</i> Design a Temporary Package Storage System Using Arduino Mega 2560-Based Password	14.15-14.30
6	677	<i>(Erick O. Juan, Leo D. Bentoso, Deborah G. Brosas, Jessie R. Paragas, Lyra K. Nuevas, Ma. Windie C. Velarde)</i> Web-Based Solution for Flood Warning Decision Support in the Province of Leyte, Philippines	14.30-14.45
BREAK			14.45-15.15
7	592	<i>{Agung Prijo Budijono, Djoko Suwito, Muh.Syariffuddien Zuhrie, Wahyu Dwi Kurniawan, Rachmad Syarifudin .H, Bidya Nur Habib)</i> Paramedic Assistant Robot :	15.15-15.30

		Feature Review from Generation 1.0 to 3.0	
8	581	<i>(Wahyu Dwi Kurniawan, Agung Prijo Budijono, Rachmad Syarifudin Hidayatullahc, Purbodjati)</i> Design And Build of Energy Proportional Electric Folding Bike According to Rider Needs	15.30-15.45
9	572	<i>(Murry Raditya, Purwardi Agus Darwito, Anton S.R Ansori, Bintang Kalahari, Pandu Galih Saputro, Hasna Mufidah)</i> Design of Monitoring System for Temperature, PH, and Turbidity Based on LoRa to Improve The Quality of Milkfish Harvest	15.45-16.00
10	700	<i>Sulis tiyadi</i> Analysis of Communication Network Reliability Improvement SCADA Based for Pumping Wells Offshore	16.00-16.15

Room 2 IEEE
 Moderator Dr. Lilik Anifah, ST.,MT
 Assistant Dodik
 Moderator

No	Paper ID	Paper Title	Time (GMT +7)
1	753	<i>(Auzuir Ripardo de Alexandria, Matheus Cruz Ferreira, Elene Firmeza Ohata, Tarique da Silveira Cavalcante, Francisco Alan Xavier da Mota, Ingrid Correia Nogueira, Victor Hugo Costa Albuquerque, Victor José Timbó Gondim, Edson Cavalcanti Neto)</i> Automated clasification of dynamic renal scintigraphy exams to determine the stage of chronic kidney disease, an investigation.	13.15-13.30
2	593	<i>(Ilham A.E. Zaeni, Ahsan Walad, Arizal Ismoyo Wijanarko, Dessy Rif'a Anzani, Anik N. Handayani)</i> Applying Decision Tree for Utility Control System on Patient Room using Eye Activity Command	13.30-13.45
3	669	<i>(Mark Julius P. Tiozon + Jessie R. Paragas + Neil M. Pascual)</i> Implementation of Traditional Transposition Cipher with Salting Principle	13.45- 14.00
4	666	<i>(Jonabell Y. Bacaoco, Jay Gabriel E. Mencias, Ritchell S. Villafuerte, Jessie R. Paragas, Deborah G. Brosas, Diane B. Remot)</i> SARS-COV-2: Symptoms Severity Assessment using Data Mining	14.00-14.15
5	708	<i>(Lilik Anifah, Haryanto)</i> Decision Support System Erythemato-Squamous Diseases Classification Diagnosis using Linear Vector Quantization Based Clinical Atributes	14.15-14.30
6	733	<i>(Lilik Anifah, Muhamad Syariffuddien Zuhrie, Muhammad)</i> Sensor Positioning Effectiveness Analysis of Smart Pirates on Pencak Silat Sport	14.30-14.45
BREAK			14.45-15.15
7	667	<i>(Setya Chendra Wibawa, Mashudi, Subuh Isnur Haryudo, Fendi Achmad, Dewa Gede Hendra Divayana, Ramadhani Rani Relifian, Edy Sulistiyo, Anderson Ngelambong)</i>	15.15-15.30

		The Media Application using Markerless Augmented Reality to Learn The Technique of Angle of Photography	
8	622	<i>(Noveri Lysbetti Marpaung, Rahyul Amri, Syafitri, Edy Ervianto, Nurhalim)</i> Application of Single Moving Average Method for Population Growth Forecasting	15.30-15.45
9	574	<i>(Erlangga, Yaya Wihardi, Eki Nugraha)</i> User Experience Evaluation by Using a User Experience Questionnaire (UEQ) Based on an Artificial Neural Network Approach	15.45-16.00
10	698	<i>(Sugianto Eko Cahyono, Nabila Zoraidha Damayanti, Aldino Syaman, Dina Fitria Murad, Nora Fitriawati)</i> The Smart Application Approval Feasibility Of Potential Customers Based On Decision Support System	16.00-16.15
11	644	<i>(Jessie Retorca Paragas, Ellen Joyce B. Nartia, Neil M. Pascual)</i> Detection of Students' Mental Health Status: A Decision Support System	16.15-16.30

Room 3 (IEEE)
 Moderator Dr. Nurhayati., ST.,MT
 Assistant Endah
 Moderator

No	Paper ID	Paper Title	Time (GMT +7)
1	628	<i>(Haruki Ohira, Takeshi Fukusako, Ryuji Kuse)</i> Single Feed Waveguide Antenna with Orbital Angular Momentum Mode.	13.15-13.30
2	611	<i>(Russul Khalid Abdulsattar, Taha A. Elwi, Zaid A. Abdul Hassain)</i> Microwave Resonator based a Fractal Moore Structure for Modern Wireless Reconfigurable Systems	13.30-13.45
3	613	<i>(Zainab Salam Muqdad , Taha Ahmed Elwi , Zaid Asaad Abdul hassain)</i> Novel Reconfigurable Fractal Antenna Design based Metasurface Layer for Modern Wireless Systems	13.45- 14.00
4	699	<i>(Annisa Ayu Avrillia,Riri R. Siregar,Shalahuddin M. Nur,Dina Fitria Murad,Lena)</i> The Use of Satellites for Analysis of Plantation Locations, Minimize Land Fires, and Improve Fertilization	14.00-14.15
5	636	<i>(Yusnita Rahayu and J.R.M Simanihuruk)</i> Design of 4x4 Butler Matrix for Beamforming 5G Antenna	14.15-14.30
6	711	<i>(Nurhayati Nurhayati, Eko Setijadi, Alexandre M. De Oliveira , Takeshi Fukusako, Bagus E. Sukoco, Fitri Adi Iskandarianto)</i> Coplanar Vivaldi Antenna with Koch Fractal Lens for L and S-band application	14.30-14.45
BREAK			14.45-15.15
7	725	<i>(Raimundo Eider Figueredo; Alexandre Maniçoba de Oliveira; Nurhayati; Alexandre Jean Rene Serres; Antonio Rebouças de França Filho; João F. Justos; Marcelo B. Perotoni; Arnaldo de Carvalho Jr.)</i> An Antipodal Vivaldi Antenna Using Radiant Side Slot Edge Based on the Star Trek Dominion Insignia	15.15-15.30
8	734	<i>(Nurhayati Nurhayati, Tri Rijanto, Puput R Wanarti, Ahmad Abimanyu, S. Prasad Jones Christydass)</i> UWB Antenna with Bandwidth Enhancement for Wireless Applications	15.30-15.45
9	692	<i>(S.Prasad Jones Christydass, Nurhayati Nurhayati)</i> Multiband THz Rectangular Microstrip Patch antenna with Hexagonal Complementry Split Ring Resonator	15.45-16.00

10	620	(Noveri Lysbetti Marpaung , Ficky Galang Prasetya) The Making of PWPCS Building Video of Riau Province Based on Three Dimensional Animation	16.00-16.15
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Room 4 IEEE

Moderator Ayusta Lukita Wardani S.ST.,MT

Assistant Moderator Tri W

No	Paper ID	Paper Title	Time (GMT +7)
1	569	<i>(Dany Iman Santoso, I Wayan Susila, Dewanto, Yunus, Akhmad Hafizh Ainur Rasyid, Rachmad Syarifudin Hidayatullah)</i> Investigation of the droplet properties along their trajectory in the cooling tower	13.15-13.30
2	695	<i>(Lukman Medriavin Silalahi ,Setiyo Budiyanto)</i> Optimizing The Performance Of The Power Station Generator Space Lighting System Performance Based On Internet Of Things Using ESP32	13.30-13.45
3	705	<i>(Aris Ansori , Denny Widhiyanuriyawan)</i> Increased output power of a triboelectric nanogenerator with a starch biopolymer composite interface layer	13.45- 14.00
4	720	<i>(Daeng Rahmatullah, Iradiratu Diah PK, Belly Yan Dewantara, Fendi Achmad)</i> Design and Build of 3 Phase Induction Motor Speed Regulation on Programmable Logic Controller (PLC) Using PID Control Method	14.00-14.15
5	721	<i>(Machrus Ali, Muhammad Ruswandi Djalal, Saiful Arfaah, Muhlasin, Muhammad Fakhrurozi, Ruslan Hidayat)</i> Application of Energy Storage-PID For Load Frequency Control In Micro Hydro Using Flower Pollination Algorithm	14.15-14.30
6	693	<i>(Murry Raditya, Purwadi Agus Darwito, Zakiah Nurul Fahmi, Arviandi Cikadiarta, Andreas Pratama Putra, Sulthon Sidiq Wicaksana)</i> Multiple Linear Guide Actuator (LGA) Controller Based on ModBus RTU	14.30-14.45
BREAK			14.45-15.15
7	616	<i>(Asnun Parwanti, Slamet Imam Wahyudi, Moh Faiqun Ni'am, Machrus Ali, Iswinarti, Muhammad Agil Haikal)</i> Modified Firefly Algorithm for	15.15-15.30

		Optimization of the Water Level in the Tank	
8	618	<i>(Ery Safrianti, Linna Oktaviana Sari, Nur Aprilia Sari)</i> Real-Time Network Device Monitoring System with Simple Network Management Protocol (SNMP) Model	15.30-15.45
9	610	<i>(Rifqi Firmansyah, Rudi Irmawanto Comparison Study of PI Controller)</i> Tuning Method to Regulate the DC Motor Speed	15.45-16.00
10	577	<i>(Saiful Anwar, Made Arsana, Ika Nurjannah, Handini Novitasari)</i> The Effect Of Hydraulic Diameter Variations and Distance of Rods Square Profile in The Four Channel	16.00-16.15

Room 5 IEEE
 Moderator I Made Suartana, S.Kom., M.Kom
 Assistant Moderator Keisha

No	Paper ID	Paper Title	Time (GMT +7)
1	573	<i>(Widi Aribowo, Reza Rahmadian, Mahendra Widyartono, Ayusta Lukita Wardani, Aditya Chandra Hermawan, Unit Three Kartini)</i> Implementation Of The Arithmetic Optimization Algorithm For Economic Load Dispatch	13.15-13.30
2	609	<i>(Mochamad Arif Irfi'a, Andita N. F Ganda, I Made Arsana, Retno Eka Pramitasari dan Dzulkifliih)</i> Analysis of Tensile Strength and Hardness of Al-Si alloy Using Sand Casting and Centrifugal Casting Methods	13.30-13.45
3	612	<i>(I Made Arsana, Wahyu Dwi Kurniawan, Kukuh Uzia Bramantyo)</i> Performance Analysis of Electric Coolers Tec1-12706 And Tec1-12715 With Heatsinks at Semi-Conductor Cooler Boxes	13.45- 14.00
4	701	<i>(Firman Yasa Utama, Zulfa Ludfi Diana Sari)</i> Development of Automatic Fuel Meter Trainer Control System Using Microcontroller	14.00-14.15
5	594	<i>(Testa Adi Nugraha, Achmad Widodo, Awang Firmansyah, Muhammad Dzul Fikri, Syaifathul Jannah, Mokhammad Riyad)</i> Implementation Of Monitoring Load Exercise in Finswimming to Preparation for Porprov 2022	14.15-14.30
6	617	<i>(Indarti; Jihan Alya Salsabilla; Li Hsun Peng)</i> Computerized Embroidery: Utilizing Technology in Making Decorative designs for Muslim Wedding Dress	14.30-14.45
BREAK			14.45-15.15
7	690	<i>(Yeni Kustiyahningsih, Eza Rahmanita, Devie Rosa Anamisa, Jaka Purnama)</i> Selection SMEs of Batik Bangkalan Using Fuzzy Interval Type-2 Method based on Group Support System	15.15-15.30
8	732	<i>(Wahyu Nur Hidayat)</i> Gamified Mobile Learning For Digital Business Model Course	15.30-15.45

9	621	(Francisco de Assis Souza Alexandre, Marcello Carvalho dos Reis, Maria Elisa Marciano Martinez, Auzuir Ripardo de Alexandria) A look at the city of Fortaleza from the perspective of the social indicators of NBR ISO 37120:2017	15.45-16.00
10	715	(Mohammad Syahidul Haq, Nur Aini Dwi Setyowati) Development of Codeigniter-Based E-Office Applications	16.00-16.15
11	745	BasicHomeschooling: The Parents Role For Optimizing Early Age Children Potential	16.15-16.30

Room 6 IEEE

Moderator Roswina Dianawati., S.Pd. M.Ed

Assistant Moderator Rofik

No	Paper ID	Paper Title	Time (GMT +7)
1	691	<i>(Glenn Gumba, Jessie R. Paragas, Deborah G. Brosas)</i> Student Information and Accounting System (SIAS) Software Quality Assessment	13.15-13.30
2	575	<i>(Handini Novita Sari, I Made Arsana, Ika Nurjannah)</i> Implementation of Problem Based Learning to Improve Students Motivation And Learning Outcomes As a Solution For Distance Learning (PJJ) During The Covid 19 Pandemic Case Study on Heat And Mass Transfer Subjects	13.30-13.45
3	580	<i>(Usman Mulbar, Nasrullah Pemu)</i> e-Portfolio as OLEA to Identify Higher Ability for Students in Higher Education	13.45- 14.00
4	582	<i>(G H B A De Silva, T C Sandanayake, M F M Firdhous)</i> An investigation of visually impaired learners marginalized in an online classroom environment	14.00-14.15
5	588	<i>(Bambang Bagus Harianto, Yuyun)</i> Evaluation of Multiple Choice Items in the Telecommunication and Navigation Engineering Department with Validation	14.15-14.30
6	605	<i>(fendi achmad Supari Muslim Daeng Rahmatullah Setya Cendrah Wibawa Edy Sulistiyo)</i> An Influence of Problem Based Learning Models Assisted by Media Trainer Programmable Logic Control and Achievement Motivation on Skills Competence	14.30-14.45
BREAK			14.45-15.15
7	595	<i>(Farid Baskoro and Bambang Suprianto)</i> Teaching Factory Management in the Edutel Sector at SMK Negeri 1 Surabaya	15.15-15.30
8	632	{Kisyani Laksono, Endah Budi Rahaju, Ari Kurniawan, Zulaikhah Abdullah, Raras Tyasnurita, Ahmad Bayu Prastyo)	15.30-15.45
9	674	<i>(Miftahur Rohman, Nur Kholis, Farid Baskoro)</i> Development Of Employability Of Fresh Graduate Alumni Through Tracer Study By	15.45-16.00

		Evaluating The Likert Scale Method	
10	713	<i>(Oce Wiriawan , Siswantoyo, Donny Ardy Kusuma, Awang Firmansyah, Azmawati Binti Mohamad Nor, Afif Rusdiawan)</i> The Difference Between Level of Physical Activity, Nutritional Status, Sedentary Lifestyle in Students in Mountain and Coastal Areas	16.00-16.15
11	607	<i>(Ratna Suhartini , Luthfiyah Nurlaela)</i> Training Development of Teaching Factory Based on Local Wisdom in Vocational High School	16.15-16.30

Room 7 AP

Moderator **Dr. Dony Ardi Kusuma, M.Kes**

Assistant Moderator Yayuk

No	Paper ID	Paper Title	Time (GMT +7)
1	689	<i>(Isnawati, Lisa Lisdiana, Mahanani Tri Asri, Guntur Trimulyono, Rony Afif Hidayat)</i> Diversity of Cellulolytic Fungi Isolated in Fermetodege: Fermented Feed Mixed Water Hyacinth, Rice Bran, And Corn Cob	13.15-13.30
2	703	<i>(Sari Edi Cahyaningrum; Titik Taufikurohmah; Dina Kartika Maharani; Jonathan Angelo Ranamanggala; Achmad Fitriadi Akbar and Fitriari Izzatunnisa Muhaimin)</i> Synthesis and Characterization of Nanosilver Fluoride Hydroxyapatite as an Anti Cariogenic Agent	13.30-13.45
3	704	Tukiran Nutritional Analysis Of Non-Dairy Milk Almond-Tempeh As A Multivitamin Supplement For The Elderly	13.45- 14.00
4	718	Tukiran Antioxidant Activity from The Combination Ethanol Extract Secang Wood (Caesalpinia sappan L.) And Red Ginger Rhizome (Zingiber officinale Roxb.)	14.00-14.15
5	730	<i>(Silmi Kaaffah Nurul Hasana, Dwi Kristiastuti, Niken Purwidiani, Ita Fatkhur Romadhoni, Ila Huda Puspitasari, Any Sutiadiningsih)</i> Innovation of Milk Fish Sausage with The Addition of Moringa Leaf Puree As a Healthy Food	14.15-14.30
6	586	<i>(Ni Ketut Alit Armini, Rahayu Dwi Pangestuti, Lingga Curnia Dewi)</i> Dietary Pattern, Sedentary Lifestyle and Awareness on Breast Cancer among Adolescents	14.30-14.45
BREAK			14.45-15.15

7	633	<i>(Any Sutiadiningsih, Agung Prijo Budijono, Wahyu Dwi Kurniawan, Yunus)</i> Effectiveness of Brem Production Process Through The Application of Brem Press Machine At Madiun Brem Smes	15.15-15.30
8	625	<i>(Asrul Bahar, Samik, Maria Monica Sianita Basukiwardojo, Nita Kusumawati, Supari Muslim, AR. Sella Auliya)</i> Effect of Milk on Physico-Chemical, Functional and Contamination of Herbal Jelly Drink	15.30-15.45
9	640	<i>(Sri Dwiyanti, soto Sulandjari, Titik Winanti,IGP Asto, Lilik Anifah)</i> Cypirus Rotundus L : Formulation And Evaluation Antiseptic Soap	15.45-16.00
10	657	<i>(Nining W Kusnanik, Fransisca JM Wijaya, Fifit Y Wulandari, Stephen P Bird)</i> Isokinetic Strength and Power of Female Field Hockey Players	16.00-16.15
11	xxx	<i>(Dwi Cahyo Kartiko)</i> Android-Based Application (Body Fat Calculate) As Information Media for Obesity Prevention	16.15-16.30

Room 8

Moderator

Tri Edliani Lestari, S.S., M.Hum

Assistant

Basram

Moderator

No	Paper ID	Paper Title	Time (GMT +7)
1	660	<i>(Eni Wuryani, Susi Handayani, Mariana)</i> The Effect of Financial Performance And Bank Size On Banking Bank Stock Price	13.15-13.30
2	659	<i>(Cindy Veronica, Nina Nur Alfi Aulia, Dinda Suci Al Aluf, Amar Khan Ijtihad Mudhaffar, Arik Susanti)</i> Building Creative Industries by Bringing Local Potential to Grow Village Community Economic Independence	13.30-13.45
3	646	<i>(Vira Oktaviani Rezqy, A'rasy Fahrullah)</i> A Prototype of Digital Sharia Business Incubator To Develop Rural Economy	13.45- 14.00
4	614	<i>(Jun Surjanti, Rahayu Dewi Soeyono, Tony Seno Aji)</i> Pre-Posttest: Diagnosis of the Achievement Level on Sustainable Business	14.00-14.15
5	717	<i>(Sjafiatul Mardiyah, Putri Aisyiyah Rachma Dewi, Awang Dharmawan, Agus Prasetyawan, Yuni Lestari)</i> Building family resilience through philanthropy and populist policies to cope the covid-19 pandemic in Indonesia	14.15-14.30
6	702	<i>Ari Khusumadewi</i> Identification of Student (Santri) Problems On Islamic Boarding School (Pondok Pesantren)	14.30-14.45
BREAK			14.45-15.15
7	727	<i>(Sarmini, Sukma Perdana Prasetya, Nuansa Bayu Segara, Faridatul Lailiyah)</i> Ethno-pedagogy of Parents in Enforcement of Health Protocols to Change Students' Social Behavior	15.15-15.30
8	706	<i>(Yuni Lestari, Agus Prastyawan, Prasetyo Isbandono)</i> Women's Leadership Based on Local Wisdom	15.30-15.45

9	651	<p><i>Ali Imron, S.Sos., M.A. dan Siti Maizul Habibah, S.Pd., M.A.</i></p> <p>The Practice of Identity Politics Carried Out By Ex-Lepers</p>	15.45-16.00
10	601	<p><i>(Rr Nanik Setyowati1, R.N. Bayu Aji, Sarmini, Ali Imron, Nasihatul Mahmudah)</i></p> <p>Street Children Survival Strategy Against Violence: Case Study on the Surabaya Ketintang Railway</p>	16.00-16.15
11	683	<p><i>Ketut Prasetyo</i></p> <p>The Effect of A Gender-Residential Location And Education Level In Response To Regulation Of Corona Virus Disease-19 Distribution And Prevention In Social Studies Student</p>	16.15-16.30

Room 9

Moderator Imami Arum Tr

Assistant Moderator Alfi

No	Paper ID	Paper Title	Time (GMT +7)
1	729	<i>(Gitud Sudarto, Minnar Titis Santoso, Nusriningyati)</i> Development of the Omronf CP1E PLC to support PLC practicum activities in the Control System Engineering laboratory	13.15-13.30
2	686	<i>Mauren Gita Miranti, Didit Yantony, Setya Chendra Wibawa, Rima Melyana Anjelita, Nia Lestari</i> DEVELOPMENT OF GLIDE DAILY NUTRITION APPLICATION BASED ON ANDROID	13.30-13.45
3	673	<i>Yuli Sutoto Nugroho, Windy Dwi Oktavia, Setya Candra Wibawa, Farid Baskoro</i> Application Development Little Cakes Based on Android as Lunch Box Cake Salesa and Learning Media	13.45- 14.00
4	571	<i>(Yunus, I Made Arsana, Erlinda Ningsih, dan Novi Sukma Drastiawati)</i> Designing and Fabrication of Integrated Soybean Machine (3 In 1 Process) to Optimize of Tempe Producers Productivity	14.00-14.15
5	687	<i>(Suprpto, Alfania Lailatul Rizky, Setya Chendra)</i> Application of Android-Based Mobile E-Commerce Applications In Ornamental Plants	14.15-14.30
6	635	<i>(Niken Purwidiani , Dwi Kristiastuti, Sri Handajani, ta Fatkhur Romadhoni, Choirul Anna Nur Afifah, Any Sutiadiningsih)</i> Making Instant Spiced Coffee Drink to Prevent Covid-19	14.30-14.45
BREAK			14.45-15.15
7	680	<i>Warju</i> Development of Android Buket Snack Olshop Application	15.15-15.30
8	679	<i>(Novi Sukma Drastiawati, Lutfiyyah Nur Rasyidah and Setya Candra Wibawa)</i> Utilization of The BUKAOLSHOP Application As A Sales Media MOCHICECREAM	15.30-15.45

9	633	<i>Niken Purwidiani</i> Nutritional Content Of Dried Choux As Tourist Souvenirs	15.45-16.00
10	678	<i>Ferly Isnomo Abdi</i> Development of Android-Based Tote Bag Business Application	16.00-16.15

Room 10 AP

Moderator Putri Aisyiyah Rachma Dewi

Assistant Moderator ILO

No	Paper ID	Paper Title	Time (GMT +7)
1	585	<i>(Anitiyo Soelistiyono, Chen Feijuan)</i> A Literature Review of Labor Market Profile of Vocational High School Graduates In Indonesia	13.15-13.30
2	714	<i>(Mutimmatul Faidah)</i> Pilgrims Spiritual Practices at The Tomb of Sunan Giri During The Covid Pandemic	13.30-13.45
3	596	<i>Made Pramono</i> The Challenges And Opportunities Of The Industrial Revolution 4.0 And Society 5.0	13.45- 14.00
4	623	<i>Dindy Megasari, Arita Puspitorini, Dewi Lutfiati</i> Employability Tracer Study of Cosmetology Education Graduates at the Universitas Negeri Surabaya	14.00-14.15
5	629	<i>Ratna Suhartini</i> The Partnership Model for The Diploma of Fashion Designer and The Fashion Industry	14.15-14.30
6	599	<i>Wahyu Dwi Mulyono, Gde Agus Yudha Prawira Adistana, Heri Suryaman</i> The effect of teaching materials, implementation, evaluation, and problems on student motivation in online learning during the COVID-19 Pandemic	14.30-14.45
BREAK			14.45-15.15
7	576	<i>Ika Nurjannah</i> Development of OBE-Based Learning Evaluation Model in Mechanical Engineering Education Program	15.15-15.30
8	633	<i>Ani Sutiadiningsih</i> Composite Flour of Glutinous And Sticky Rice Dreg Against The Character	15.30-15.45

9	681	<i>Edi Sulisty</i> Utilizing E-Commerce To Create Giftcare App For Unique Gift Sales	15.45-16.00
10	688	<i>Made Arsana</i> Utilizing Social Media And Applications To Stay Productive For Photographers In Pandemic Times	16.00-16.15
11			16.15-16.30

Room 11 AP
 Moderator Kunjung Ashadi S.Pd., M.Fis.
 Assistant Moderator Isbin

No	Paper ID	Paper Title	Time (GMT +7)
1	578	<i>Vita Mahardhika</i> An Electronic Court In The Perspective Criminal Law Reform	13.15-13.30
2	624	<i>(Kisyani Laksono, Endah Budi Rahaju, Pratiwi Retnaningdyah, Agusniar Dian Savitri, Zulaikhah Abdullah, Ahmad Bayu Prastyo)</i> The Favorite Vocabulary In Elementary School Student Writing Of 750 Words	13.30-13.45
3	602	<i>(Pudji Astuti, Anam Miftakhul, Rr. Nanik Setyowati)</i> Opportunities And Challenges Of Universitas Negeri Surabaya In Fulfillment Of The Rights Of Education For People With Mentally Retardation	13.45- 14.00
4	710	<i>Darni, Yuni Lestari</i> Literacy Gender in Elementary School Education	14.00-14.15
5	709	<i>(Susanti, Renny Dwijayanti, Han Tantri Hardini, Moh. Danang Bahtiar)</i> Financial Literature Versus Digital Literature As A Predictor Of Student Entrepreneurs Behavior In The Era of The Covid 19 Pandemic	14.15-14.30
6	653	<i>(Arik Susanti, Sarah Lailiyah)</i> Improving Efl Students Higher Order Thinking Skills Using Reading Strategies	14.30-14.45
BREAK			14.45-15.15
7	726	<i>(Agung Listiadi, Rochmawati)</i> self-efication in interpreting as a teacher in Indonesia	15.15-15.30

8	722	<i>Wahyu Sukartiningsih</i> Short Story Materials through Explanation, Space, Time of Writing Techniques in Elementary School	15.30-15.45
9	645	<i>Dody Arwin</i> Infographics As A Media To Develop Student's Digital Literature Capabilities	15.45-16.00
10	603	<i>Endang Pudjiastuti Sartinah</i> The Management of Inclusive Schools Curriculum in Indonesia	16.00-16.15
11			16.15-16.30

Room 12 AP
 Moderator Ajeng Dianing Kartika
 Assistant Moderator Amiruddin

No	Paper ID	Paper Title	Time (GMT +7)
1	626	<i>(Ajeng Dianing Kartika, Arif Hidajad, Ririe Rengganis, Bambang Dibyo Wiyono, Cindy Asli Pravesti)</i> Upgrading Conselor’s Critial Thinking Skills for High School Counselors in Surabaya to Improve Student Problem Solving Readiness during The Pandemic	13.15-13.30
2	668	<i>(Raden Roro Maha Kalyana Mitta Anggoro, Harpang Yudha Karyawanto, Heri Murbiyantoro, Autar Abdillah, Noordiana)</i> Music Scoring Training in the Pare String Ensemble Music Community in Kediri	13.30-13.45
3	719	<i>(Fahmi Wahyuningsih, Rr. Dyah Woroharsi P, Lutfi Saksono, Suwarno Imam Samsul)</i> Utilization of QuizWhizzer Educational Game Applications as Learning Evaluation Media	13.45- 14.00
4	728	<i>(Rr. Dyah Woroharsi P, Fahmi Wahyuningsih, Lutfi Saksono)</i> Hörbuch: Maerchen on Youtube as a additional material for listening skills for students of the German literature study program	14.00-14.15
5	731	<i>(Oktaviani Tri Saprika, Lukman Hadi Wibowo, Adinda Nur Qomariyah, Dinda Ayu Febrika Widayustira, Nugraheni Nur Awalia Pratiwi, Prima Vidya Asteria)</i> Marginal Community Empowerment in Kampung 1001 Malam by Using Hydroponic Interactive Video	14.15-14.30
6	754	<i>Jody Suryanto</i> Influence of Work Motivation In Archival Management On Performance With Variable	14.30-14.45

Intervening Commitment Lppm Unesa			
BREAK			14.45-15.15
7	664	<i>Tri Rijanto, Joko, Irma Russanti</i> Validation of Developed Hazmat Suit as Personal Protective Equipment for Medical Workers	15.15-15.30
8	735	<i>(Lutfi Saksono, Rojil Nugroho Bayu Aji, Muamar Zainul Arif)</i> Performance of Community Services in Universitas Negeri Surabaya	15.30-15.45
9	656	<i>(Nurhayati, Sari Edy Cahyaningrum, Warju, Zulaikhah Abdullah, Supriadi, Alfi Qonitatin Wafiyah)</i> Development of Research and Community Service Information Systems (SIRIP) with Synchronizing Data from SIMLPPM and Performance Requirement of SIMLITABMAS	15.45-16.00
10	600	<i>Muh Ariffudin Islam, Anam Miftakhul Huda, Vinda Maya Setianingrum, Puspita Sari Sukardani, Gilang Gusti Aji</i> Branding Development of Rumah Kinasih by Diffable Community	16.00-16.15
11			16.15-16.30

ARTICLE THAT WILL BE SUBMITTED TO IEEE

Integration Of Lifting Pump Monitoring System Using ESP32 And Hostinger With Internet Of Things Based

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Abstract— Lifting pump is a system used to distribute dirty water to landfills or water treatment sites. The need for integrated information through a pump flow and voltage monitoring system is a problem finding in this study, because the lifting pump monitoring system previously had to be visited on site twice a day. So the suggestion in this research is to get real time information. The work process of this prototype is: when the pump is active then the sensor reads the current and voltage, so that the sensor readings are received and processed by the ESP32 until the output from the ESP32 is sent to the Hostinger web so that the data results can be displayed on Android. The results of this design obtained a monitoring system of pump currents and voltages in real time because it can be seen through web hostinger and android. The comparison between the current and voltage on the prototype with the measured current and voltage shows a difference of less than 5%.

Keywords— *Monitoring, Current, Voltage, ESP32, Hostinger*

#ID 634

Design and Development Of Monitoring System On Carp Farming Ponds As IoT- Based Water Quality Control

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Abstract— Monitoring water quality in freshwater pond fish farming is an important thing to do because the quality of the fish depends on the conditions of the aquatic environment in which it lives. Terrible water conditions can interfere with fish activities and can cause mass mortality that will reduce the productivity of freshwater fish farming farmers. Temperature, pH level, and turbidity of fish pond water are measured parameters that represent optimal water quality. This research contributes to developing water quality monitoring instruments that can produce continuous and real-time quality data. The monitoring system of fish pond water quality was designed by installing a temperature sensor, pH sensor, and turbidity sensor. The value obtained from the sensor measurement is then processed using a microcontroller. The system design uses the ESP32 wireless module. It makes an application on Android so that the measurement results from the sensors are used to display integrated monitoring results online as an implementation of the Internet of Things. Then the system can be accessed through an application on a smartphone to show notifications and replace water automatically. And the result of a validity test with calibrators obtained each uncertainty result from the turbidity sensor, temperature sensor, and also the pH sensor is of 1.24; 0.136; 0.31 (acid pH); 0.2 (alkaline pH). From the result of validation testing show a small uncertainty, that can also understand as to how close the measurement result is to the actual value.

Keywords—*monitoring, water quality, Internet of Things*

#ID 697

Development Of Internet Of Things Based Fertigation System For Improving Productivity Of Patchouli Plantation

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Abstract— The problem faced by patchouli farmers, besides being rivaled by the production of lemongrass, was found to be relatively low productivity of patchouli plants by about 2 kg per tree. While the results of trials conducted by the Atsiri Research Center (ARC) obtained productivity of up to 5-6 kg per tree. In addition to problems on the side of high competition and low production and productivity, patchouli still has advantages that its competitors do not have. If ordinary perfume, the scent only lasts 2-3 hours, then perfume that uses patchouli, the scent can last 12 to 72 hours according to its concentration. That is why the world perfume industry is very interested in Aceh's patchouli. Patchouli grows and produces well in fertile, loose, and contains a lot of organic matter. Good soil types are regosol, latosol, and alluvial. The texture of the clay is sandy clay or dusty clay and has good absorption capacity and is not flooded during the rainy season. Patchouli leaves to produce high oil content requires full sun. The height of the place suitable for patchouli cultivation starts from the lowlands to an altitude of 1,200 meters above sea level (asl), and is optimum at 100-400 m asl. In the lowlands, the oil content is higher than in the highlands, on the contrary the alcohol content of patchouli is lower. Rainfall is needed for the growth of patchouli plants ranging from 2300 - 3000 mm / year with equitable distribution throughout the year. Humidity, temperature, and pH suitable for patchouli growth are 70-90%, 24-28 ° C, and 5.5-7, respectively.

Keywords— Arduino, Temperature Sensor, Soil Moisture Sensor, pH Sensor, Internet Of Things

#ID 584

Wireless Nurse Call System Using IoT Implementation

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Abstract—A spreading of updating technology recently encourages many scientists to explore implementing it as a daily activity. The important part of implementation technology is in the health field. One of them is the Nurse Call system which is very important in every hospital. Many hospitals use a wired Nurse Call system which needs many cables to connect to the monitor room. With a lot of cables, there will be much effort needed for finding the broken or loose cables, if any, so that the connection can be maintained. This research proposed to solve this issue by using IoT implementation on wireless nurse call system. The proposed prototype contains raspberry pie as the collecting data from each node and placed it at the monitor room, router as communication between raspberry pie and each node and the node itself by using node MCU that is placed at the patient room. The simulation shows that the system of this proposed prototype can be managed to communicate successfully between each node and monitor the room. To exam the performance, it uses three scenarios for testing, and those scenarios can be executed appropriately to the system.

Keywords— *IoT, Nurse Call System, Raspberry Pi, Wireless, Node, Patient*

ID #694

Design a Temporary Package Storage System Using Arduino Mega 2560-Based Password

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Abstract— Online shopping is an activity that is carried out between buyers and sellers online and then sent using courier services. So, at the time of delivery the package requires a clear address, correct and the delivery time can already be estimated. A courier can complete the delivery of the package perfectly if the buyer / booker receives the package in place directly. The problem is that if the buyer /booker does not receive the package, then the courier will delay the delivery until the package is received. This paper aims to build a secure, privacy and confidential package storage system consisting of a keypad for password input, a servo motor for opening and closing doors, ultrasonic sensors for detecting incoming goods, SIM800L V2 for SMS message notification and Arduino Mega 2560 as the main control of the system. Based on the results of tests and analysis that have been done, the keypad has a delay of 100 seconds in filling in every 1 digit of the input password. Setting the minimum limit value as far as 10 cm, then get the visibility of the HC-SR04 sensor that can be read as far as 10 cm to 12 cm. Package materials coated with iron, plastic, wood, paper, glass, and fabric are capable of detection by hc-SR04 proximity sensors.

Keywords— *SMS, Arduino Mega 2560, SIM800Lv2, Sensor HC-SR04, Keypad*

ID #677

Web-Based Solution for Flood Warning Decision Support in the Province of Leyte, Philippines

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Abstract— Floods are one of the most damaging disaster events in the province of Leyte; their occurrence and strength are increasing in the last decade. The most common reasons for flooding in Leyte are unpredictable and heavy monsoon rainfalls, resulting in massive live losses, a large amount of internally displaced persons (IDPs), damages of agricultural land and crops, and live stocks. The proposed Automated Flood Warning System for the Province of Leyte is an online-based system that tends to help the communities. It measures rain and water level by positioning the reading device with measuring sensors to the strategic location and generating real-time readings. The data will be transmitted to the web system and convert to readable, easy-to-understand reports. As shown in the results and discussion, the system successfully monitors the flooding situation through the system's graphical representation. The authorities also received alert messages to warn them of the alert level measured by the system. It also assists the management in planning flood control using decision support, monitoring a local flood-prone area, and identifying early warning disturbances.

Keywords—IoT Based Solution, Flood Warning, Decision Support, Province of Leyte, Early Warning, Real-Time Monitoring

ID #592

Paramedic Assistant Robot : Feature Review from Generation 1.0 to 3.0

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Abstract—The increasing number of Covid-19 patients in the Surabaya, East Java area has affected the performance of the medical personnel who treat them. The medical personnel tire easily as the patient increases over time. The concrete action of this condition is Paramedic Assistant Robot. The method used in designing this paramedic assistant robot is as follows: 1) Formulating problems and the value of the robot's function, 2) Designing the robot's electrical unit, 3) designing the robot's communication unit and network, 4) designing the robot's mechanical unit, 5) the overall manufacturing process unit, 5) assembly process, 6) trial phase. The development result of feature each generation from 1.0 to 3.0 increase significantly. For the maneuver, from remote control and joystick become autonomous system. It means that the artificial intellegent also improved. For generation 3.0 robot divided into two robots, namely robot for service and robot for monitoring. Robot generation 1.0 has no measurement instruments, while robot generation 2.0 and 3.0 has measurement instruments wheather integrated with the robot or seperated.

Keywords—*paramedic, robot, assistant, covid-19*

ID# 581

Design And Build of Energy Proportional Electric Folding Bike According to Rider Needs

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Abstract—The use of fuel-powered vehicles is not recommended because fossil fuels are running low, and these vehicles pose a major threat to the safety of many people. Foldable electric bicycles can be a solution to this problem. The purpose of this research is to design and build an energy-proportional electric folding bicycle according to the needs of the rider. The method of implementing this research is designing, manufacturing, assembly, function test, performance test and evaluation stage. Based on the research that has been carried out until this progress report has been prepared, it can be concluded as follows: (1) The mechanical system and control system for electric folding bicycles can function properly according to the design; (2) The average accuracy percentage of the pedal assist sensor is 98.25% (very good); (3) The electric folding bicycle has 6 speed grades which are set according to the needs; (4) The electric folding bicycle uses a 48V 350W Planetary Gear BLDC Motor and a 48V 10AH Lithium battery which can travel 80 km per full charge.

Keywords: *electric folding bike, energy proportional, sports, healthy, easy to use*

ID#572

Schematics Monitoring System Temperature, Ph and Turbidity Based on Lora (Long Range) to Improve the Quality Of The Harvest

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Abstract—Water quality in milkfish cultivation is an important role. The optimal temperature for milkfish is 28°C-32°C and a pH of 7.5-8.5. In this study, a water quality monitoring system was made in the milkfish ponds which included temperature, pH, and turbidity based on LoRa (Long Range) communication. Testing of this tool uses an NTC temperature sensor and pH 4502-C is read and gets a value, if the value is in accordance with the standard value of the milkfish water quality, it will make a decision that the water condition is in good condition and if it does not match the standard standard value then the water condition is not doing well. And for turbidity using the DFRobot turbidity sensor The results of the test can be displayed on thinkspeak.

Keywords—*Sensor NTC, sensor pH 4502-C, turbidity sensor DFRobot, LoRa*

ID #753

Implementation Of The Arithmetic Optimization Algorithm For Economic Load Dispatch

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Abstract— This paper presents the completion of the economic load dispatch on the power system using the latest metaheuristic named Arithmetic Optimization Algorithm (AOA). This algorithm uses the classification conduct of the major math operators such as addition (A), subtraction (S), multiplication (M), and division (D). The optimization process in various search spaces is modeled and applied AOA mathematically. To get the performance of the proposed method, this study uses mathematical methods as a comparison, namely Differential Evolution (DE), Particle Swarm Optimization (PSO), and Sine Tree-Seed Algorithm (STSA). This study uses 2 experimental tests. From the research, it was found that the AOA method is better than the math and PSO methods. The generation cost of the AOA method is better than the PSO method by 0.016264%.

Keywords—*Economic Load Dispatch, Arithmetic Optimization Algorithm, Metaheuristic, Power system, Artificial Intelligence.*

Implementation Of The Arithmetic Optimization Algorithm For Economic Load Dispatch

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Abstract— This paper presents the completion of the economic load dispatch on the power system using the latest metaheuristic named Arithmetic Optimization Algorithm (AOA). This algorithm uses the classification conduct of the major math operators such as addition (A), subtraction (S), multiplication (M), and division (D). The optimization process in various search spaces is modeled and applied AOA mathematically. To get the performance of the proposed method, this study uses mathematical methods as a comparison, namely Differential Evolution (DE), Particle Swarm Optimization (PSO), and Sine Tree-Seed Algorithm (STSA). This study uses 2 experimental tests. From the research, it was found that the AOA method is better than the math and PSO methods. The generation cost of the AOA method is better than the PSO method by 0.016264%.

Keywords—*Economic Load Dispatch, Arithmetic Optimization Algorithm, Metaheuristic, Power system, Artificial Intelligence.*

ID #593

Applying Decision Tree for Utility Control System on Patient Room using Eye Activity Command

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Abstract— Some quadriplegics are unable to move their limbs from hand to foot. They require an assistive gadget to help them to have a better life. An assistive device to control some apparatus in the patient's room was created using eye activity signals. This study aims to implement a decision tree for a utility control system in the patient room by using the eye activity command. Based on the user eye movement command, the decision tree is proposed to be implemented on the patient's room equipment control system. The eye movement electrode, data acquisition, noise removal and signal pre-processing, and the decision model are involved to develop the system. In this study, four instructions are used, including the switch to the next option, switch to the previous option, activate an option, and start the systems command. These commands are represented by gaze to the left, gaze to the right, wink, and double wink. The holdout was utilized to validate the model by dividing data into 70 percent training and 30 percent testing sets. The decision model's accuracy is greater than 95%, according to the test results. This is an excellent outcome, and the model may be used in the system.

Keywords— *Decision tree, patient's room equipment, control system, eye blink, eye movement.*

ID #669

Implementation of Traditional Transposition Cipher with Salting Principle

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Abstract— Transposition Cipher was the most often used conventional cipher in the early days because it was resistant to frequency analysis. The purpose of this study is to provide another way of encrypting information through transposition and substitution cipher with salting – which is a common method to hashing. The aim behind this cipher is to keep all the original letters while mixing them and keeping the total number of characters intact. Through series of simulations, the new algorithm is proven to eliminate the repetitive appearance of letters as compared to the existing ones. In addition, this strategy will be more secure when paired with another algorithm to make a hybrid technique.

Keywords— *transposition cipher; salting; hashing; cryptography; hybrid;*

ID #666

SARS-COV-2: Symptoms Severity Assessment using Data Mining

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Abstract— COVID-19 spreads from person to person in communities (local transmission). Symptoms experienced vary from one person to another. Some may be asymptomatic, while others can experience mild to severe respiratory illness. Adults with existing medical problems are said to have more severe respiratory symptoms. As SARS-Cov-2 cases continually increase in the Philippines, hospitals and quarantine facilities can no longer accommodate new patients. People exposed to the virus are considered Person Under Investigation (PUI). And those experiencing COVID-like symptoms are Person Under Monitoring (PUM). Patients assessed as PUI/PUM are no longer admitted to the hospitals but observe their condition at home. In this study, the researchers developed a System that will closely monitor the symptoms of the probable SARS-COV-2 patients. It aims to assist healthcare professionals, including Barangay health workers, in tracking the patient's condition and informing them once the System evaluates the severity of the patient's symptoms. A clinical symptom dataset was used in this analysis to identify the COVID-like symptoms using the Decision Tree algorithm. The result shows that the System could determine if the patient's symptoms are severe or not.

Keywords— SARS-CoV-2, data mining, assessment, decision tree, COVID-19

ID # 708

Decision Support System Erythemato-Squamous Diseases Classification Diagnosis using Linear Vector Quantization Based Clinical Atributes

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Abstract— Telemedicine technology is currently a necessity in society. This study aims to design and build a decision support system to classify Erythemato-Squamous disease using Linear Vector Quantization, which is later expected to contribute to strengthening the decision support system regarding Erythemato-Squamous disease used in telemedicine. Erythemato-squamous is a group of skin diseases. This skin disease is categorized into 6 groups, including psoriasis, seboreic dermatitis, lichen planus, pityriasis rosea, chronic dermatitis and pityriasis rubra pilaris. Each group has its own characteristics and signs. The decision support system built in this research is based on clinical attribute data. The data used in this study is data from the UCI Repository which consists of 180 data, consisting of 60 learning data and 120 testing data. The results of this study indicate that learning based on clinical attribute data is psoriasis cluster, seboreic dermatitis, lichen planus, pityriasis rosea, and chronic dermatitis not enough based on clinical attribute data/atributes, or it can be said that other data/atributes are still needed that characterize these clusters. Meanwhile, to detect the sixth cluster (pityriasis rubra pilaris) using data/clinical attributes, the system has been able to identify it well.

Keywords— *Erythemato-Squamous, DSS, Linear*

ID #729

Sensor Positioning Effectiveness Analysis of Smart Pirates on Pencak Silat Sport

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Abstract—Pencak silat is an original sport from the legacy of Indonesian ancestors. This sport needs to be preserved to avoid extinction. The use of technology in this sport is still very limited. This technology is needed especially in the development of match pirates for athletes. The existing pirates still function as body protectors, even though the pirates function can be developed for several purposes that are used in matches. One of them is as a decision support system in determining match scores. This study aims to analyze the sensor placement on pirates so that the best accuracy is obtained in assisting referees in determining the score of a pencak silat match. This research is still limited to positioning sensors. If the sensor placement is not right, it will have an impact on the score in the match. This study proposes 5 pirates which use 10 sensors, 15 sensors, 20 sensors, 25 sensors, and 30 sensors. Testing process is done by doing 20 punch on each pirates. The tests carried out are the analysis of the accuracy of the punch area and the power of the blow. The results show that the best result is the 5th pirates. This is because it has been able to accommodate the hit area as much as 100%, while the sensor's reach to hit is 50.4%.

Keywords— *Pencak silat, pirates, power, punch, accuration, body protection*

ID #667

The Media Application using Markerless Augmented Reality to Learn The Technique of Angle of Photography

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Abstract— Educational facility are an essential component in supporting the process of the implementation of vocational education. However, there are vocational schools that have limited educational facilities. This limitation will hinder the process of learning, especially in vocational schools, which have a productive time allocation of subjects more than the normative subjects. The purpose of this study is to produce products such as Augmented Reality-based learning media for angle of taking picture subjects that are expected to support the creation of a learning process. Research procedures using Research and Development ADDIE models. This study is limited to four stages, namely: (1) the stage of analysis, (2) the design stage, (3) develop phase, (4) the stage of the implement. Application features a random object placement on the condition that can trace a flat, tracking without using the marker (Markerless), a screenshot of the object, as well as creative content taking a picture angle. Limitations of application are the absence of a sensor to show how the decision-angle image. Media validation results showed a value of 87.62% and the results of a student's response amounted to 79.05%. As well as the results of data inquiry using the t-test $14.02 > 2.04$. It concluded that a valid instructional media developed is used in the learning process, get a good response from students and utilize the corners of the image retrieval application augmented reality can improve decision-angle picture material

Keywords— augmented reality, markerless, simulation, angle-view of picture, photography.

User Experience Evaluation by Using a User Experience Questionnaire (UEQ) Based on an Artificial Neural Network Approach

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Abstract — User Experience describes the experience that users receive after using an application. Focusing on users' needs and emotions after using a product is a key to the success of an application. The Mobile Learning Cloud Computing System is an application that provides Video Learning Resources Materials, making it easier for users to get learning videos based on their needs. User Experience Questionnaire (UEQ) determines the aspects of User Experience after using the application. This study aims to estimate the relationship between aspects of User Experience and its determinants without restricting general statistical procedures such as linearity, symmetry, and normality. Based on the aims, Artificial Neural Networks are used and trained based on the data from the survey results to determine the aspects of user experience. The measurement attributes were derived from the User Experience Questionnaire (UEQ). The analysis shows that the application attributes have different effects on the aspects of User Experience. On the other hand, the asymmetry and nonlinear features were found in the connection. The study concludes that the use of Artificial Neural Networks can estimate valuable information on the aspects of User Experience especially usability aspects (attractiveness, efficiency, dependability).

Keywords—*User Experience, User Experience Questionnaire (UEQ), Experience Assessment, Artificial Neural Network*

ID #698

The Smart Application Approval Feasibility Of Potential Customers Based On Decision Support System

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Abstract—The application is required by various companies, and companies in the gas sector are no exception. Applications within the gas company can be used to assist companies in carrying out activities, one of which is an approval of the submission of new prospective customers. The purpose of this study is to discuss the existing problems and support of the feasibility of potential customers following the needs of the company. This research uses a Structured System Development Approach (Traditional Approach). The analysis starts with starting the problem at PT. Perusahaan Gas Negara issues communications between the regional office and the head office where prospective customer data sent via email or courier which takes a long time. The solution to this debate is by introducing application development consisting of input data for customers, evaluation of eligibility, and monitoring of approval results. The results of this study prove that this application offers superior communication between regional and central offices because it has several advantages according to company needs. It can be concluded as the development of this application will help companies in providing information, progress, and approval of prospective customers between the area and the center.

Keywords— approval system, evaluation of eligibility, decision

ID # 628

Single Feed Waveguide Antenna with Orbital Angular Momentum Mode

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Abstract— Spatial multiplex transmission with orbital angular momentum (OAM) is being studied as a method for increasing wireless communication capacity. In this paper, we propose a one-point feeding waveguide structure consisting of a circular waveguide and a branch probe that propagates in the TE₂₁ mode to generate the OAM +1 mode. A simulation is performed on the proposed structure, and its characteristics and operating principle are examined and reported.

Keywords— *Channel capacity, Spatial multiplexing, Orbital angular momentum, Circular waveguide*

Microwave Resonator based a Fractal Moore Structure for Modern Wireless Reconfigurable Systems

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Abstract—In this work, a design of a microwave resonator based on reconfigurable technology is proposed for different modern wireless communication systems. In the proposed design, Moore geometry is invoked based on the 4th order that is fetched to a T-resonator. The resulting combination is attached to a transmission line with two air gaps to realize a frequency resonance about 0.8 GHz. The purpose of this study is to apply such technology to characterize liquids. The proposed sensor is mounted on an FR4 substrate of 1.6 mm with an area of 50×50 mm². The resulting design dimensions are optimized using a commercial software package of CST MWS formulations. The proposed resonator performance in terms of S₁₁ and S₂₁ are evaluated based on the numerical calculations. Later, for reconfiguration purposes, two varactor diodes with two photoresistors are introduced in order to control the frequency band and the S-parameters with the frequency band of interest. Therefore, the photoresistor is suggested to reconfigure the frequency band by controlling the current motion along the fractal trace and varactor diodes are considered to sweep the frequency resonance at the desired band. The resonant frequency sweeping after introducing the varactor diodes is found to vary from 0.6 GHz up to 0.9 GHz. However, a significant change is found to be occurring in the resonance band when the LDR value changes relative to the light of incidence. Such technology is found to be an excellent candidate for many modern wireless technologies that may invoke optical based interface systems.

Keywords—*photoresistor, Moore shaped, microwave resonator*

Novel Reconfigurable Fractal Antenna Design based Metasurface Layer for Modern Wireless Systems

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Abstract— A novel wideband–pattern reconfigurable metasurface antenna base on H-tree fractal slots is presented in this work. the H-tree fractal slots patch illuminates a metasurface layer of 5×5 unit cells array. Four PIN diodes are embedded in the patch, in the H-tree slots, to switch the radiating slots and control the antenna radiations. The individual unit cell dimensions are $33 \times 33 \text{mm}^2$. The overall antenna size is $173 \times 173 \times 56.6 \text{mm}^3$. Switching the antenna by PIN diodes, the antenna main lobe can be steered toward different nine directions. The antenna provides a gain in the front lobe direction of 8.99dBi at 1.268GHz without significant change degradation in the gain during the beam steering process. Nevertheless, the antenna shows a wide operating frequency bandwidth of 55.5 % from 0.978-1.73 GHz around the frequency resonance of interest. The proposed design shows a novelty in controlling the main lobe direction by switching four PIN diodes to be steered from -10° to 10° . The diode switching process shows no significant effects on the antenna bandwidth. The proposed antenna is designed with aid of a software package based on the finite integration technique of the CST MWS formulations

Keywords— Pattern reconfiguration, H-tree fractal slots, metasurface, wideband antenna.

ID # 699

The Use of Satellites for Analysis of Plantation Locations, Minimize Land Fires, and Improve Fertilization

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Abstract—This study aims to help monitor a land prone to forest fires and detect soil fertility by designing a centralized monitoring information system using satellites for plantation companies. The analysis was carried out using data from companies such as plantation conditions, weather humidity levels and temperatures as well as soil conditions which were then outlined in the form of role models and used as the basis for developing an information system for monitoring plantation land. Dashboards are used to display visualizations of important information that are consolidated and organized in one screen so that information can be digested with one view and easy to navigate. Normalized Difference Vegetation Index (NDVI) is used to indicate plantation conditions based on the color spectrum index. NDVI is also used to indicate the health condition of the plant. In addition, rainfall data obtained from satellites is used to forecast the weather for the next few days. The results of this study prove that the satellites used can identify and analyze plantation locations to minimize losses due to fires on plantation land and provide benefits related to a better fertilization process.

Keywords— *satellites, plantation land, dashboard monitoring system, NDVI.*

Design of 4x4 Butler Matrix for Beamforming 5G Antenna

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Abstract— Butler matrix is one of the most frequently used beamforming techniques for 5G antenna development. In this paper, a 4x4 butler matrix integrated with a 5G antenna is designed. The array antenna works at 38 GHz. The antenna has the ability to transmit signals in various directions. The simulated results of the butler matrix show the phase difference of P1 and P4 in -45° with a phase unbalanced of 15° , and P2 and P3 have a phase unbalanced of 48° . The main beams directions of the antenna are 8° , -26° , 26° , and -8° respectively. The beamforming antenna works well with the butler matrix.

Keywords—*Antenna 5G, Butler Matrix, Branch-line coupler, Beamforming Network*

ID # 711

Coplanar Vivaldi Antenna with Koch Fractal Lens for L and S-band application

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Abstract—Vivaldi Antenna is a planar antenna that has a superiority of wide bandwidth, high gain, and directional radiation pattern. In this study, we compared the return loss and radiation pattern performance of four Coplanar Vivaldi Antenna that operated in the frequency L and S-band (0.5-6 GHz). Those antennas are Regular Coplanar Vivaldi Antenna (RCVA), Exponential Slot Edge Coplanar-Vivaldi Antenna (ESECVA), Exponential Slot Edge Coplanar-Vivaldi Antenna with Regular Lens (ESECVA-RL), and Exponential Slot Edge Coplanar-Vivaldi Antenna with Koch Fractal. Lens (ESECVA-KFL). From the simulation result, the directivity performance from the lowest to the highest was obtained of 6.37 dBi, 9.19 dBi, 9.74 dBi, and 11.48 dBi by RCVA, ESECVA, ESECVA-RL, and ESECVA-KFL respectively at a frequency of 2.5 GHz. The provision of corrugated and lens structures can increase the radiation pattern performance of the antenna. It is found that ESECVA-KFL obtains the best side lobe level (SLL) performance at a frequency 1.5GHz of -15 dB. However the SLL for ESECVA, ESECVA-RL, and RCVA are -12.95 dB, -11.99dB, and -4.97dB respectively. It can be concluded that the ESECVA-KFL structure can improve the performance of the Vivaldi antenna radiation pattern.

Keywords— *Vivaldi antenna, corrugated antenna, Radiation pattern. Fractal, Lens antenna*

ID # 725

An Antipodal Vivaldi Antenna Using Radiant Side Slot Edge Based on the Star Trek Dominion Insignia

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Abstract— This paper presents the Vivaldi Antipodal Antenna (AVA) development using radiant side slot edges based on the Dominion breed insignia from the Star Trek TV series. The intention is that the proposed antenna, with radiant cavities called Gamma-AVA, improves the gain, decreases the Side Lobe Level (SLL), and eliminates squint, where the peak gain in the radiation pattern at a given frequency is at 0 degrees. After performing the simulation, using Ansys HFSS 2021 R1, and measuring parameter S11, with NanoVNA V2 of conventional AVA and Gamma-AVA, the goal was achieved by the proposed antenna resulting in a gain of 9.53 dB, with SLL of -9.99 dB and 0.00° squint, having, therefore, a performance superior to that of the AVA.

Keywords—*Ultra Wide-Band (UWB), Planar Antennas, Gain, Squint, Directivity.*

Bandwidth Enhancement of Monopole Antenna with Triangle Slot in the Ground plane and Modified Patch for UWB applications

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Abstract—This article discusses a planar monopole antenna with high impedance bandwidth for Ultra-Wideband (UWB) Applications. The three monopole antenna i.e: Monopole A, B, and C are designed on 5 x 5 x 1.6 FR4 Substrate has return loss below -10dB from 2 to more than 20 GHz. There is an improvement of impedance bandwidth and directivity by adding a triangle slot in the ground plane and a slot in the patch for the Monopole C antenna. From 2.5 GHz to 8.29 GHz antenna has a return loss of less than -20 dB. It also shows that from 2.35 GHz to 10.9 GHz antenna has a return loss below -15 dB. In the frequency, 8 GHz antenna monopole A has a directivity of 5.98 dBi and antenna monopole C reaches a directivity of 7.01 dBi. The improvement of the sidelobe level of 3.1 dB is reached for Monopole C at 8 GHz. It indicated that Monopole antenna suitable use for UWB applications

Keywords—*Antenna, Monopole, Ultra-Wideband, bandwidth*

ID # 692

Multiband THz Rectangular Microstrip Patch antenna with Hexagonal Complementary Split Ring Resonator

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Abstract—A multiband antenna for THz application is presented in this article. The proposed antenna has a rectangular patch with a hexagonal Complementary Split Ring Resonator (CSRR) etched on it. The antenna has a pentaband resonance at 2.1, 2.6, 4.6, 5.1, and 6.1 THz. The antenna is designed on an FR4 structure with CST studio. The simulated antenna parameters such as s_{11} , VSWR, gain, E plane, H plane, directivity, and surface current distribution is presented to validate the performance of the proposed THz antenna. The antenna has 4.02 dB as its maximum gain and 6.89 dB as maximum directivity at 2.6 THz. Characterization of materials, diagnosis and security are some of the applications of the proposed antenna.

Keywords: *CSRR, SRR, Metamaterial, rectangular radiating element, THz*

ID # 620

The Making of PWCPS Building Video of Riau Province Based on Three Dimensional Animation

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Abstract—Video profile is an important thing in a company, because video profile can simplify introduce the functions and duties of that agency to public. Research aims to produce a video of Public Work and Compartment Planning Service(PWCPS) building based 3D-Animation as a part of PWCPS profile videos that is tested by USE Questionnaire to obtain the qualification of video based on Likert Scale. This research can be used as a reference for making 3D-Animation Video. Three Dimensional Animation video is created by making a concept to determine anything to be included in video. Then, creating a video design by making storyboards and collecting data for video purposes. Next, making animation and video editing. All components of Usability Testing namely Usefulness, Satisfaction, Ease-of-Learning, Ease-of-Use are used in testing the result. The research produces a video profile in 20-minutes that shows Outside and Inside of Riau Province PWCPS Building based on 3D-Animation that is followed voice over in every scene and Malay music is added into the opening scene. Viewpoints of Riau Province PWCPS Building with 0, 200 and 500 Frames in the timeline show that objects of video can be seen as a whole unit from many viewpoints, even without a drone. The qualification of system is Very Good due to various values from USE's components started 90.6%-100%. In general, average value of Usability Testing for Video of Riau Province PWCPS Building reaches 96%. Based on Likert-Scale, it is categorized Very Satisfied qualification

Keywords— *IoT, Nurse Call System, Raspberry Pi, Wireless, Node, Patient*

ID # 569

**INVESTIGATION OF THE DROPLET PROPERTIES ALONG THEIR TRAJECTORY IN
THE COOLING TOWER**

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Abstract—Water capacity is the most crucial thing in the evaporation process in the cooling tower. Therefore, at the initial setting, the manufacturer limited the load or the point of equilibrium so that no drifting or mass transfer occurs during the process. Mass transfer means that the cooling tower was experiencing a water deficit. This experiment used a mechanical draft wet cooling tower (MDWCT) with varying water capacities between 0.5 – 18 liters per minute (Lpm). This study changed air capacity also through variations in fan rotation between 300 – 1500 rpm. In the previous calculation, the value of 6 Lpm was obtained as the equilibrium capacity. Mathematical modelling based on Reynolds Averaged Navier-Stokes (RANS) was applied to simulate the interactions. It presented heat and mass transfer by mass and temperature charts, respectively, and their reductions. For low capacity (0.5 Lpm), water undergoes mass transfer, as proven by the mass flow reduction graph value of 10^{-8} kg/(m.s). Meanwhile, for high capacity (18 Lpm), water experiences heat transfer as evidenced by the temperature difference graph value of 11°C.

Keywords—*water capacity, evaporation process, point of equilibrium, drifting process, heat and mass transfer.*

ID # 616

Modified Firefly Algorithm for Optimization of the Water Level in the Tank

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Abstract— Accuracy of water level measurement has been required by controlling the flow of water in tanks in industrial processes. The accuracy of the water level must be determined to control the flow and volume of water used in the storage tank. It is necessary to design a good tank-based water flow control model. This system uses a flow sensor to detect the speed of water flow in an actuator. The actuator stabilizes the water output rate per minute at a certain point. So we need an automatic and accurate control method design. This study focuses on the Modified Firefly Algorithm (MFA) artificial intelligence method which is designed for water level. As a comparison, the design method is used without control, conventional PID (PID), PID-Auto tune using Matlab (PID-Auto), PID-Firefly Algorithm (PID-FA) method, and Modified Firefly Algorithm (PID-MFA) method. The simulation results show that the smallest overshoot value in the PID-MFA model is 0.421 pu, the smallest undershoot value in the PID-MFA is 0.496 pu. Output Current The smallest overshoot value for the PID-MFA model is 1.264 pu, the smallest undershoot value for the PID-MFA model is 0.219 pu. The output Flow result obtained the smallest overshoot value in the PID-MFA model = 1.532 pu, the smallest undershoot in the model PID-MFA = 0.201 pu. Thus it can be concluded that the best controller model is PID-MFA. Future research will be compared with other artificial intelligence methods.

Keywords—*Firefly Algorithm, Modified Firefly Algorithm, PID controller, Water Level*

ID # 693

Multiple Linear Guide Actuator (LGA) Controller Based on ModBus RTU

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Abstract— The number of various kinds of products installed in plants in the industry makes some equipment require various communication protocols for data transmission on different lines. In this study, a device that can communicate with other devices has been created using an industry-standard communication protocol, namely the Modbus RTU protocol. Modbus is an open-source and legal communication protocol. In the design of this controller module device using the Atmega 2560 microcontroller chip, the optoisolator safety circuit for the Linear Guide Actuator. and the GP 2Y0A02K0F sensor are used to monitor the movement position of the two Linear Guide Actuators. The control system used is based on a mathematical algorithm, namely Bresenham and the Modbus protocol. From the research, it is found that the address of the write holding register (sending instructions from the server to the client) and the read holding register of commands that are read on the controller module (client) where every 1000 micro steps movement is equivalent to a shift of 1.5 cm and is taken in an average time of 1.2 seconds. The movement has been validated using a ruler and the GP 2Y020YK0F sensor. The result is that both Linear Guide Actuators can move correctly according to the parameters used, namely the input steps value on the server in the form of PC Modbus software.

Keywords— *Modbus RTU, Linear Guide Actuator, Microcontroller*

ID # 721

Application of Energy Storage-PID For Load Frequency Control In Micro Hydro Using Flower Pollination Algorithm

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Abstract—To get optimal SMES and CES performance, optimal parameter tuning is needed. This research uses artificial intelligence method based on Flower Pollination Algorithm (FPA) for optimization of SMES and CES parameters. The FPA algorithm performs computations based on objective functions, namely optimizing Integral Time Absolute Error (ITAE). To test the reliability of micro hydro, a disturbance is given in the form of load changes, then analyzed the governor response and micro hydro frequency. In addition, in this study, a combination of SMES and CES control system scenarios with conventional PID controllers was used. From the results of the correct tuning of the SMES and CES parameters, the optimal micro hydro performance was obtained. This is shown by the overshoot governor response and the minimum frequency and faster settling time using the methods proposed by SMES and CES.

Keywords: Micro-Hydro, Superconducting Magnetic-Capacitive Energy Storage, Flower Pollination Algorithm, Overshoot

ID # 573

Implementation Of The Arithmetic Optimization Algorithm For Economic Load Dispatch

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Abstract— This paper presents the completion of the economic load dispatch on the power system using the latest metaheuristic named Arithmetic Optimization Algorithm (AOA). This algorithm uses the classification conduct of the major math operators such as addition (A), subtraction (S), multiplication (M), and division (D). The optimization process in various search spaces is modeled and applied AOA mathematically. To get the performance of the proposed method, this study uses mathematical methods as a comparison, namely Differential Evolution (DE), Particle Swarm Optimization (PSO), and Sine Tree-Seed Algorithm (STSA). This study uses 2 experimental tests. From the research, it was found that the AOA method is better than the math and PSO methods. The generation cost of the AOA method is better than the PSO method by 0.016264%.

Keywords—*Economic Load Dispatch, Arithmetic Optimization Algorithm, Metaheuristic, Power system, Artificial Intelligence.*

ID #609

Analysis of Tensile Strength and Hardness of Al-Si alloy Using Sand Casting and Centrifugal Casting Methods

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Abstract— Casting using the sand casting and centrifugal casting methods each has advantages and disadvantages. The advantages of the sand casting method are low cost, simple process but the disadvantages is prone to defects. Centrifugal casting has the advantages of being able to make uniform work pieces but the disadvantages equipment and maintenance costs are expensive. The aims of this study was to compare the tensile strength and hardness of the sand casting and centrifugal casting methods. The material used in this study is Al-Si alloy. The sand used in casting comes from Kelud Mount, while the centrifugal casting uses a horizontal mold. Tensile test procedure using ASTM-E8 standard and hardness test procedure using ASTM-E92. The results showed that the highest tensile strength and hardness in the sand casting method are 151.25 MPa and 126.1 HV respectively. Meanwhile, in centrifugal casting, the highest tensile strength and hardness are 162.86 MPa and 132.74 HV respectively.

Keywords—*sand casting, centrifugal casting, tensile strength and hardness*

ID # 612

Performance Analysis of Electric Coolers Tec1-12706 And Tec1-12715 With Heatsinks at Semi-Conductor Cooler Boxes

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Abstract— This cooler box is designed to assist humans in getting cold drinks when traveling long distances by car. Semi-conductor cooler box components consist of TEC1-12706 and TEC1-12715, styrofoam box with a size of 53x31x43 cm, copper and aluminum processor heatsinks, fans with 12V and 1A voltage, acrylic, and retaining bolts. The lowest temperature that can be achieved by TEC1-12706 and TEC1-12715 is 23.7°C which is reached in 60 minutes. The efficiency possessed by TEC with a heatsink is very low at 0.012%. This is because the calorific value released and the heat removed by TEC do not have a significant difference, so that the performance results are not effective enough due to the possibility of interference with air flow in the cooler box design. Maintenance for the semi-conductor cooler box is very easy by not using a voltage that exceeds 12 volts and it is not expected to disassemble the cooling component circuit consisting of the heatsink and TEC.

Keywords: *TEC, Cooler Box, Semi konduktor*

ID # 701

***Development of Automatic Fuel Meter Trainer Control System Using
Microcontroller***

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Abstract— The actual fuel consumption measurement tool already exists, but the work system in calculating fuel consumption from this is done by using visual sensing parameters, namely conditioning the motor rpm at a certain position and calculating how much fuel volume is reduced in units of time using a stopwatch. This method causes the reading process to be inaccurate and still depends on the human accuracy itself which is influenced by factors of concentration, fatigue, reading response and others. Therefore, an Automatic Fuel Meter is designed to be the solution to this problem. The purpose of this research is to design and create an automatic control system that can calculate fuel consumption on the trainer using a microcontroller with available mechanical trainers. The results of this study are Automatic Fuel Meter using Arduino Nano controller as a controller, infrared sensor is used as a timer or timer for fuel consumption. The work algorithm carried out in calculating fuel consumption has 3 stages, namely the filling stage, the reading stage, and the data calculation stage. The Auto Fuel Gauge can calculate fuel consumption with a sought precision value of a known standard deviation of 0.194366778. So that the percentage value of the coefficient of variation is 1.7057198596% ~ 1.7%. Response time from the infrared sensor takes 0,202083 seconds on the test on pertalite fuel and 0,200521 seconds on Pertamina fuel.

Keywords: Automatic Fuel Meter, Fuel Consumption Test, Microcontroller, Infrared Sensor.

ID # 617

Computerized Embroidery: Utilizing Technology in Making Decorative designs for Muslim Wedding Dress

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Abstract-The purpose of this study was to describe the process of making and the finished product of the Palembang songket decorative stylization on Muslim wedding dresses using computer embroidery. This study used the Double Diamond method which consists of 4 stages: discover, define, develop, deliver. In the discover stage, we started the research by determining the source of the idea from the folklore of *the Legend of Kemaro Island* from the city of Palembang, Indonesia. In the define stage, we determine the Muslim wedding dress design that will be realized and determine the design criteria using the FEA (Function, Aesthetic, Expressive) model. The next stage was making a decoration prototype, and applying the stylized decoration of Palembang *songket* motifs with computer embroidery techniques. The results of making stylized Muslim bridal clothing were analyzed using the FEA model. The function of the clothing created is bridal clothing for Muslim women who will get married. The design chosen consisted of a long dress and a long outer with lace sleeves. The function of outerwear is to disguise the body shape according to Islamic requirements while at the same time beautify the appearance. For aesthetic value, the application of geometric ornaments is applied to the collar, while the floral decoration is applied to the seams and front edges of the outer garment. For expressive considerations, the finished wedding dress is the result of acculturation and the influence of Chinese, Palembang (part of Indonesian) and Islamic cultures.

Keywords: computerized embroidery, *songket* Palembang, Muslim wedding dress, double diamond model, FEA model

ID # 690

Selection SMEs of Batik Bangkalan Using Fuzzy Interval Type-2 Method based on Group Support System

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Abstract— The Covid-19 pandemic has caused the domestic and global economic sectors to experience turmoil. The impact of pandemic has been most pronounced in Small Medium enterprise (SMEs) sector. Most SMEs experienced a decline in sales turnover, difficulties in obtaining financing / credit, problems in distribution of goods, and difficulties in obtaining raw materials. The purpose of this research is to determine selection of Decision Support System (DSS) SMEs Batik Madura Indonesian, in the face of Covid-19 pandemic based on influential indicators. The method used is interval value fuzzy type-2 Technique for Others Reference by Similarity to Ideal Solution (TOPSIS) based on Group Decision Support System (GDSS). The method for processing expert data is interval value fuzzy type-2 Geometric Mean Aggregation (GMA). The research findings are the most influential indicator weights in selection are variety of batik motifs and online market places. The contribution of the research is to develop the fuzzy interval type-2 method to support SMEs selection decisions by modifying the midpoint on triangular Fuzzy Number interval based on GRUP (GDSS). Based on expert data, the comparison of accuracy between fuzzy type-2 with one point, and two points, the highest accuracy result is using fuzzy type-2 with two points.

Keywords— SMEs Batik, fuzzy type-2 TOPSIS, MCGDM, Decision Support System, Selection

ID # 732

Gamified Mobile Learning For Digital Business Model Course

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Abstract — COVID-19 pandemic brings changes that have an impact on all fields, including the field of education. This change is due to Indonesia implementing online education conducted at the homes of each student as a precaution against the spread of COVID-19. Changes in online education have had an impact such as confusing students, students becoming passive, less creative and productive, students facing stress, and reducing student learning motivation. The focus of this research is how to develop gamified mobile learning applications for digital business model course. Gamification application in mobile is expected to make it easier for students to understand the material, increase students' competitive spirit, and motivate students to learn. This research uses ADDIE method which is an acronym for Analyze, Design, Develop, Implement, and Evaluate. Data analysis in this study used descriptive analysis. The development of mobile learning apps is expected to be a source of Business Digital Model learning materials and can be used anytime and anywhere by students, especially during the COVID-19 pandemic. Based on the results of the functional test, Gamified Mobile Learning has been well developed and runs as expected. The result of usability testing obtained score 80,67 from media expert which can be concluded that the aspects contained in the usability test such as Potential Effectiveness, Usability and, Satisfaction have given results that are quite appropriate and have been covered well.

Keywords: Mobile Learning, Gamification, Digital Business Model

ID # 691

Assessment of SIAS Application Using Software Quality Model

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Abstract— Managing a software project is a difficult process to do since it necessitates careful planning in order to find the best alternatives for a certain project. Software quality assessment is the technique of assessing software to ensure that the end result fulfills the customer's needs. It is a systematic examination of the software capability to meet the specified quality requirements. On the other hand, Student Information and Accounting System (SIAS) is a comprehensive and well-designed application with student information and accounting system for the educational institutions. The SIAS has an integrated learning management system for flexible learning due to the existence of the COVID-19 virus. This software has been used by 89 academic institutions all over the Philippines including the Biliran Province State University, Naval, Biliran. Thus, this paper analyzes if the SIAS meets the software quality standards or ISO/IEC 25010 that includes the eight quality characteristics by conducting an online survey based on the ISO software quality standards questionnaire. It was discovered that the application complied with ISO/IEC 25010.

Keywords—Software quality, Assessment, Quality Standard, Project Management, Student Information and Accounting System (SIAS), ISO/IEC 25010

Implementation of Problem Based Learning to Improve Students Motivation And Learning Outcomes As a Solution For Distance Learning During The Covid 19 Pandemic: Case Study on Heat And Mass Transfer Subjects

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Abstract— Distance learning is one of the educational policies during the COVID-19 emergency. This is done as an effort to maintain the educational process so that it does not stop even in a pandemic atmosphere. However, distance learning that has been going on for quite a while has also created problems. The saturation of students in following the learning process will have an impact on decreasing learning outcomes, so innovative learning methods are needed to minimize this. one of them by applying problem-based learning. This study will analyze how to apply problem-based learning by considering student learning outcomes and motivation. This research design uses classroom action using the Kemmis and McTaggart model which consists of three steps, namely: plan, act and observe, reflect which is carried out in two cycles. The research data was then analyzed quantitatively based on predetermined indicators. Based on this research study, it was found that the application of distance learning with problem based learning methods can improve student learning outcomes during the COVID-19 pandemic and minimize student boredom which causes low student motivation. Learning outcomes data increased by 36% from cycle I to cycle II. The results of student learning motivation in the first cycle are 27.3% of students who have a high learning cycle, 63.7% have a medium learning cycle and 9.9%. In the second cycle, students' learning motivation increased from high, medium and low by 45%, 52%, and 3% respectively.

Keywords— *distance learning, problem based, covid-19, learning outcomes, motivation.*

ID # 580

E-Portfolio as OLEA to Identify Higher Ability for Students in Higher Education

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Abstract— The importance of high ability (HA) for students in higher education so that they show ability as a resource who is ready to face the challenges in today's competitive era. This research was conducted to identify HA by utilizing Online Learning Environment Activities (OLEA). OLEA is applied in the form of online lecture activities combined with the e-portfolio approach. This activity involved 32 people who came from students majoring in mathematics class C 2019. By using a questionnaire distributed via Google Form, the results were analyzed using descriptive statistics. The results show that 1) the HA identification method with OLEA is good for motivating students to recognize their abilities, 2) OLEA needs to be designed in such a way as to initiate the development of students' HA, 3) the e-Portfolio approach is a good alternative to support OLEA.

Keywords— *e-Portfolio, OLEA, Higher Ability*

An investigation of visually impaired learners marginalized in an online classroom environment

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Abstract—Despite their abilities or skills, all students had to attend to online classes in universities last two years. Visually Impaired Learners (VIL) had unexplored problems associated with existing learning technologies, pedagogy, students per se, and facilitators in online classrooms. The objective of this study is to identify these problems and causes and to propose a theoretical model as a solution. The study identified 10 main problems causing dissatisfaction with VIL in online classrooms: the accessible devices and connectivity problems, the teaching-learning platform problems, lack of adequate training for teaching staff, pedagogical approach problems, lack of individual attention, inadequate time (extra) for learning and assessment, limitations of individual (reserved) space, limitations of assessment methods and platform, unavailability of the peer support, and unavailability of bilingual communication. The proposed theoretical model suggests consolidating learning technology with pedagogy, students, facilitators, and an extended learning environment to enhance the online class experience for VIL.

Keywords— *Visually Impaired Learners, Learning technology, Learner satisfaction, E-Learning, online classroom, extended learning environment*

Evaluation of Multiple Choice Items in the Telecommunication and Navigation Engineering Department with Validation

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Abstract— Improved multiple-choice questions (MCQs) item analysis is fundamental to be used for further tests. Besides increasing item analysis can also be used to removes items that are trapped in a test. This journal focuses on the quality of the questions on the test. It explores the relationship between the difficulty index (p-value) and the discrimination index (DI) and the efficiency of the distractor (DE). The research will be conducted by 49 6th semester students currently studying Diploma, especially in air navigation engineering in education at Aviation Polytechnic of Surabaya. Fifty multiple-choice questions will be given while a final exam for the transmission media and antenna courses. The value of validity using the Pearson correlation with a significance level of 5% and reliability using Cronbach's Alpha. We find that the difficulty index (p) is 59% with an SD value of 10%, while the DI value is 30 % with an SD value 10% and DE with a value of 25% (SD 22%) has item items with average difficulty and discriminatory power related to functional impairments that must be integrated into the test later to improve the quality evaluation.

Keywords— *MCQs, discrimination index, difficulty index, distractor efficiency*

ID # 605

An Influence Of Problem-Based Learning Models Assisted by Media Trainer Programmable Logic Control and Achievement Motivation on Skills Competence

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Abstract - This study aims to obtain information: (1) differences in the competence of students who are taught using a problem-based learning model assisted by PLC trainer media and assisted by conventional media; (2) differences in the competence of students with high achievement motivation, compared to students with low achievement motivation. The research design is a quasi-experimental design: the non-equivalent control group design. In this design, the experimental group and the control group were not chosen randomly. As a measuring tool for competency achievement in this study, learning outcomes tools and instruments were made, which functioned as instruments to assess the competence of students during the learning process. The experimental treatment used a problem-based learning model assisted by the Programmable Logic Control media trainer and for the control class assisted by conventional media. The study found: (1) the competence skills for students who were taught using a problem-based learning model assisted by the Programmable Logic Control trainer learning media, were significantly higher than those assisted by conventional media; and (2) skill competence for students with high achievement motivation is significantly higher than those with low achievement motivation.

Keywords - Problem-based learning model, Achievement Motivation, Skill competence

ID # 595

Teaching Factory Management in the Edutel Sector at SMK Negeri 1 Surabaya

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Abstract—The purpose of this study was to determine the teaching factory management in terms of planning, organizing, implementing, and evaluating. The Regional Public Service Agency in structuring the TeFa began to be implemented at SMKN 1 Surabaya since 2018. Since BLUD was implemented at SMKN 1 Surabaya, that school received financial assistance for the development of TeFa, one of the example is construction of Edutel in the hospitality department. This study used a survey method with data collection techniques like questionnaires, documentation and interviews, data analysis using descriptive statistical techniques with 26 respondents, there are teachers and students. The results showed (a) planning has been done well, such as administering time, tools and division of tasks; (b) organizing a well-structured teaching factory, start from the head of expertise competency, school principal, subject teacher, pptk; (c) the implementation has been done well with 83.3% of respondents stated that Edutel has been well socialized in the school and community environment, designed and implemented based on actual work procedures and standards. 84% of respondents stated that the learning process in the field of Edutel is learning by doing, improving students' soft skills, developing and implementing business-based learning patterns in a sustainable manner. 77% of respondents stated that the implementation of TeFa in Edutel carry out big data literacy, teaches critical, creative, communicative thinking skills, improves skills in market research. 69.5% of respondents stated that Edutel activities are supported by the industrial world. The standard error value less than 0.15, it indicates that the total average value of the respondents is close to the true value. It has a standard deviation less than 0.8 which is indicates a low standard deviation value, so the data approaches the average value. Has an average sample variant less than 0.6; (d) Evaluation of the Teaching Factory in Surabaya has been carried out by involving all member of Teaching Factory learning, the principal, the head of expertise competency, teachers and employees.

Keywords—*Edutel, Evaluation, Planning, Organizing, Implementing, TeFa*

ID # 674

Development of Employability of Fresh Graduate Alumni Through Tracer Study by Evaluating The Likert Scale Method

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Abstract— The number of electrical engineering graduates produced every year. The suitability of the required competencies with those of alumni is very necessary. In this research, a tracer study of electrical engineering graduates was conducted. Tracer study research is very important to find out the competency profile of graduates and alumni's work ability in relation to user needs. The target of tracer study is graduates of new graduates in 2019 and 2020. Research is very important to assess and improve the relationship between alumni characteristics and the field of work of graduates of study programs. The research used a descriptive approach design. The population is UNESA Electrical Engineering undergraduate graduates in 2019 and 2020 who have successfully filled out the online tracer study form. The number of samples as many as 139 respondents. The survey media uses university website links and google platform surveys which are distributed to each alumni within a period of 6 months. Data analysis used descriptive analysis method likert scale. Before the questionnaire was distributed to respondents, the validity of the questionnaire will be tested with Pearson correlation. The results of the tracer study with a Likert scale of 5 instrument questions by paying attention to the largest percentage. The results of the tracer study instrument for knowledge obtained by alumni from lectures have a major contribution to the world of work with a percentage of 73%. Internships have a big role in increasing world knowledge with a percentage of 63%, Practicum contributes a lot to the ability to work with a percentage of 67%, English has a share of 41% of language skills obtained during college, and communication skills obtained from lectures with a percentage of 70% which obtained during lectures, as well as the ability of alumni to solve problems in the world of work which is the largest percentage of 69%

Keywords—*Tracer Study, Likert Scale, Employability*

ID # 713

The Difference Between Level of Physical Activity, Nutritional Status, Sedentary Lifestyle in Students in Mountain and Coastal Areas

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Abstract—The purpose of this study was to determine differences in nutritional status, sedentary lifestyle and physical activity of junior high school students in mountainous and coastal areas. This study used a cross-sectional design with 97 junior high school students as research subjects were living in coastal areas (CoA) and mountainous areas (MoA). Anthropometric measurements of subjects were performed to determine nutritional status based on BMI. Filling out the questionnaire regarding the physical activity carried out was obtained directly from the IPAQ short form and Sedentary lifestyle instruments using the ASAQ instrument. Data were analyzed by descriptive test and Mann Whitney test. The results showed a normal BMI category with a mean MoA (19.35 ± 2.78) and CoA (20.25 ± 4.00). For PA also showed moderate results with a mean MoA (1970 ± 2633.16) and CoA (1388.12 ± 2290.20). while SL showed low mean results, namely MoA (187.85 ± 217.62) and CoA (121.12 ± 87.85). The results of the Mann Whitney test stated that the P value > 0.05 in BMI, PA and SL. The conclusion is that there is no significant difference level in nutritional status, physical activity and sedentary lifestyle between students who live in mountainous areas and coastal areas.

Keywords—Physical activity, sedentary, nutritional status, students, geographic

ARTICLE THAT WILL BE SUBMITTED TO AP

ID #689

Diversity of Cellulolytic Fungi Isolated in Fermetodege: Fermented Feed Mixed Water Hyacinth, Rice Bran, and Corn Cob

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Abstract— Fermetodege is an innovation of fermented feed with a mixture of water hyacinth, corn cobs, and rice bran which was developed in the manufacture of ruminant feed by utilizing the role of microbes. Fungal communities in the feed fermentation process have a role as microbes that can degrade materials containing cellulose to increase the palatability of feed. This study aims to determine the diversity of cellulolytic fungi isolated from fermetodege, namely ruminant fermented feed mixed of water hyacinth, rice bran, and corn cobs that influence during the fermentation process of feed ingredients. Fungi isolation was carried out using potato dextrose agar (PDA) media and screened by growing on carboxymethyl cellulose (CMC). Fungi isolates was analyzed base on Shannon- Wiener to get the diversity and evenness index, and the Simpson dominance index. There were nine cellulolytic fungi isolates with the Shannon-Wiener diversity index value in medium category 1.3423-1.8814 (1$\leq H' \leq 3$), the evenness index 0.8340-0.9668 and the Simpson dominance index in the low category (close to 0) namely 0.1608-0.3105. The results showed that the community structure of cellulolytic fungi in the fermetodege had moderate diversity with an even distribution without the dominance of certain species of cellulolytic fungi during fermentation. The diversity of fungi in fermetodege: fermented feed mixture of water hyacinth, rice bran, and corn cobs has a diversity of fungi that have the potential to be used in the fermentation process.

Keywords— Cellulolytic Fungi, Fermetodege, Diversity

Synthesis And Characterization Of Nanosilver Fluoride Hydroxyapatite As An Anti Cariogenic Agent

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Abstract— This research aimed to study the characterization of Nanosilver fluoride added with hydroxyapatite solution. This material was developed as an antibacterial agent and remineralizing agen in teeth, by using the properties of nanosilver, fluoride, and hydroxyapatite to overcome problems that commonly occur in the mouth and teeth, namely dental caries caused by bacteria *s. mutans*. The role of each component, namely, silver nanoparticles act as an antibacterial agent, fluoride ions are used to inhibit tooth demineralization and inhibit bacterial activity, and hydroxyapatite solution acts as the main source of calcium and phosphate ions to assist the remineralization process in teeth. The material was synthesized using three different concentration of AgNO₃ solution 3, 15, and 30 mM. The result is the FT-IR characterization of all samples, the O–H and N–H functional groups appeared only with slight differences in each wavenumber. While PSA indicates the greater the concentration of AgNO₃ used in NSF synthesis, the smaller the average particle size, with the results are NSF (3 mM) + hydroxyapatite had average particle size of 39.636 nm, NSF (15 mM) + hydroxyapatite has average particle size of 34.974 nm, and NSF 30 ppm + HAp with average particle size of 34.75 nm.

Keywords— Nanosilver, fluoride, hydroxyapatite solution, characterization, particle size.

Nutritional Analysis Of Non-Dairy Milk Almond-Tempeh As A Multivitamin Supplement For The Elderly

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Abstract—Increasing age in the elderly causes a decrease in physiological function and body resistance due to the degenerative process (aging). The elderly are susceptible to various diseases, both non-communicable diseases and infectious diseases. Intake of highly nutritious food and beverages is needed to strengthen the immune system of the elderly can be through the consumption of milk. Generally milk comes from cows called dairy milk. There is also milk derived from plants known as non- diary milk, such as almond milk and tempeh milk. This research was a quantitative descriptive study to analyzed the content of macro and micro nutritional values in almond-tempe milk products on the presentation of the daily nutritional adequacy rate for the elderly. Almond-tempe milk product is formulated from substitution of 25% almond milk and 75% tempeh milk with the addition of Moringa leaf extract, beetroot and broccoli as well as the addition of dates as a sugar substitute sweetener. The results of the nutritional value of almond-tempe milk per serving to the percentage of RDA for the elderly showed the energy content of almond-tempe milk had a percentage of 14.86-17.84 % per day for the elderly. The percentage of carbohydrate for the elderly was 13.05-15.62 % per day. The percentage of fat for the elderly was 23.45-26.06 % per day. The percentage of protein for the elderly was 7.15-7.89 % per day. The percentage of crude fiber for the elderly was 16.5- 18.75 % per day. The content of vitamin E was 0 ,65 mg had been able to meet the needs of vitamin E based on the percentage of RDA for the elderly per day. The content of folic acid (vitamin B9) was able to provided 95,25 % of folic acid percentage of RDA for the elderly per day.

Keywords—Almond, elderly, non-dairy milk, nutrition, recommended dietary allowance (RDA), and tempeh.

ID #718

**Antioxidant Activity from The Combination Ethanol Extract Secang Wood
(Caesalpinia sappan L.)
and Red Ginger Rhizome (Zingiber officinale Roxb.)**

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Abstract— The antioxidant activity test combination of the ethanol extract secang wood (*Caesalpinia sappan* L) and red ginger rhizome (*Zingiber officinale* Roxb.) was carried out using the DPPH method. Where the principle of the DPPH method is a decrease in the intensity of the absorbance value of the DPPH solution which is directly proportional to the increase in the concentration of antioxidant compounds called IC 50 or Concentration Inhibition 50. The results have shown that the value of the IC 50 or Inhibition Concentration 50 of the ethanol extract of Secang wood is 54,53 which is a strong antioxidant, the IC 50 or Inhibition Concentration 50 value from the ethanol extract of red ginger rhizome (*Zingiber officinale* Roxb.) is 197,74 which is a weak antioxidant, and the IC 50 or Inhibition Concentration 50 value combination of the ethanol extract Secang wood (*Caesalpinia sappan* L) and red ginger rhizome (*Zingiber officinale* Roxb.) for F1 with a ratio of 1:1 is 109,72 which is a moderate antioxidant, F2 with a ratio of 1:2 is 140,96 which is a moderate antioxidant and F3 with a ratio of 2:1 is 90,14 which is a strong antioxidant.

Keywords— antioxidant, DPPH, ethanol extract of secang wood, ethanol extract of red ginger rhizome

Dietary Pattern, Sedentary Lifestyle and Alertness on Breast Cancer among Adolescents

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Abstract— Breast cancer alertness among female adolescents was poor. The aim of this study was to analyze the relationship between dietary pattern sedentary lifestyle, dietary and breast cancer alertness among female adolescents. A cross-sectional approach with stratified random sampling was used. The sample population included 206 female adolescents aged 15-18 from the Vocational High School in Surabaya. The data collected using a validated self-administered questionnaire to measure breast cancer alertness, a Food Frequency Questionnaire (FFQ), and an Adolescent Sedentary Activity Questionnaire (ASAQ). The data analyzed using Chi-square, and Spearman's Rho tests. Breast cancer alertness among female adolescents was high (67,5%). Dietary patterns were shown to be significantly associated with breast cancer Alertness in female adolescents (OR=0,230; 95% CI: 0,081-0,651; p=0,007). However, no significant relationship between a sedentary lifestyle and breast cancer Alertness. The respondents were aware about breast cancer. Nevertheless, they had insufficient knowledge of its risk factors, signs, and symptoms. Lack of knowledge regarding its risk factors might be a reason for this sedentary lifestyle. These findings suggest that further research is necessary investigate over a time series.

Keywords— *breast cancer, dietary pattern, sedentary lifestyle, adolescence.*

**Effectiveness of Brem Production Process through the Application
of Brem Press Machine at Madiun Brem Smes**

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Abstract— Brem is one of the typical souvenirs of Madiun, made from fermented sticky rice essence and then molded into rectangular pieces. Based on the results of observations and interviews conducted by the team proposing this activity with partner SMEs groups, data was obtained that the problem that needed to be resolved in the implementation of this activity was the pressing process. This is because the process of pressing the raw material for brem (glutinous rice) to extract the juice is done manually by using simple tools such as square wooden placemats and levers made of bamboo. This causes the process of squeezing the raw material for brem (sticky rice) which is less hygienic and takes a relatively long time (30 minutes/5 kg). So far, this group of SMEs often has difficulty meeting market needs due to the limitations of inadequate production equipment. The methods used to achieve these objectives are by designing, manufacturing, assembly, function testing, handover, machine operation/maintenance training, mentoring and monitoring. Based on the application of the machine in partner SMEs, the result is that the process of pressing the raw material for Brem is faster. It takes 30 minutes to press 5 kg of original Brem raw material to 5 minutes. In addition, the quality of the pressing results becomes more hygienic because it uses foodgrade material (stainless steel). With this activity, it indirectly participates in the success of government programs in supporting the existence of SMEs in supporting the national economy.

Keywords— **the effectiveness of the production process; pressing machine; brem.**

Effect of Milk on Physico-Chemical and Functional of Herbal Jelly Drink

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Abstract—The COVID-19 outbreak has been declared a pandemic, a number of modern medical drugs of excellent quality, especially immunostimulants, are being and continue to be developed from secondary metabolites of herbal commodities. World Health Organization (W.H.O.) reports the dependence of 80% of the world's population on traditional therapies, some of them are ginger and temulawak. The effect of milk on the physico-chemical, functional properties and contamination of herbal jelly drink products based on ginger and temulawak has been studied. In general, the addition of milk in making ginger jelly drink has reduced water content, ash content, total sugar and pH. Conversely, the addition of milk has had an increased effect on protein, fat and syneresis. The addition of milk has also had an effect on decreasing levels of phenolic and flavonoids, decreasing antioxidant, antimicrobial *Salmonella Typhimurium* activity ginger jelly drink products and antimicrobial *Eschericia Coli* activity ginger jelly drink products. The addition of milk in the manufacture of temulawak jelly drink products resulted in a number of the same impacts, such as decreased water content, ash content and increased protein, fat, syneresis, decreased phenolic content, flavonoids, antioxidant, antimicrobial *Salmonella Typhimurium* activity temulawak jelly drink products and antimicrobial *Eschericia Coli* activity ginger jelly drink products, a number of differences in physico-chemical and functional properties, namely the increase in total sugar, and pH.

Keywords— *herbal, jelly, drink, ginger, temulawak*

Cypirus Rotundus L: Formulation And Evaluation Antiseptic Soap

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Abstract— Soap is a product that is one of the people's needs, used as a body cleansing agent, which is available in many forms and perfume that can be selected according to your needs. Natural soap products are rarely used in the market. Today's soap products use a lot of artificial or synthetic ingredients as their active ingredients, which have side effects on human skin, because they have the potential to cause irritation to users with sensitive skin. This study aims to describe the antiseptic soap formula and evaluate the antiseptic soap from *C. rotundus*. This research is an experimental research with quantitative descriptive research method. : 1) Determining and making an antiseptic soap formula with active ingredients of *C. rotundus* formulas X1, X2, X3, 2) Evaluating the antiseptic soap product of *C. rotundus*. The results of the study were 1) product evaluation based on the response descriptively X2 is the most superior in terms of color and texture, and X3 is superior in aroma, but the results of statistical analysis, X1, X2, and X3 have similarities in color and aroma. The only difference is the texture, namely X2 is superior 2) evaluation of laboratory test results on bacterial killing power, froth power and product pH stated that the three formulas of tuber-based soap nuts which are neither (X1) nor those that use olive oil (X2) or lime leaf powder (X3) are included in the category of antiseptic soap which has good bacteria killing power

Keywords— antiseptic soap, *C. Rotundus*, bar soap

ID # 660

The Effect of Financial Performance And Bank Size on Banking Bank Stock Prices

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Abstract-Banking as the main sector in the economy with an intermediary function. This study aims to determine the effect of financial performance and bank size on the stock price of banking banks in 2019-2020. The financial performance to be studied includes the profitability variable, liquidity variable and capital adequacy variable. The dependent variable is stock price. Research data in the form of secondary data, data of 86 data, obtained from 43 financial statements of banks in Indonesia for 2 years. Measurement of independent variables using ROA, LDR, CAR and bank size. The research method used is a quantitative approach. This study uses regression analysis. The results showed that the variables of capital adequacy and bank size had an effect on banking stock prices. While the profitability and liquidity variables have no effect on stock prices.

Keyword: *Profitability, Liquidity, Capital Adequacy, Bank Size, Stock Price*

ID # 659

Building Creative Industries by Bringing Local Potential to Develop Village Community of Economic Independence

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Abstract-Currently, rural communities need economic independence. By having economic independence, rural communities can improve their standard of living in order to create a prosperous society. With the potential of natural resources as a catfish center village that has not been maximized, the creative industry is an alternative that can help increase the income of the people of Tawangrejo Village, Turi District, Lamongan Regency. Therefore, creative industry training is held in order to help improve people's living standards. The methodology is qualitative. In this activity, the village community was given training on three ways of processing catfish into processed catfish floss, catfish sticks and catfish crackers. In addition, village communities were also given training on marketing strategies through digital media and product branding training. Through these trainings, the production and marketing of processed catfish products is expected to be carried out in a sustainable manner and can penetrate the international market share so that the potential of Tawangrejo Village, Turi District, Lamongan Regency as a catfish center village can be optimized and the welfare and standard of living of the community can increase significantly.

Keywords: creative industry, catfish, village development.

ID # 646

A Prototype Of Digital Sharia Business Incubator to Develop Rural Economy

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Abstract— There are a number of studies which state that the development of Micro, Small, and Medium Enterprises (MSMEs) in rural areas can reduce poverty. The existence of MSME development can provide access to the poor in rural areas so that they can be involved in productive business activities and promote entrepreneurship, especially in disadvantaged areas. Baiul Maal wattamwiil (BMT) as a microfinance institution has the potential to develop small industry in the village, but BMT only focuses on financing distribution, so there are still many small industry business actors who lack knowledge about marketing. For this reason, Ryad.id's role is needed as a sharia business incubation platform that can provide business consulting services, marketing training, and monitoring BMT customers who have businesses.

Keywords— sharia business incubator, medium and small enterprises, baitulmaal wattamwiil

ID # 614

**Pre-Posttest: Diagnosis of the Achievement Level on Sustainable Business
Workshop**

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Abstract—There are various ways to measure an achievement level on the activity to develop a sustainable business. This study is used to serve as a reference in designing appropriate developmental programs for small business actors. This study aims to analyze the effectiveness of the pre-posttest technique in diagnosing the achievement level of the workshop on sustainable culinary business. The population was 15 culinary SMEs in Surabaya who participated in a sustainable business workshop. The pre-posttest was evaluated using 10 indicators (by selecting correct/B and incorrect/S) to measure the participants' understanding. Data were analyzed using the t-test technique. Results show that the pre-posttest technique was unable to measure the achievement level of the workshop on the sustainable culinary business. Thus, the pre-posttest technique will not appropriately be used to measure the achievement level of other similar activities/programs to develop a sustainable business.

Keywords—*pre-posttest, sustainable business, achievement level, SMEs culinary*

ID # 717

Building family resilience through philanthropy and populist policies to cope the covid-19 pandemic in Indonesia

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Abstract— Family resilience is an essential factor to cope with the Covid-19 pandemi. The aim of this study is to identify various efforts, from the state to the family, as the smallest unit in society, to build their strength during the crisis. This research were carried out through two methods, survey and discourse anlysis. The results explain that building family resilience during the pandemic can be realized only when relationship as social capital developed by the society and the state in the cultural and structural dimensions. The cultural dimension is characterized by the emergence instituationalized social philanthropyh. People perceived that positive acts can be more meaningful when it becomes formal and institutional, furthermore it creates a mutually beneficial exchange in social environment, This perspective is reflected by religious and social philanthropy, as well as personal and communal philanthropy. Meanwhile, the structural dimension is reflected by populist policies were issued by local, provincial, and central government policies.

Keywords—*philanthropy, populist policies, social capital, family resilience, covid-19*

ID # 702

Identification Of Student (Santri) Problems On Islamic Boarding School (Pondok Pesantren)

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Abstract—This research is motivated by the various problems experienced by students on Pondok Pesantren. With the number of students reaching thousands with an unbalanced number of caregivers, the problem is not handled optimally. The policy of the Islamic boarding school regarding the curriculum used makes each Islamic boarding school different. Pesantren as an educational institution has one characteristic that distinguishes it from other educational institutions. The values of Islamic boarding schools that frame the life of social interaction between kiai, ustadz and santri are the distinguishing characteristics in question. So the problems experienced by students will be different. This study aims to identify the problems experienced by students both in personal, learning, social, and career problems so that it is hoped that they will be able to help plan solutions to the problems faced. This study uses a literature study method that analyzes various reference sources. The data analysis technique used is content analysis, which is a technique used to analyze and understand the text. The results of this study are to explain the various problems faced by students in Islamic boarding schools, their characteristics.

Keywords—Student Problems, Islamic Boarding School

ID # 727

Ethno-pedagogy of Parents in Enforcement of Health Protocols to Change Students' Social Behavior

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Abstract— Implementation of various laws and regulations regarding enforcement of the protocols of health to be important dimensions. Enforcement protocol health contains a number of values that are internalized into the binding value of social behavior. The substance of this research is how the parents of the status of civil servants constructing protocols of health in building the social behavior of the child. The goal is to determine the urgency and the source of value ethno-pedagogy parents do. The design used was a case study. Subjects were parents of students in SMPN 6 Surabaya, who work as civil servants. Data collection techniques used are questionnaires. The technique of data analysis using the technique of percentage. The results of this study show, First ethno-pedagogy enforcement protocol health is influenced by: (1) knowledge, in this case the internalization of a variety of rules of government policies that should be implemented; (2) experience, is obtained from the exposed person; (3) the value of the religious, socio-cultural, especially related to the value of discipline, away from the crowd and reduce the mobility of the; and (4) environment, a space where enforcement was done at home and office. Second, the legislation on the enforcement of the protocol of the health and value norms, including religious values, as a source of value ethno-pedagogy. This study provides recommendations that the internalization of the value of the various laws and regulations enforcement protocol health needs space, media and educational strategies new habits through education in the family.

Keywords- *Health Protocol, Parents, Social Behavior Ethno-pedagogy*

ID # 706

Women Leadership Based on Local Wisdom

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Abstract— The struggle of women to occupy the position of women is not as easy as men. The totality of domestic and public roles that are carried out simultaneously by women leads to a dual role that must be played. The perpetuation of the wrong perception of the division of roles between men and women further exacerbates the situation. The patriarchal culture is also a measure of the inappropriateness of women to occupy leadership positions. This misunderstanding does not only come from men and society, even many women are not aware of the roles they carry out. In writing and analyzing this article, the author uses a literature review approach. The author tries to analyze the critique of the role of women leaders in utilizing local wisdom.

The study of gender and women is still a study that is quite controversial in some circles. Likewise, the study of women leaders in villages has become a topic of pro and contra in many researches. Village leaders as the front line of government in establishing direct relationships with the people, so the leaders should learn and master every culture as a source of local wisdom. Local culture, values, and norms become a social capital for women leaders in determining the good leadership style so the leadership success can be realized.

Keywords—*local wisdom, indigenous leadership, women leader, leadership*

ID # 651

**The Practice of Identity Politics Carried Out
By Ex-Lepers**

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Abstract—Negative stigma on ex-lepers appears along with the constructed stigma in a society that considers leprosy is contagious, incurable, hereditary disease, curse of God, unclean, and cause disability. This constructed stigma affects to ex-lepers to gain access to public services, such as health, education, and employment. Low accessibility to public services makes the ex-lepers as subaltern groups in the social structure. Subaltern groups characterized by oppression and discrimination to be the marginalized. Subaltern closely related to power of relations and politics, where the minority would be marginalized from the strong influence of society. These conditions affect them to have a turning point to fight in order to seek their obsession to be recognized and equalized through identity politics. Identity politics has a tendency to put the interests of the members of the group in the front because they have the same identity or characteristics. Various forms of identity politics practice is realized through morality resistance and radical resistance. Subaltern utilizes speaking for as a representative and liaison for the group aspirations. The practice of identity politics is carried out by ex-lepers in Sumberglagah hamlet as tangible evidence in order to create equality of social representation.

Keywords—*identity politics, subaltern, speaking for, resistance, equality*

ID # 601

Street Children Survival Strategy Against Violence: Case Study on the Surabaya Ketintang Railway

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Abstract-Development in the economic sector as well as science and technology in Surabaya resulted in very rapid progress. However, development also has an adverse impact on the community, including the emergence of social inequality, both at the national and regional levels. This social gap often raises social problems, including street children and violence. This study aims to determine the forms of violence experienced by street children who do not occupy a shelter in the city of Surabaya, and the survival strategy of street children who do not occupy a shelter against violence in the city of Surabaya. This study uses a qualitative approach and takes the location of the gathering of street girls along the railroad tracks in the Ketintang area, Surabaya. According to E. Lawson, there are four forms of violence (abuse) against children and it occurs in the Ketintang railroad area, namely emotional abuse (emotional abuse), verbal abuse (verbal abuse), physical abuse (physical abuse), and violence (sexual abuse).

Keywords : Survival strategy, Children Street, Violence

ID # 571

**Designing and Fabrication of Integrated Soybean Machine (3 In 1 Process)
to Optimize
of Tempe Producers Productivity**

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Abstract—The aim to this study is to optimize the productivity of tempe producers. Optimization is carried out through engineering research of the soybean machine 3 IN 1 process production capacity of 250 kg / hour to solve the problem of low productivity of stripping, solving and separating the soybean husk. To guarantee the product's hygiene, the machine is made from food grade material, namely stainless steel 304, to guarantee the effectiveness of production, the machine is designed with a production capacity of 250 kg / hr, to improve efficiency, the machine is designed using a low power electric mechanical motor by 350 watt and a transmission system using a V-belt. Engineering methods are carried out through the stages of design, manufacturing, assembly, function testing, analysis, discussion and conclusions. Soybean machines designed are engine dimensions (850 x 700 x 1200) mm and 350 watt electric motor. The results shows production capacity of 250 kg / hour, hopper inlet power holds 5 kg., accuracy of breaking soybean shells $\pm 95\%$ of the total capacity of the engine, and all engine components that come in contact with soy are made from food grade materials. This 3 in 1 Soybean Machine can increase production capacity 10 times compared to peeling, crushing and separating the soybean husk separately. Machine production capacity can be increased by increasing the size of the machine dimensions.

Keywords: soybean machine, food grade, hygienic

Effectiveness of Brem Production Process Through the Application Of Brem Press Machine at Madiun Brem Smes

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Abstract— Brem is one of the typical souvenirs of Madiun, made from fermented sticky rice essence and then molded into rectangular pieces. Based on the results of observations and interviews conducted by the team proposing this activity with partner SMEs groups, data was obtained that the problem that needed to be resolved in the implementation of this activity was the pressing process. This is because the process of pressing the raw material for brem (glutinous rice) to extract the juice is done manually by using simple tools such as square wooden placemats and levers made of bamboo. This causes the process of squeezing the raw material for brem (sticky rice) which is less hygienic and takes a relatively long time (30 minutes/5 kg). So far, this group of SMEs often has difficulty meeting market needs due to the limitations of inadequate production equipment. The methods used to achieve these objectives are by designing, manufacturing, assembly, function testing, handover, machine operation/maintenance training, mentoring and monitoring. Based on the application of the machine in partner SMEs, the result is that the process of pressing the raw material for Brem is faster. It takes 30 minutes to press 5 kg of original Brem raw material to 5 minutes. In addition, the quality of the pressing results becomes more hygienic because it uses foodgrade material (stainless steel). With this activity, it indirectly participates in the success of government programs in supporting the existence of SMEs in supporting the national economy.

Keywords— the effectiveness of the production process; pressing machine; brem

ID # 635

Making Instant Spiced Coffee Drink to Prevent Covid-19

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Abstract— Spicy drinks are derived from types of spices such as turmeric, ginger, kunci, kencur, temulawak, galangal, and so on have been widely known by the Indonesian people as herbs and fresh drinks. However, there are still many who do not like this type of drink because of the distinctive and sharp flavor and taste of the spices. In order to make variations of spiced drinks so that they can be more accepted by the public, practical, and have a higher selling value, innovations can be made by adding ingredients that can improve the taste, namely coffee and creamer so that the processed product is called "Instant Spiced Coffee". The purpose of this research is to find out: 1) the level of preference of the panelists towards the finished instant spiced coffee which includes texture, color, flavor, and taste; and 2) nutritional content of instant spiced coffee per 100 grams. The type of research is experimental, data collection using observation and preference testing techniques. The analysis technique for organoleptic test results is quantitative descriptive to determine nutritional content based on laboratory tests which include Energy, Carbohydrates, Fat, Calcium, Protein, Vitamin A, Vitamin C, and Antioxidants, as well as to calculate the selling price using the standard cost method. The results showed: 1) the panelists' preference for color was 93.335 likes, 93.33% likes flavour, 93.33% likes taste, 86.67% viscosity, and 93.33% solubility; and 2) the nutritional content per 100 grams is Energy: 208.50 kcal, Carbohydrates 44.80%, Fat 2.15%, Calcium 89.50 mg, Protein 1.38%, Vitamin A 42.50 grams, Vitamin C 38, 10 grams, and Antioxidants 198.20 mek.

Keywords— *Instant Drinks, Spices, Coffee, Creamer, Covid-19*

ID # 673

Development of Little Cakes Application Based on Android as Lunch Box Cake Sales

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Abstract— Information technology and the internet today, which continues to develop, have a considerable influence on the sales of a product. It also affects the sales of cakes, including the Lunch Box Cake. Cake sellers are now starting to switch to marketing their products through online media to increase sales. This study aims to develop an android-based application that provides information about products, product prices, and product details to help increase sales of Lunch Box Cake. The method used in application development is a waterfall which consists of (1) Analysis, (2) System design, (3) Coding, (4) Testing. This research will produce an android-based application as a sales medium for Lunch Box Cake that is easily accessible by a smartphone and can make it easier for customers to find information about products, product prices, and product details.

Keywords— *Cake Sales, Android, Sales App, Waterfall.*

ID # 679

Utilization of The “BUKAOLSHOP” Application As A Sales Media

MOCHICECREAM

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Abstract—At this time the role of technology is very important as a supporter of activities in various fields, one of which is in the industrial sector, especially in buying and selling activities. MochIcecream is a home-based business that requires advanced technology at this time. Therefore, MochIcecream utilizes the BukaOlshop application to assist in selling its products. The purpose of this study is to identify features in the BukaOlshop application that can support buying and selling activities for MochIcecream products. The method used in this study is the waterfall method, including needs analysis, system design, system implementation, system testing, and system maintenance. This research produces features in the BukaOlshop application that can be used to support buying and selling activities for MochIcecream products. So it can be concluded that the BukaOlshop application can help in selling products from MochIcecream

Keywords—*applications, BukaOlshop, waterfall method*

ID # 687

Application of Android-Based Mobile E-Commerce Applications In

Ornamental Plants

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Abstract— During the pandemic, various cities in Indonesia experienced an increasing trend of growing ornamental plants in various circles and not a few were using ornamental plants to increase their income, but difficulties in reaching market segmentation caused the ornamental plant business to develop a little slower. E-Commerce is one of the business media to expand marketing reach and innovate in the business world using adequate technology. The aims of this study are (1) to utilize an Android-based E-Commerce mobile application as a medium to expand the marketing of ornamental plant businesses, and (2) to determine the effect of e-commerce on products and consumer trust. The method of developing an Android-based E-Commerce mobile application using ADDIE, consists of (1) Analysis, (2) Design, (3) Development, (4) Implementation, (5) Evaluation. This research produces an Android-based E-Commerce mobile application (AdmireYou) which contains various kinds of ornamental plants, and ornamental plant shelves and a survey of the effectiveness of the Android-based E-Commerce mobile application. E-Commerce media is very useful for the founders of ornamental plant businesses who make the business grow more rapidly.

Keywords— E-Commerce, AdmireYou, ADDIE.

Development of the Omron CP1E PLC to Support PLC Practicum

Activities in the Control System Engineering Laboratory

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Abstract— Programmable Logic Control (PLC) is a microprocessor used for automation in industrial processes such as control and supervision. For this reason, PLC courses are important to be given to students as a preparation for entering the industrial world. PLC subject must be supported by a trainer who can represent the original form of PLC equipment in the Industry. The Department of Electrical Engineering (TE) at the State University of Surabaya (UNESA) has a PLC subject as one of the mandatory subject that must be taken. However, Department of Electrical Engineering UNESA still uses the Omron C28H PLC as a media trainer. To increase the effectiveness of learning in the classroom, it is necessary to optimize the Omron CP1E PLC instead of C28H. This article will describe the results of the development of the Omron CP1E PLC at the Control Engineering Laboratory of the UNESA TE Department. The results showed that the development of the Omron CP1E PLC trainer needs to be done because it is more efficient than the C28H PLC.

Keywords— *PLC Omron C28H, PLC Omron CP1E, Practicum Quality*

ID # 585

A Literature Review of Labor Market Profile of Vocational High School Graduates In Indonesia

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Abstract - Employment is an essential issue in business and economic activities in Indonesia. A labour force, working population, and unemployment rate, which are the capital for the driving wheel of development. With have the knowledge and skills, vocational high school (VHS) graduates to enter the workforce after completing their education immediately. However, in reality, the open unemployment rate of vocational high school graduates still shows the highest number compared to other education levels. This literature review discusses employment in Indonesia, especially for vocational high school graduates, utilizing an employee survey conducted by the Central Bureau of Statistics. This research aims to describe and evaluate Indonesia's employment, especially in the population who have completed vocational high school. The contribution of study to the parties involved in making recommendations in formulating policies to improve the quality of vocational high school graduates. The result of research, by gender, the number of unemployed male graduates is almost twice as high as that of women. Employment opportunities which are still limited and unable to accommodate all graduates, are also thought to be one indicator of the cause of the high rate of graduate unemployment. Based on education level, workers with low education do not choose jobs and tend to accept available jobs. In the informal sector, the percentage of vocational high school graduates who work is much smaller. Male workers tend to receive higher salaries than the wages received by female workers.

Keywords - *central bureau of statistics, employment, vocational high school*

ID # 714

**Pilgrims' Spiritual Practices at the Tomb of
Sunan Giri During The Covid Pandemic**

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Abstract— Sunan Giri is one of *Walisongo* in Java who was buried in the hills of Giri. *Walisongo* is the name of nine *ulama'* who spread Islam in Indonesia in the 7th century AD. *Walisongo* is believed to have spiritual virtues so that it becomes an attraction for spiritual pilgrimages for Indonesian Muslims to receive blessings from God. This study aimed to describe the characteristics of the tomb of Sunan Giri and describe the pilgrims' spiritual practices at the tomb. This study used qualitative research with historical and phenomenological approaches. Data were collected by using observation and documentation. The results showed that the tomb of Sunan Giri was at the top of the hill as a symbol of the high position of *Wali* in front of Allah. The shape of the tomb and its ornaments were a combination of Hindu-Islamic elements. Another finding showed that there were three types of pilgrims namely individual, individual-*lelaki* (*spiritual behavior*), and congregational. The activities carried out were generally reading *tawassul*, *S. Yasin*, *tahil*, and prayer. The purpose of the pilgrims was to pray closer to God, get blessings, and get *wasilah*/intermediary so that their prayers and wishes were granted by God. Pilgrimage was a medium for fulfilling needs, both material and spiritual. The findings of this study were the continuity of Hindu-Islamic traditions in the form of *Wali's* tomb and the presence of material and spiritual dimensions in the pilgrimage tradition.

Keywords: tomb, spiritual, pilgrimage, blessing

ID # 623

Employability Tracer Study of Cosmetology Education Graduates at the Universitas Negeri Surabaya

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Abstract - This research aims to define the employability of cosmetology education graduates at the Universitas Negeri Surabaya. The researchers used the survey method. A total of 87.37% or 173 of the 198 graduates in the cosmetology education study program from 2018-2020 participated in this research. The instrument that used by the researcher for data collection is the tracer instrument for the study of faculties and study programs. The findings reveal that 139 out of 173 or 80.34% of the respondents are already working. In addition, 121 out of 139 or 80.67% felt that the first job was related and in line with the program the respondent took in college. It took 1 year to less than 2 years for 20.12% of respondents to get their first job. It took 1-6 months for 26.62% of respondents to find their first job. And when they were asked, whether the curriculum used by the university was relevant or not to their first job?, most of respondents 79.14% stated that the curriculum of the study program held at the university was relevant. Recommendations to improve the employability of the graduates produced by universities include periodical review of the curriculum by academic administrators, alumni and representatives of industry to confirm that graduates have capability with the necessary knowledge and skills required in the industry.

Keywords: *Cosmetology education, Employability tracer study, Graduates, Universitas Negeri Surabaya.*

ID # 629

The Partnership Model for The Diploma of Fashion Designer and The Fashion Industry

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Abstract: This study aims to describe the partnership model for diploma of fashion design and fashion industry, which has already been implemented and describe the partnership model needed. Data is collected by interview, observation and documentation. The results show that the partnership between the diploma of fashion design and the fashion industry is mutually beneficial in terms of providing labour for the fashion industry and real work practices for the fashion design diploma. The partnership model that needed is persuading to practice of fashion design and clothing production carried out in the industry, with the lecture model carried out in the one-month study program and in the one-month industry, learning outcomes are assessed by the industry. Internships for lecturers are held every year for one month. Field work practices include design, clothing production, pattern maker, and business management. Student self-development ahead of graduation, following fashion activities in the fashion community.

Keywords - *central bureau of statistics, employment, vocational high school*

ID # 599

**The effect of teaching materials,
implementation, evaluation, and problems on student
motivation in online learning during the COVID-19
Pandemic**

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Abstract— The COVID-19 pandemic has shifted from classroom and face-to-face experiences to online learning. Online learning poses challenges for students and the root of the problem lies in their internal motivation. To analyze students' learning motivation during online learning, this study examines the effect of teaching materials, implementation, evaluation, and constraints on student motivation. This research is an ex post facto study where multiple regression is used to analyze the data. There are 63 respondents involved in this research, and they are students of the undergraduate program of building construction education. Data collection using a questionnaire. The results of this study are as follows. (1) There is a simultaneous influence between teaching materials, implementation, evaluation, and constraints on student learning motivation during online learning during the COVID-19 Pandemic, (2) Partially each variable that has a significant effect on learning motivation is teaching materials and implementation of learning, while evaluation and constraints have no significant effect

Keywords— *Online learning, Learning motivation, COVID-19*

Development of OBE-Based Learning Evaluation Model in Mechanical Engineering Education Program

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Abstract—This study aims to determine the appropriate OBE-based learning evaluation model to be applied to Mechanical Engineering Education undergraduate at State University of Surabaya (S1 PTM Unesa) The research was carried out qualitatively using a development model based on a 4D model consisting of Define, Design, Development and Dissemination developed by Thiagarajan, with a limit of 3 stages, namely the Define, Design and Development stages. This experiment make FGD data collection method. the results of this study obtained from learning evaluation document sheets that have been made by researchers, this results based on the analysis of the learning outcomes of the Program Learning Outcome (PLO) for the subject. OBE-based learning evaluation research is known to be able to improve the quality of learning, improve the curriculum, which leads to improving the quality of graduates who are qualified and competent in the field of mechanical engineering.

Keywords— *learning evaluation model, OBE, 4D Model, FGD*

ID # 633

Effectiveness of Brem Production Process Through the Application Of Brem Press Machine At Madiun Brem Smes

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Abstract— Brem is one of the typical souvenirs of Madiun, made from fermented sticky rice essence and then molded into rectangular pieces. Based on the results of observations and interviews conducted by the team proposing this activity with partner SMEs groups, data was obtained that the problem that needed to be resolved in the implementation of this activity was the pressing process. This is because the process of pressing the raw material for brem (glutinous rice) to extract the juice is done manually by using simple tools such as square wooden placemats and levers made of bamboo. This causes the process of squeezing the raw material for brem (sticky rice) which is less hygienic and takes a relatively long time (30 minutes/5 kg). So far, this group of SMEs often has difficulty meeting market needs due to the limitations of inadequate production equipment. The methods used to achieve these objectives are by designing, manufacturing, assembly, function testing, handover, machine operation/maintenance training, mentoring and monitoring. Based on the application of the machine in partner SMEs, the result is that the process of pressing the raw material for Brem is faster. It takes 30 minutes to press 5 kg of original Brem raw material to 5 minutes. In addition, the quality of the pressing results becomes more hygienic because it uses foodgrade material (stainless steel). With this activity, it indirectly participates in the success of government programs in supporting the existence of SMEs in supporting the national economy.

Keywords— *the effectiveness of the production process; pressing machine; brem.*

ID # 578

An Electronic Court In The Perspective Criminal Law Reform

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Abstract- The Corona Virus Disease-2019 (Covid-19) pandemic that hit Indonesia and the world demands changes in behavior and habits in life. The education, economic, social, and even legal sectors are affected to immediately implement new patterns in carrying out their activities. Including in the court process which was originally conducted face to face or presenting all parties in the same room, efforts must be made to implement a new pattern in order to minimize the spread of Covid-19. Electronic court has emerged as a new concept in the examination of criminal cases. With the pattern of examinations carried out in separate rooms that are connected through the media with information technology facilities, whose implementation mechanism is regulated by taking into account the principles of criminal procedural law, it is hoped that it can fulfill a sense of justice for litigants. In this study, we will examine how an electronic court can create a modern criminal justice system in accordance with the concept of reforming the national criminal law. This research is a normative legal research using a conceptual approach and legislation. From this research, it can be seen that the electronic court is not appropriate if it is said to be a momentary reaction due to the pandemic but is a challenge of globalization for the future of Indonesian criminal law where criminal law reform must always be responsive to the development of science and technology in order to increase the effectiveness of its functions in society, namely law enforcement.

Keywords- *Covid-19, Electonic Court, Criminal Law Reform.*

ID # 624

The Favorite Vocabulary in Elementary School Student Writing of 750 Words

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Abstract—Writing is one manifestation of literacy competencies. The frequently used vocabulary in writing/reading is called favorite vocabulary. This research aims to produce (1) identification of favorite vocabulary of elementary-school students, (2) comparison of vocabulary between early grade elementary-school and the advanced. Documentation and comparison method are used for writings by 305 elementary school students, consisting of 75 early grade classes and 230 advanced classes. A collection of these writings was collected in a book entitled "My Book and My World." with the theme: Me and Books, (2) Books, Grandma/Grandfather, and my family, (3) Books, and COVID-19. Participants came from various regions in Indonesia. All participants used 750 words as the basis for writing length. To determine the favorite vocabulary, we used the descriptive-quantitative method. The results showed that the favorite vocabularies of early and advanced grade students were the same, namely in Bahasa "*covid, mama, corona masker, house, papa, pandemi*". From the comparison of early grade and advanced, it appeared that there was an increase of 1,093 entries from the initial class to the advanced class. On the other hand, "*mama*" vocabulary is used more than "*papa*." It shows that "*mama*" is closer in the world of children than "*papa*." This article is expected to be useful for learning in elementary school.

Keywords—*favorite vocabulary, writing, elementary school, 750 words.*

ID # 602

An Electronic Court In The Perspective Criminal Law Reform

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Abstract- The Corona Virus Disease-2019 (Covid-19) pandemic that hit Indonesia and the world demands changes in behavior and habits in life. The education, economic, social, and even legal sectors are affected to immediately implement new patterns in carrying out their activities. Including in the court process which was originally conducted face to face or presenting all parties in the same room, efforts must be made to implement a new pattern in order to minimize the spread of Covid-19. Electronic court has emerged as a new concept in the examination of criminal cases. With the pattern of examinations carried out in separate rooms that are connected through the media with information technology facilities, whose implementation mechanism is regulated by taking into account the principles of criminal procedural law, it is hoped that it can fulfill a sense of justice for litigants. In this study, we will examine how an electronic court can create a modern criminal justice system in accordance with the concept of reforming the national criminal law. This research is a normative legal research using a conceptual approach and legislation. From this research, it can be seen that the electronic court is not appropriate if it is said to be a momentary reaction due to the pandemic but is a challenge of globalization for the future of Indonesian criminal law where criminal law reform must always be responsive to the development of science and technology in order to increase the effectiveness of its functions in society, namely law enforcement.

Keywords- *Covid-19, Electonic Court, Criminal Law Reform.*

ID # 710

Literacy Gender in Elementary School Education

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Abstract—There is a lot of research on gender understanding in schools which shows that there are still teachers who show discriminatory values, attitudes, and behaviors towards their students. The teacher's lack of awareness and understanding of the correct gender concept is one of the causes of this bias condition. This is exacerbated when the teachers do not realize that the behaviors that are shown are gender biased. The teachers assume that the patterns of attitudes and behavior that are usually carried out so far are part of the community's culture which is considered correct. The paper is written using the literature review method and a comparative study approach. This paper describes the literacy of gender and gender-based education in Indonesia-Malaysia. In Indonesia and Malaysia, the dominance of women in the public area, especially in the field of education, does not seem to have had a significant impact on women's dominance in decision-making and leadership. Both countries are still dominated by a patriarchal culture which considers that the role of leaders and decision makers is an area of the men's role.

Keywords—*gender mainstreaming, gender literacy, educators' gender perspective, comparative study indonesia-malaysia*

ID # 709

Financial Literacy Versus Digital Literacy As A Predictor Of Student Entrepreneurs Behavior in the Era Of The Covid 19 Pandemic

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Abstract- This study aims to analyze the entrepreneurial behavior of students who are influenced by financial literacy and digital literacy. The population used in this study were young entrepreneurs at the Faculty of Economics, Unesa, amounting to 400 students. Sampling using purposive sampling by determining the number of samples using the Slovin formula with a total of 200 respondents. The instruments used in early research are questionnaires and questionnaires. The technique used is analysis of reliability test, validity test, classical assumption test and multiple regression test. The results showed that financial literacy and digital literacy had an effect on student entrepreneurship behavior during the covid 19 pandemic.

Keywords—*Financial Literacy, Digital Financial, Entrepreneurial Behavior*

ID # 653

Improving EFL Students' Higher Order Thinking Skills Using Reading Strategies

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Abstract— In 21st century, the learners must master higher order thinking skills (HOTS) to solve problems in their life easily. This study aims to investigate whether reading strategies can increase students' higher order thinking skills for students. It was an experimental study that was held in MAN 1 Mojokerto, East Java Indonesia. The participants were students in eleventh graders that was divided into experimental and control group. Both of the group were given pre-test and post-test to know the different result of their achievement after the experimental group was conducted treatment. The data was analyzed using SPSS. The result showed that there was a significant different mean score of post-tests between experimental group and control group. The mean score of experimental groups was higher than control group which show .000 level. To sum up, reading strategies can improve students' higher order thinking skills. It is recommended EFL teachers should apply many kinds of strategies in learning process to motivate and engage in studying English.

Keywords—*Reading strategies, higher order thinking skills, improve, English*

ID # 726

Self-Effication In Interpreting As a Teacher In Indonesia

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Abstract-This study aims to determine the effect of perceptions of the teaching profession, self-efficacy and learning management programs on the interests of becoming a teacher. The purpose of this study is to analyze the effect of perceptions of the teaching profession, self-efficacy and learning management towards the interest in becoming a teacher. Students who are interested in becoming teachers, especially in the field of accounting are still few. One of the factors influencing students' interest to become accounting teachers is perceptions about the teaching profession, self-efficacy and field experience programs. The interest in becoming a teacher must also have a high sense of self-efficacy, they will try harder to complete tasks, face challenges faced and achieve success. This research is a quantitative study with data collection techniques using questionnaires, and documentation. The sample in this study used a saturated sample. Data analysis techniques in this study used multiple linear regression analysis. The results of the study are perceptions of the teaching profession, self-efficacy and learning management programs simultaneously influence the interest in becoming a teacher.

Keywords: Perception of the teaching profession, Self-Efficacy, learning management, Interest in becoming a teacher, Accounting.

ID #626

Upgrading Counselor's Critical Thinking Skills for High School Counselors in Surabaya to Improve Student Problem Solving Readiness during The Pandemic

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Abstract— The optimization of counselors in high school during the pandemic must be carried out properly based on the facts that students experience many problems both academic and non-academic during online learning. the transition process from face-to-face learning to online learning requires students to adapt quickly to the situation. Differences in student adaptability create problems for certain students, such as lack of motivation to attend classes which results in decreased academic achievement. In dealing with this problem, counselors are required to have critical thinking skills so that they can analyze the root of the problem and provide appropriate alternative solutions for students as their counselees. Therefore, workshop is carried out with the aim of improving the critical thinking skills of counselors in Surabaya with the hope that they will be able to optimize their role in overcoming student problems. The workshop was followed by a focus group discussion to directly practice critical thinking skills in mapping problems and solutions for students.

Keywords—*critical thinking, counseling, online learning*

ID #668

Music Scoring Training in the Pare String Ensemble Music Community in Kediri - East Java

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Abstract – Sendratasik Department, Language and Art Faculty, Universitas Negeri Surabaya, in order to carry out the Tri Dharma of University and efforts to grow with character, it will carry out various activities that are manifested in the form of "Music Scoring Training in the Pare String Ensemble Music Community in Kediri". This training aims to introduce and implement digital literacy in the field of Music, namely about music scoring using the Sibelius software. This Sibelius software is later expected to be the main provision for each individual member of the Pare String Ensemble to develop the expected repertoire, increase professionalism in work (especially in operating the Music Learning Management System), and can become a superior selling power in the local, regional, even nationally. The activity of training the operation of the Sibelius software to the Pare String Ensemble community in Kediri, East Java, clearly showed significant results, where the soft skills of members in optimizing music technology devices were facilitated, which directly increased their productivity in carrying out musical activities, starting from arranging songs, to creating new musical works. With the increase in the skills of these members, it is also an investment for the Pare String Ensemble community institutionally, where the community has competitive offers or high selling power to music services users. In the end, the goal of the Pare String Ensemble community, Kediri – East Java to develop the existence and performance of their community, was achieved.

Keywords - *Music Scoring, training, musician, ensemble*

ID #719

Utilization of QuizWhizzer Educational Game Applications as Learning Evaluation Media

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Abstract— In order to support and facilitate online learning and evaluation activities in distance learning activities during this pandemic, relevant media are needed. Therefore educators must be ready to use educational and innovative learning media. Along with the rapid development of technology, many website-based applications provide easy means in the learning evaluation process, one of which is the QuizWhizzer educational game application. But unfortunately with the various facilities that QuizWhizzer has, it is less known and used by teachers, including teachers who are members of the German MGMP in Surabaya. This was revealed from the results of the questionnaire distributed. Based on the results of interviews with teachers who are members of the Surabaya German MGMP, they are not familiar with and use this application. Therefore, practical solutions are needed that are able to assist teachers in presenting learning materials and making evaluations of interesting, interactive, and technology-based learning through training and mentoring. This activity aims to provide knowledge and equip educators to be skilled in using online-based learning media. The focus of this activity is the use of the QuizWhizzer educational game application in making interactive and fun learning evaluations for students. The implementation method is carried out online which is divided into planning, implementation and evaluation stages. The subjects of this training are teachers who are members of the Surabaya German MGMP. An indicator of success is obtained when more than 85% of participants can create an account and are able to collect assignments to create interactive quizzes with the QuizWhizzer application. Based on the results of the responses, participants thought that this activity was very useful and was able to develop the QuizWhizzer application for making daily, formative and summative questions for their students.

Keywords—*media, quizwhizzer, learning evaluation*

ID #728

Hoerbuch–Deutsch: Maerchen on Youtube as a additional material for listening skills for students of the German Literature Study Program

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Abstract—As is known, the Covid–19 pandemic has changed the way of teaching and learning. In learning listening skills, many teachers or lecturers use social media such as YouTube. This study discusses the exercises that can develop listening skills teaching materials obtained from audiobooks (Hoerbuch–Deutsch) on YouTube. The title of the fairy tale of the audio text in the audiobook is Rotkaeppchen. Some exercises can be given to students before, during, and after listening. The six forms of exercise being tested are: Associograms, Discussion of the topic, Multiple–choice, True or false, W-questions about the text, Which statements are factual? To find out students’ interest in the six forms of exercise given, students were given a questionnaire. The questionnaire was filled out by 37 fourth-semester students of the German Literatur Study Program at Universitas Negeri Surabaya. The questionnaire results showed that the students’ very high interest was in the forms of exercise: Associograms (67%), Discussion of the topic (52%), and Which statements are true ? (73%). Meanwhile, the exercises that make students uninterested are Multiple–choice (22%), True or false (45%), and W-question about the text (19%). The data of this research are the words and sentences that were heard from the audiobook. This descriptive qualitative research explains that the six exercises can be used in learning listening skills. The contribution of this research helps lecturers to use types of listening skills exercises based on the of Hoerbuch–Deutsch on Youtube.

Keywords— *Hoerbuch, listening skill, exercise*

ID#656

Development of Research and Community Service Information Systems (SIRIP) based on website

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Abstract— The Research and Community Service Information System is a system that facilitates the collection of research and community service data for educators in a particular agency. Information systems can save, manage, and coordinate data and it will speed up the process of manage data compared to the manual method. This article discusses the development of research and community service information systems that synchronizing data from information system research and community service Universitas Negeri Surabaya (Unesa) SIMLPPM and performance requirement Research Management Information System and Community Service of Ministry of Research and Technology / National Research and Innovation Agency SIMLITABMAS. SIRIP was developed to facilitate easier data access, faster data import, database management that requirements needed by each faculty so that they can be more effective.

Keywords— Information systems; management data; research; research, community service



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Program book ICRCOS 2021

1 message

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Sat, Oct 9, 2021 at 11:37 AM

Dear Author

Here in the attachment file is the Program book that contains the author's abstract. We are sorry the program book is still incomplete because there are some authors who are late in sending data.

All of the authors should attend in the parallel room although the presentation is delivered by video recording. We will not include the article to the publisher if the author do not attend the conference

Thank you very much

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