UNIVERSITAS BHAYANGKARA JAKARTA RAYA
FAKULTAS ILMU KOMPUTER
Kampus I: Jl. Harsono RM No. 67, Ragunan, Pasar Minggu, Jakarta Selatan, 12550
Telepon: (021) 27808121 – 27808882
Kampus II: Jl. Raya Perjuangan, Marga Mulya, Bekasi Utara, Jawa Barat, 17142
Telepon: (021) 88955882, Fax.: (021) 88955871
Web: fasilkom.ubharajaya.ac.id, E-mail: fasilkom@ubharajaya.ac.id

SURAT TUGAS

Nomor: ST/1181/XI/2023/FASILKOM-UBJ

Pertimbangan : Dalam rangka mewujudkan Tri Dharma Perguruan Tinggi untuk Dosen di Universitas Bhayangkara Jakarta Raya maka dihimbau untuk melakukan penelitian.

Dasar :
1. Kalender Akademik Universitas Bhayangkara Jakarta Raya Tahun Akademik 2023/2024;
2. Rencana Kerja dan Anggaran Pembelanjaan Universitas Bhayangkara Jakarta Raya Tahun 2023.

DITUGASKAN

Kepada : Personil yang namanya tercantum dalam Surat Tugas ini.

NO.	NAMA	NIDN	JABATAN	KETERANGAN
1.	Herlawati, S.Si., M.M., M.Kom.	0311097302	Dosen Tetap Prodi Informatika	Sebagai Penulis Pertama
2.	Prima Dina Atika, S.Kom., M.Kom.	0311037107	Dosen Tetap Prodi Informatika	Sebagai Penulis Keempat
3.	Sri Rejeki, S.Kom., M.M.	0320116602	Dosen Tetap Prodi Informatika	Sebagai Penulis Keenam
4.	Dwi Budi Srisulistiowati, S.Kom., M.M.	0323057701	Dosen Tetap Prodi Informatika	Sebagai Penulis Ketujuh
5.	Khairunnisa Fadhilla Ramdhania, S.Si., M.Si.	0328039201	Dosen Tetap Prodi Informatika	Sebagai Penulis Kedelapan

Untuk :
1. Membuat Artikel Ilmiah dengan judul **"*The Impact of the COVID-19 Pandemic on Land Surface Temperature Change through Remote Sensing Data Processing*"** dalam kegiatan *The 9th International Conference on Computing, Engineering and Design (ICCED 2023) at International Islamic University Malaysia*.
2. Yang dilaksanakan pada:
   Hari : Selasa s.d Rabu
   Tanggal : 07 November 2023 s.d 08 November 2023
   Melalui : *Hybrid* (*Offline* dan *Online*)
   Penyelenggara : *International Conference on Computing, Engineering, and Design* (ICCED) 2023
3. Melaporkan hasil pelaksanaan kepada Dekan Fakultas Ilmu Komputer Universitas Bhayangkara Jakarta Raya.
4. Melaksanakan tugas ini dengan penuh tanggung jawab.

Jakarta, 02 November 2023
DEKAN FAKULTAS ILMU KOMPUTER

Dr. Dra. Tyastuti Sri Lestari, M.M.
NIP. 1408206

The Impact of the COVID-19 Pandemic on Land Surface Temperature Change through Remote Sensing Data Processing

Herlawati Herlawati ; Rahmadya Trias Handayanto ; Kusuma Hati ; Prima Dina Atika ; Didik Setiyadi ; Sri Rejeki ; Dwi Budi Srisulistiowati ; Elfirda A… **All Authors**

Abstract:
Various fields can collaborate in analyzing specific phenomena, such as the impact of the COVID-19 pandemic. Most research tends to focus on one aspect of the discipline,... **View more**

Metadata

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Various fields can collaborate in analyzing specific phenomena, such as the impact of the COVID-19 pandemic. Most research tends to focus on one aspect of the discipline, such as economics, health, spread predictions, and the like. Given its impact not only on health but also on other aspects, this study utilizes the processing of spatial data derived from satellite imagery using Geographic Information System (GIS) to observe the impact of the pandemic phenomenon on environmental conditions, i.e., surface temperature warming in the city of Bekasi, Indonesia. This research utilizes GIS tools to convert Landsat 7 and Landsat 8 datasets by extracting thermal sensors (Band 10 and Band 11). The test results show an annual increase in temperature, but a decrease of approximately 10 degrees Celsius during the COVID-19 pandemic. This indicates the possibility of reducing temperature by reducing carbon usage as closely as possible to pandemic conditions.

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Herlawati Herlawati
Informatics, Universitas Bhayangkara Jakarta Raya, Jakarta, Indonesia

Rahmadya Trias Handayanto
Computer Engineering, Universitas Islam, 45 Bekasi, Indonesia

Kusuma Hati
Information System, STMIK Antar Bangsa, Tangerang, Indonesia

Prima Dina Atika
Informatics, Universitas Bhayangkara Jakarta Raya, Jakarta, Indonesia

Didik Setiyadi
Information System, STMIK Sinar Nusantara, Surakarta, Indonesia

Sri Rejeki
Informatics, Universitas Bhayangkara Jakarta Raya, Jakarta, Indonesia

Dwi Budi Srisulistiowati
Informatics, Universitas Bhayangkara Jakarta Raya, Jakarta, Indonesia

Elfirda Ade Putri
Law, Universitas Bhayangkara Jakarta Raya, Jakarta, Indonesia

Khairunnisa Fadhilla Ramdhania
Informatics, Universitas Bhayangkara Jakarta Raya, Jakarta, Indonesia

Contents

Authors

Herlawati Herlawati
Informatics, Universitas Bhayangkara Jakarta Raya, Jakarta, Indonesia

Rahmadya Trias Handayanto
Computer Engineering, Universitas Islam, 45 Bekasi, Indonesia

Kusuma Hati
Information System, STMIK Antar Bangsa, Tangerang, Indonesia

Prima Dina Atika
Informatics, Universitas Bhayangkara Jakarta Raya, Jakarta, Indonesia

Didik Setiyadi
Information System, STMIK Sinar Nusantara, Surakarta, Indonesia

Sri Rejeki
Informatics, Universitas Bhayangkara Jakarta Raya, Jakarta, Indonesia

Dwi Budi Srisulistiowati
Informatics, Universitas Bhayangkara Jakarta Raya, Jakarta, Indonesia

Elfirda Ade Putri
Law, Universitas Bhayangkara Jakarta Raya, Jakarta, Indonesia

Khairunnisa Fadhilla Ramdhania
Informatics, Universitas Bhayangkara Jakarta Raya, Jakarta, Indonesia

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The Impact of the COVID-19 Pandemic on Land Surface Temperature Change through Remote Sensing Data Processing

1st Herlawati Herlawati
Informatics
Universitas Bhayangkara Jakarta Raya
Jakarta, Indonesia
herlawati@ubharajaya.ac.id

2nd Rahmadya Trias Handayanto
Computer Engineering
Universitas Islam 45
Bekasi, Indonesia
rahmadya.trias@gmail.com

3rd Kusuma Hati
Information System
STMIK Antar Bangsa
Tangerang, Indonesia
kusumahati.antarbangsa@gmail.com

4th Prima Dina Atika
Informatics
Universitas Bhayangkara Jakarta Raya
Jakarta, Indonesia
prima.dina@dsn.ubharajaya.ac.id

5th Didik Setiyadi
Information System
STMIK Sinar Nusantara
Surakarta, Indonesia
ddk.setiyadi20@gmail.com

6th Sri Rejeki
Informatics
Universitas Bhayangkara Jakarta Raya
Jakarta, Indonesia
sri.rejeki@dsn.ubharajaya.ac.id

7th Dwi Budi Srisulistiowati
Informatics
Universitas Bhayangkara Jakarta Raya
Jakarta, Indonesia
dwibudi@dsn.ubharajaya.ac.id

8th Elfirda Ade Putri
Law
Universitas Bhayangkara Jakarta Raya
Jakarta, Indonesia
elfirda.ade@dsn.ubharajaya.ac.id

9th Khairunnisa Fadhilla Ramdhania
Informatics
Universitas Bhayangkara Jakarta Raya
Jakarta, Indonesia
khairunnisa.fadhilla@dsn.ubharajaya.ac.id

***Abstract*— Various fields can collaborate in analyzing specific phenomena, such as the impact of the COVID-19 pandemic. Most research tends to focus on one aspect of the discipline, such as economics, health, spread predictions, and the like. Given its impact not only on health but also on other aspects, this study utilizes the processing of spatial data derived from satellite imagery using Geographic Information System (GIS) to observe the impact of the pandemic phenomenon on environmental conditions, i.e., surface temperature warming in the city of Bekasi, Indonesia. This research utilizes GIS tools to convert Landsat 7 and Landsat 8 datasets by extracting thermal sensors (Band 10 and Band 11). The test results show an annual increase in temperature, but a decrease of approximately 10 degrees Celsius during the COVID-19 pandemic. This indicates the possibility of reducing temperature by reducing carbon usage as closely as possible to pandemic conditions.**

Keywords—Landsat, LST, Urban Heat Island, COVID-19, RS-GIS

I. Introduction

Global warming is a natural phenomenon that is currently a serious concern [1]–[4]. This is because this phenomenon has an impact on human life, not just on the environment. Global warming can be mitigated by reducing warming in each region, such as reducing greenhouse gas emissions, improving efficiency, increasing vegetation, and so on.

Research on the COVID-19 phenomenon has been extensively conducted, both in terms of its management [5] and predictive calculations [6]. The COVID-19 pandemic condition has forced people to stay indoors, resulting in reduced emissions from transportation. This phenomenon will be investigated in this research to determine how much the surface temperature decreases when vehicle emissions are reduced. If each region follows the recommendations of this research, it is expected to contribute to mitigating global warming. Several studies have investigated global temperature changes by utilizing existing satellite sensors [7]–[11].

The suburbanization phenomenon appears to area near the central city, with the characteristic of the higher growth of the vicinity then the central city [12]. Bekasi City is a suburbanization area of Jakarta, providing an insight into the changes in Land Surface Temperature (LST) during the COVID-19 pandemic.

Most environmental research is still based on qualitative data in assessing the environment [1], [13]. Some experts advocate for reducing vehicle and industrial emissions, but the actual impact is rarely quantified. The occurrence of COVID-19, aside from affecting all aspects of life, can also serve as a crucial basis for the importance of emission reduction, accompanied by real quantitative data derived from Landsat satellite imagery. With this data, objectivity can be ensured, making it a reference for researchers focused on environmental issues. The obtained data is processed with the assistance of computational tools involving Geographic Information Systems (GIS) and modules available in the application.

After explaining the method used to convert satellite images into LST, where the actual surface temperature is known, the results are analyzed to understand the phenomena that occurred during the pandemic conditions (from 2019 to 2021). The conclusion section then provides insights into the phenomena that occurred during those years.

II. Materials and Methods

A. Materials

The current study used Landsat 7 and Landsat 8 satellite images for specific dates. The data were obtained from the United States Geological Survey (USGS) through its official website (https://earthexplorer.usgs.gov/). Four capture dates were selected: August 2010 (Landsat 5), August 2013 (Landsat 8), September 2018 (Landsat 8), and September 2021 (Landsat 8). The selection of these time ranges follows the COVID-19 pandemic conditions, which began in early 2020 and extended into 2021 for the Indonesian region.

Therefore, the year 2021 will demonstrate the effects of the COVID-19 pandemic on land surface temperature.

While Landsat 5 used Band 6, Landsat 8 utilized Band 10 and Band 11 [14]. The downloaded files have a size of approximately 1 gigabyte. We need to sign up on the USGS website first to be able to download available satellite images. It's advisable to choose clear (cloud-free) captures, although with GIS Tools, you can remove clouds during the LST creation process.

Satellites are widely available and can be utilized at no cost. Some satellites offer advantages in terms of resolution, the number of sensors, and other facilities. For this research, Landsat was chosen because it provides broad coverage at the city/district level. Additionally, this satellite is equipped with two bands that function as thermal image capturers of the Earth's surface for both daytime and nighttime conditions.

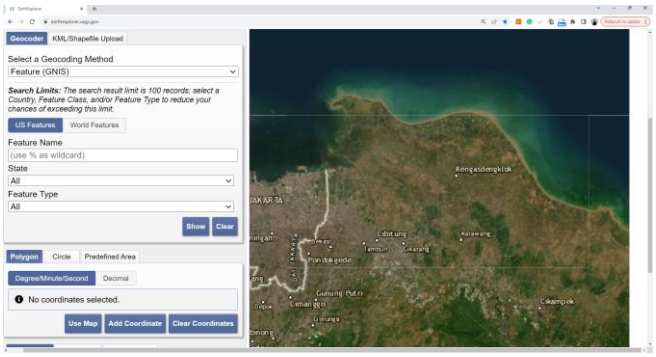

Fig. 1. The region downloaded (Tile) from USGS.

Satellite sensor captures consist of several files that indicate Bands along with important metadata. This metadata serves calibration purposes, such as converting surface temperature to degrees Celsius. Landsat 8 differs from its predecessors (1-7) due to differences in the number of sensors on the launched satellite. In previous Landsat satellites, the thermal sensor was in band 6.

In addition to satellite images in the form of raster data, vector data is needed, which represents the study area, in this case, the city of Bekasi, West Java, Indonesia. This map is used to crop the extensive satellite images that cover the Jakarta Metropolitan Region (JABOTABEK) into the size of the city of Bekasi.

B. Methods

Several GIS tools can be used to create thematic maps of Land Surface Temperature (LST), such as ArcGIS, QGIS, and others. Each tool has its advantages, ease of use, and limitations. However, in principle, they all follow the same process for creating LST maps of an area. Following are the steps to generate LST map.

B.1. Conversion to Top of Atmosphere (TOA) Radiance

In the context of remote sensing and satellite image analysis, the term "radiance" pertains to the transformation process through which the raw sensor data collected by a satellite sensor is converted into radiance values at the top of Earth's atmosphere [15]. This conversion constitutes a crucial step within the data pre-processing workflow for satellite imagery. TOA follows the equation (1):

$$TOA\ (L) = M_L * Q_{CAL} + A_L \quad (1)$$

Where M_L represents Band-specific multiplicative rescaling factor from the metadata, Q_{CAL} is retrieved from band 10, and A_L is Band-specific additive rescaling factor from the metadata.

B.2. Top of Atmosphere (TOA) to Brightness Temperature conversion

The process of converting TOA Radiance to Brightness Temperature is crucial in remote sensing, particularly in the interpretation of satellite images. A satellite sensor's measurement of brightness temperature determines the surface or object's radiative temperature. The function to change TOA to Brightness Temperature is shown here.

$$BT = (K_2 / (\ln (K_1/L) +1)) – 273.15 \quad (2)$$

Where K_1 and K_2 represents Band-specific thermal conversion constant from the metadata.

B.3. Calculate the Normalize Difference Vegetation Index (NDVI)

The Normalized Difference Vegetation Index (NDVI) is a measurement and monitoring tool for the health and density of vegetation in remote sensing and environmental monitoring. The difference between the Earth's surface and plants' ability to absorb IR and visible light is measured by NDVI. The NDVI generates numerical values between -1 and +1, which are typically interpreted as follows:

$$NDVI = (Band\ 5 – Band\ 4) / (Band\ 5 + Band\ 4) \quad (3)$$

B.4. Calculate the proportion of vegetation P_v

Vegetation proportion to determine emissivity in the study area.

$$P_v = Sqr((NDVI-NDVI_{min})/(NDVI_{max}-NDVI_{min})) \quad (4)$$

B.5. Calculate Emissivity ε

$$\varepsilon = 0.004 * P_v + 0.986 \quad (5)$$

B.6. Calculate the Land Surface Temperature

$$LST = (BT/(1 + (0.00115 * BT / 1.4388) * Ln(\varepsilon))) \quad (6)$$

The surface temperature map can then be obtained by applying the LST equation. The raster calculator can be used to calculate equations 1-6, including calculations involving raster data (Band 10 and the Bands involved in the NDVI composite image). Figure 2 shows the metadata used for these calculations.

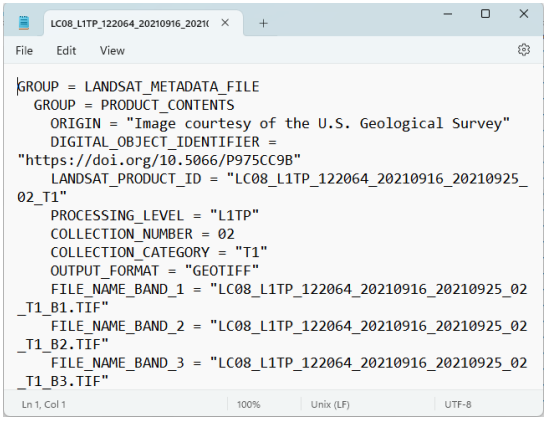

Fig. 2. Metadata file from downloaded USGS.

In this research, the RS&GIS plugin in Quantum GIS is utilized. This plugin integrates metadata with the required bands (4, 5, 10, and 11). By simply inputting the compressed files downloaded from USGS and the shapefile of the research area, it generates an output consisting of a raster map accompanied by surface temperature ranges.

III. Result and Discussion

Four-time ranges (2010, 2013, 2018, and 2021) were used to create LST maps. ArcGIS was used to obtain LST maps using equations 1 to 6, while QGIS has the RS&GIS plugin that directly converts the downloaded dataset (in tar.gz format). Another option is to specify the folder or file resulting from the extraction of the tar.gz file. We may need to rename the file if the downloaded file is in tar format and not tar.gz.

Thermal bands can be directly used to determine the distribution of surface temperature (Band 6 for Landsat 7 and Band 10 and 11 for Landsat 8); however, to obtain its precise values, calibration with the metadata files accompanying the downloaded satellite images (txt file) is required.

A. Land Surface Tempature Map

Figure 3 illustrates the RS&GIS plugin used for generating LST. The input consists of compressed files from USGS and a shapefile of the study area. Make sure to check the "extra derived output", i.e., LST, at the end. For a visual demonstration of the LST generation process, you can watch it at https://www.youtube.com/watch?v=e_P6UIs4Tv4.

The processed output is a TIF file with standard projection and coordinates. For further processing, it can be integrated with a base map, such as a street map or satellite view, to facilitate the visualization of real locations.

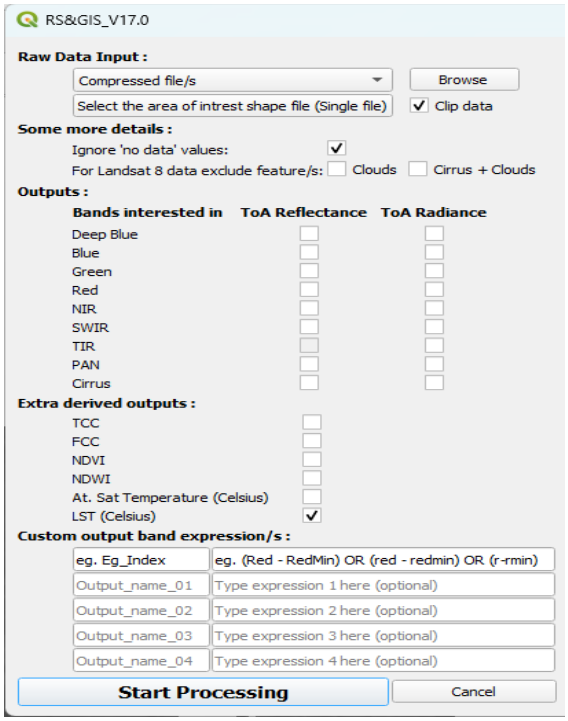

Fig. 3. Metadata file from downloaded USGS.

To remove interference from clouds, specifically for Landsat 8, you can check the "Clouds" and "Cirrus + Clouds" options in the 'For Landsat 8 data exclude feature/s' section. Clouds can affect the accuracy of LST since clouds have the characteristic of low temperature. The cloud issue can be addressed using the features available in the LST module of QGIS for Landsat 8. These features include eliminating 'no data' values as well as excluding clouds and cirrus+clouds.

Figure 4 shows the range of temperature of LST map after calibration using RS&GIS plugin in QGIS. In essence, band 10 and band 11 can be directly used to observe the distribution of heat in an area. However, to determine the exact surface temperature in degrees, calibration following equations 1 to 6 is necessary. In QGIS, these calculations can be performed through the LST module (Figure 3). For other applications, such as ArcGIS, it is necessary to perform this using the raster calculator after reviewing the file metadata (Figure 2).

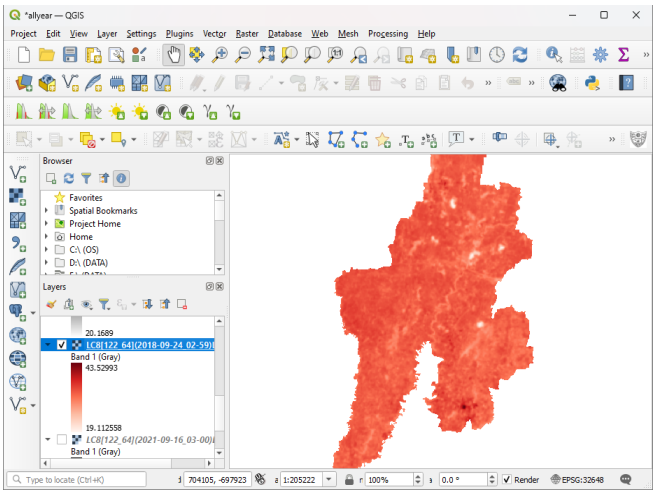

Fig. 4. LST Maps.

Gradually, the pixel colors represent surface temperatures ranging from low temperature (minimum) to high temperature (maximum) from bright red to dark-red colors. Figure 5 shows the temperature graph for four different time ranges of the experimental results. The graph shows a gradual increase in temperature each year, reaching its peak in 2018. It is possible that the temperature continued to rise until the implementation of work from home for workers in Bekasi, including Jakarta, Bogor, and Tangerang. This resulted in a decrease in temperature during the COVID-19 pandemic. Here, the year 2021 is considered when the outbreak began to subside, and some residents were allowed to leave their homes with certain restrictions (PSBB). The experimental results indicate a decrease in temperature of approximately 10 degrees Celsius during the COVID-19 pandemic.

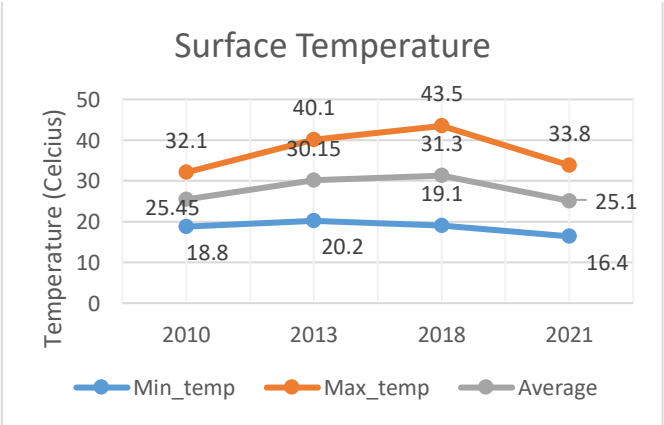

Fig. 5. Daytime Land Surface Temperature

For Landsat 8, Band 10 and Band 11 are used to calculate land surface temperature [16]. Whereas Band 10 is used for calculating daytime temperature, Band 11 is used to measure surface temperature at night with a longer infrared wavelength compared to Band 10. For the year 2010, considering the use of Landsat 5, only one band was used, which is Band 6, primarily used for capturing daytime imagery [10].

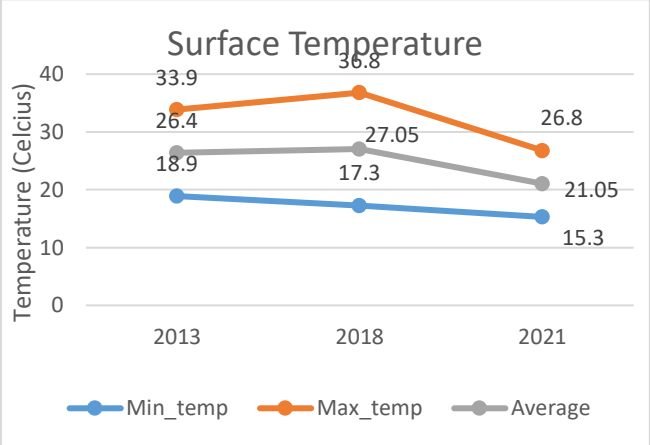

Fig. 6. Nighttime Land Surface Temperature

Figure 6 shows nighttime temperatures for the years 2013, 2018, and 2021. The sensor used here is Band 11. The year 2010 is not included because only Band 6 with daytime wavelength data was available. The temperature difference between day and night is approximately 7 degrees Celsius.

To facilitate users in determining the real location, the use of a base map is essential. Figure 7 demonstrates the use of Open Street Map (OSM) as a base map.

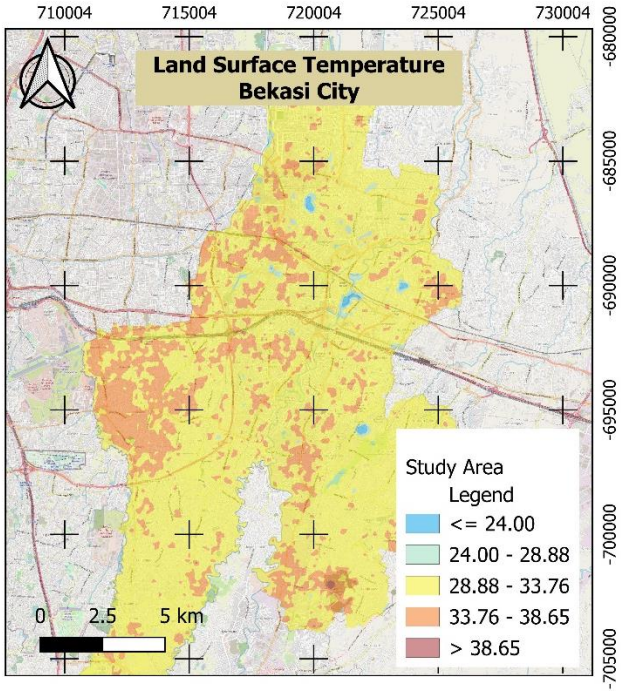

Fig. 7. Land Surface Temperature with OSM Base Map

Figure 7 shows the hottest conditions in the city of Bekasi before the COVID-19 pandemic, specifically in the year 2018. Some locations with surface temperatures are visible on the Land Surface Temperature (LST) map, including the border with Jakarta, industrial areas in the east, and the Bantargebang landfill in the southern part. Some locations indicate lower temperatures, such as along the rivers and reservoirs/lakes. Most Bekasi City experiences temperatures ranging from 29 to 34 degrees Celsius.

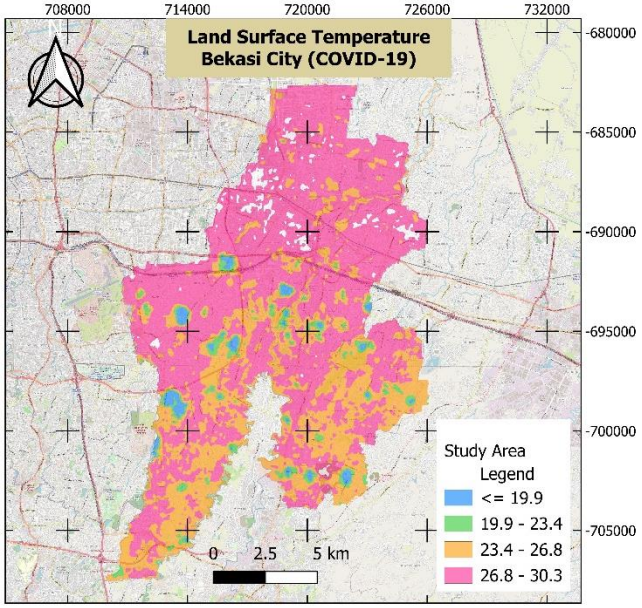

Fig. 8. Land Surface Temperature with OSM Base Map (COVID-19 Pandemic)

The COVID-19 pandemic conditions show a decrease in temperature, both maximum and minimum temperatures. Figure 8 depicts the average temperature during COVID-19 ranging from 26.8 to 30.3 degrees Celsius, or a decrease of 3 to 4 degrees Celsius. The World Health Organization (WHO) officially announced that the COVID-19 pandemic ended in 2022 [19]. Therefore, it is likely that surface temperatures will increase again to pre-COVID-19 levels.

B. The effects of the COVID-19 pandemic

COVID-19, which resulted in the implementation of work from home, has a direct impact on the decrease in land surface temperature (LST). Several industries that rely on fossil fuel combustion, as well as vehicles traveling on the roads in Bekasi, have been shown to raise land surface temperatures, in addition to air pollution that poses a threat to human health.

Equation 3 shows the temperature calculation using the effect of NDVI, which is a vegetation index. Regardless of the COVID-19 pandemic, the role of vegetation should be considered. To calculate vegetation percentage, the Modified-UNet model, which combines U-Net with DeepLabV3+, is used [20].

Although the RS&GIS plugin provides the capability to eliminate the effects of clouds and cirrus, it still affects the accuracy of measurements, considering that clouds have very low temperatures due to the liquid content within them. Therefore, it is necessary to obtain a cloud-free area. For the Indonesian region, it is recommended during the dry season, which occurs from June to September. However, for the maximum (hot) temperatures, the accuracy is sufficient. Some points with low temperatures, apart from vegetation, are bodies of water, such as rivers, lakes, ponds, and the like. Therefore, the presence of these water bodies is necessary, in addition to addressing flood issues in the low-lying areas of

Bekasi City, which has a low slope (approximately 0 to 2 percent).[21].

IV. Conclusions

This study discusses the phenomenon of a decrease in surface temperature under specific conditions, in this case, COVID-19. Using Landsat data from the USGS, precise temperature data for the years 2010, 2013, 2018, and 2021 were obtained. The results prove a decrease of approximately 10 degrees during COVID-19 both for daytime and nighttime. This provides input to the government to reduce vehicle exhaust emissions in order to lower surface temperatures due to the greenhouse effect.

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The Impact of the COVID-19 Pandemic on Land Surface Temperature Change through Remote Sensing Data Processing

by Herlawati Herlawati

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The Impact of the COVID-19 Pandemic on Land Surface Temperature Change through Remote Sensing Data Processing

***Abstract*— Various fields can collaborate in analyzing specific phenomena, such as the impact of the COVID-19 pandemic. Most research tends to focus on one aspect of the discipline, such as economics, health, spread predictions, and the like. Given its impact not only on health but also on other aspects, this study utilizes the processing of spatial data derived from satellite imagery using Geographic Information System (GIS) to observe the impact of the pandemic phenomenon on environmental conditions, i.e., surface temperature warming in the city of Bekasi, Indonesia. This research utilizes GIS tools to convert Landsat 7 and Landsat 8 datasets by extracting thermal sensors (Band 10 and Band 11). The test results show an annual increase in temperature, but a decrease of approximately 10 degrees Celsius during the COVID-19 pandemic. This indicates the possibility of reducing temperature by reducing carbon usage as closely as possible to pandemic conditions.**

Keywords—Landsat, LST, Urban Heat Island, COVID-19, RS-GIS

I. Introduction

Global warming is a natural phenomenon that is currently a serious concern [1]–[4]. This is because this phenomenon has an impact on human life, not just on the environment. Global warming can be mitigated by reducing warming in each region, such as reducing greenhouse gas emissions, improving efficiency, increasing vegetation, and so on.

Research on the COVID-19 phenomenon has been extensively conducted, both in terms of its management [5] and predictive calculations [6]. The COVID-19 pandemic condition has forced people to stay indoors, resulting in reduced emissions from transportation. This phenomenon will be investigated in this research to determine how much the surface temperature decreases when vehicle emissions are reduced. If each region follows the recommendations of this research, it is expected to contribute to mitigating global warming. Several studies have investigated global temperature changes by utilizing existing satellite sensors [7]–[11].

The suburbanization phenomenon appears to area near the central city, with the characteristic of the higher growth of the vicinity then the central city [12]. Bekasi City is suburbanization area of Jakarta, providing an insight into the changes in Land Surface Temperature (LST) during the COVID-19 pandemic.

Most environmental research is still based on qualitative data in assessing the environment [1], [13]. Some experts advocate for reducing vehicle and industrial emissions, but the actual impact is rarely quantified. The occurrence of COVID-19, aside from affecting all aspects of life, can also serve as a crucial basis for the importance of emission reduction, accompanied by real quantitative data derived from Landsat satellite imagery. With this data, objectivity can be ensured, making it a reference for researchers focused on environmental issues. The obtained data is processed with the assistance of computational tools involving Geographic Information Systems (GIS) and modules available in the application.

After explaining the method used to convert satellite images into LST, where the actual surface temperature is known, the results are analyzed to understand the phenomena that occurred during the pandemic conditions (from 2019 to 2021). The conclusion section then provides insights into the phenomena that occurred during those years.

II. Materials and Methods

A. Materials

The current study used Landsat 7 and 5 Landsat 8 satellite images for specific dates. The data were obtained from the United States Geological Survey (USGS) through its official website (https://earthexplorer.usgs.gov/). Four capture dates were selected: August 2010 (Landsat 5), August 2013 (Landsat 8), September 2018 (Landsat 8), and September 2021 (Landsat 8). The selection of these time ranges follows the COVID-19 pandemic conditions, which began in early 2020 and extended into 2021 for the Indonesian region. Therefore, the year 2021 will demonstrate the effects of the COVID-19 pandemic on land surface temperature.

While Landsat 5 used Band 6, Landsat 8 utilized Band 10 and Band 11 [14]. The downloaded files have a size of approximately 1 gigabyte. We need to sign up on the USGS website first to be able to download available satellite images. It's advisable to choose clear (cloud-free) captures, although with GIS Tools, you can remove clouds during the LST creation process.

Satellites are widely available and can be utilized at no cost. Some satellites offer advantages in terms of resolution, the number of sensors, and other facilities. For this research, Landsat was chosen because it provides broad coverage at the city/district level. Additionally, this satellite is equipped with two bands that function as thermal image capturers of the Earth's surface for both daytime and nighttime conditions.

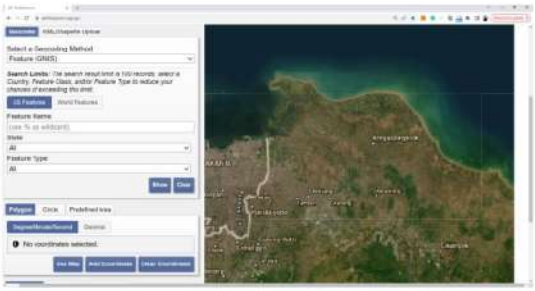

Fig. 1. The region downloaded (Tile) from USGS.

Satellite sensor captures consist of several files that indicate Bands along with important metadata. This metadata

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as the author(s) of a paper titled:

The Impact of the COVID-19 Pandemic on Land Surface Temperature Change through Remote Sensing Data Processing

in **The 9th International Conference on Computing, Engineering and Design (ICCED 2023)** at International Islamic University Malaysia

Kuala Lumpur, 7 - 8th November 2023

ICCED 2023

Prof. Ir. Teddy Mantoro, M.Sc., PhD., SMIEEE

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General Chair's Speech

Welcome to the 9th International Conference on Computing, Engineering and Design (ICCED 2023). On behalf of the organizing committee who has been working for over a half year to put this conference together, we cordially welcome all participants. ICCED is an annual event and this year, we are blessed to have competent and dedicated organisers which is organized by Nusa Putra University, International Islamic University Malaysia (IIUM), Universitas Islam Negeri Sunan Gunung Djati, Sampoerna University, Bina Nusantara University, and Sponsored by IEEE Indonesia Section, IEEE KL Malaysia Subsection, and Computer Intelligence Society Indonesia Chapter. Our goal in making this conference happen is to bring together leading academic scientists, researchers and research scholars to exchange and share their experiences and research results on all aspects of Informatics Engineering, Information Science, Mechanical Engineering, Electrical Engineering, Civil Engineering, and Visual Communication Design. We have successfully received 408 paper submission and 161 have been accepted, so the success rate is about 40%, to qualify for presentation and publication. This conference attracts authors and the reviewers from 12 countries including Indonesia, Malaysia, India, Bangladesh, Austria, United States, Oman, Taiwan, Philippines, Australia, Thailand and Turkey. These papers are of good quality as they are reviewed by qualified and experienced academicians and researchers in related disciplines. With the theme "Generative AI for Engineering and Design: Bridging Creativity and Efficiency" we hope all participants will enjoy an intellectual and stimulating discussion that allow them to move forward in their research work.

Best wishes,

Teddy Mantoro
General Chair for ICCED 2023

Virtual Link Address (Zoom)

Topic: The 9th International Conference on Computing, Engineering, and Design (ICCED 2023)

Date and Time: Tuesday, November 07th 2023 07.30 AM (Jakarta-Indonesia) or 08.30 AM (Kuala Lumpur-Malaysia)

The link for the 9th ICCED 2023

Name of Room	Link	Meeting ID	Passcode
Main Room	https://bit.ly/ICCED2023	828 9858 5060	icced2023
Room 1	Breakout Room 1		
Room 2	Breakout Room 2		
Room 3	Breakout Room 3		
Room 4	Breakout Room 4		
Room 5	Breakout Room 5		
Room 6	Breakout Room 6		

Rules:

1. All participants have to attend the opening session.
2. Name Formatting:
   a. Presenter:
      - Room No_Paper ID_fullname

        01_14_ Dede Sukmawan
   b. Non-Presenter: fullname

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PROGRAM SCHEDULE ICCED 2023

07th-08th November 2023

TIME	PROGRAM/EVENT	VENUE
DAY 1, 7 NOVEMBER 2023 (TUESDAY)		
8.00 AM – 8.30 AM	Registration	MPH
8.30 AM – 10.00 AM	Opening Ceremony and MOU Signing	MPH
10.00 AM – 10.30 AM	Refreshment & Group Photos	Around MPH
10.30 AM – 10.40 AM	General Chair Welcoming Speech Prof. Teddy Mantoro	MPH
10.40 AM – 11.30 AM	ICCED 2023, Keynote 1 Assoc. Prof. Ts. Dr. Mohd Ibrahim Bin Shapiai	MPH
11.30 AM – 12.30 PM	ICCED 2023, Keynote 2 Prof. Saman Halgamuge	MPH
12.30 PM – 01.30 PM	Lunch	MPH
01.30 PM – 03.10 PM	ICCED 2023, Parallel Session 1	Classrooms
03.10 PM – 03.25 PM	Refreshment	KICT Round
03.25 PM – 05.05 PM	1. ICCED 2023, Parallel Session 2	Classrooms
	2. ICCED 2023, Research Poster Presentation	Around Classrooms

Note:

Kuala Lumpur, Malaysia (GMT + 8)

DAY 2, 8 November 2023 (WEDNESDAY)		
8.00 AM – 9.00 AM	Registration	MPH
9.00 AM – 10.00 AM	ICCED 2023 Keynote 2 Prof. Ts. Ir. Dr. Ahmad Fadzil Ismail	MPH
10.00 AM - 10.15 AM	Refreshment	MPH
10.15 AM – 12.15 PM	ICCED 2023 Parallel Session 3	Classrooms
12.15 PM – 01.15 PM	Lunch	Around MPH
01.15 PM – 03.15 PM	ICCED 2023 Parallel Session 4	Classrooms
03.15 PM – 03.20 PM	Break Sessions	Around Classrooms
03.20 PM – 05.00 PM	ICCED 2023 Parallel Session 5	Classrooms
05.00 PM – 05.05 PM	Break Sessions	Around MPH
05.05 PM – 05.45 PM	Closing ICCED 2023	MPH

Note:

Kuala Lumpur, Malaysia (GMT + 8)

Keynote Speaker

Assoc. Prof. Ts. Dr. Mohd Ibrahim Bin Shapiai

Ts. Dr. Mohd Ibrahim Bin Shapiai @ Abdul Razak currently works as an Assoc. Professor at Malay-Japan International Institute of Technology (MJIIT) of Universiti Teknologi Malaysia Kuala Lumpur. Prior to his current position now, he previously worked as a lecturer at Universiti Teknologi Malaysia main campus in Skudai, Johor from 2008-2014. As for his educational background, in 2004, he graduated with his diploma in Telecommunication Engineering at Universiti Teknologi Malaysia followed by his Master in Audio Signal Processing at the University of York, United Kingdom in the year 2007. Not only that, but he also completed his Ph.D. in Machine Learning at Universiti Teknologi Malaysia. His widely known expertise including Artificial Intelligence, Machine Learning, Brain Computer Interface, and Swarm Intelligence.

The presentation titled "**AI on Cloud: An Application**" offers a practical exploration of artificial intelligence, spotlighting computer vision, 3D modeling, and generative AI. It kicks off with a historical review, spanning the early days of AI's promise to the challenging "AI winters" marked by setbacks and technical constraints. However, the landscape has shifted significantly with the advent of deep learning, ushering in a new era of AI and the emergence of generative AI as a standout feature. Notably, Large Language Models like ChatGPT take center stage, showcasing their capacity to not only predict but also generate content. The presentation delves into the core principles of Large Language Models, elucidating how they can be tailored for various applications using embedding and fine-tuning methods. Beyond theory, the talk highlights concrete applications of AI in the cloud, encompassing tasks such as monitoring assets on tall structures, livestock counting, semiconductor defect detection, and the development of AI-driven chatbots for natural and engaging interactions. "AI on Cloud: An Application" delivers a holistic perspective on AI's evolution, illustrating its wide-ranging impact across industries, from enhancing productivity to reshaping creativity and human-AI interactions.

Keynote Speaker

Prof. Saman Halgamuge

Prof Saman Halgamuge, University of Melbourne, Fellow of IEEE and IET, received the Dr.-Ing and Dipl.-Ing in data engineering from the Technical University of Darmstadt, Germany, and BSc Engineering degree from University of Moratuwa, Sri Lanka. He is listed as a top 2% most cited researcher for AI and Image Processing in the Stanford database. His previous leadership roles include Head, School of Engineering at Australian National University and Associate Dean of the Engineering and IT at University of Melbourne. He graduated 50 PhD students and mentored 16 postdoctoral fellows in Australia. His research funding includes Australian and International industry and government agencies and philanthropic foundations. His associations with Malaysia include visiting professorship of University Putra Malaysia (current), University of Malaya (one month) and external member of Research Advisory Committee of University of Technology Petronas (over three years). His associations with Indonesia include visiting professorship of ITB (current) and joint grants with University of Gajahmada and Universitas Indonesia and providing presentations on research strategy to several universities in Indonesia and to Directorate General of Higher Education, Research and Technology at the Ministry of Education, Culture, Research and Technology. He is a frequently sought after public speaker who delivered about 50 keynote speeches in the last 10 years. His 2023 keynotes include: 17th IEEM (Singapore), 22nd InCOB (Australia), 15th ACIIDS (Thailand), ITIS (Indonesia), AIBC 2023 (Japan) and MICML (China).

The presentation titled " **Can AI change the developing countries on Earth?**" The 21 st century AI needs to be socially responsible and equipped with capabilities to face serious threats like dangerous epidemics and climate emergencies. Several major technical issues hinder the creation of such AI with democratized access that would bring most of this technology to almost all people on Earth specially for developing nations. AI used in applications evade regulations in most parts of the world. I will introduce these major technical issues of AI as well as the opportunities current AI can create for the developing world. My talk will focus on two groups of AI applications: well-known applications of AI of value to the planet including the developing world, e.g., Health, Agriculture, Energy, Transportation and Environment and specific applications of AI mostly useful to the developing countries.

Keynote Speaker

Prof. Ts. Ir. Dr. Ahmad Fadzil Ismail

Ahmad Fadzil Ismail (Senior Member, IEEE) received a B.Sc. in Electrical Engineering from Gannon University, Erie, Pennsylvania, USA in 1994, an M.Sc. degree in Telecommunication and Information Systems from the University of Essex, UK in 1996, and the Ph.D. degree in Electronics from the University of Bath, UK in 2000. He is currently working as a Professor with the Department of Electrical and Computer Engineering, Faculty of Engineering, International Islamic University Malaysia, Selangor, Malaysia. He is a Professional Engineer with a Practicing Certificate enlisted at the Board of Engineering Malaysia and a registered Professional Technologist with the Malaysia Board of Technologists. His research interests include the development of active and passive target tracking algorithms, radio frequency and wireless systems, and microwave and millimeter wave technology.

Title: Artificial Intelligence (AI) Conundrum Juggle: Strategy, Creativity and Efficiency.

Abstract

Associating creativity and efficiency using artificial intelligence (AI) can be a prevailing means to augment prompt productivity and innovation in various domains, such as technology, business, and even art. To realistically bridge creativity and efficiency with AI, it's decisive to strike a balance that includes strategy. While AI can expedite processes and offer insights, it should also leave room for human intuition, critical thinking, and ingenuity. A strategy that advocates sustainability must be imbued in the process flow. What is more, ethical contemplations should guide the development and use of AI in all creative processes. This is a safeguard so that AI doesn't stifle creativity or originality.

Technical Session Detail

Tuesday, 7th November 2023

A. Room 1: TS 1-1 & TS 1-2

Link : https://bit.ly/ICCED2023
Meeting ID : 828 9858 5060
Passcode : icced2023
Room : LR 9, KICT IIUM Malaysia

Session Chair : Asst. Prof. Dr. Aidrina Binti Mohamed Sofiadin (TS 1-1)
Asst. Prof. Dr. Dwi Pebrianti (TS 1-2)

Room 1	Paper ID	Authors	Paper Title	Time
TS 1-1	357	Adhitia Erfina, Rahmat Hidayat, Rafli Radya Rizaldi, Puput, Riko Maulana	Analyzing Code Injection Attacks on Applications of Android Devices and Emulator	01.30pm – 01.50pm
	288	Nicholas Prasetio, Daniel Ferdinand Ardianto, Brandon Christopher Wijaya, Maria Susan Anggreainy and Afdhal Kurniawan	Performance Analysis of Distributed Database System in Cloud Computing Environment	01.50pm – 02.10pm
	117	Ashif Fajar Riady,Grace Martha Tara,Suciannna Ghadati Rabiha	Designing an IoT-Based Information System for Improving Efficiency and Productivity in Small-Scale Manufacturing Industries	02.10pm – 02.30pm
	124	Ahmad Yusuf Karoma, Temmy Julianul Ichsan, Meta Amalya Dewi, Sucianna Ghadati Rabiha	User Experience Analysis on JIBAS Computer Based Exam Application Using Usability Testing Method	02.30pm – 02.50pm
	353	Nisa Nurushalihah, Silmy Ni'Matul Kamila and Salma Addiyanati Tsaqila	Big Asian Countries Economic Recovery Post Covid-19 Pandemic Sentiment Analysis	02.50pm – 03.10pm
TS 1-2	364	Adhitia Erfina, Silmy Ni'matul Kamila, Nisa Nurushalihah, Salma Addiyanati Tsaqila, Dede Sukmawan	Big Asian Countries Economic Recovery Post Covid-19 Pandemic Sentiment Analysis	03.25pm – 03.45pm
	198	Dessy Handayani, Ridho Ikhsan, Yudi Fernando, Yudhita Valen Prasarry, Hartiwi Prabowo and Andrianto Susilo	Predicting Customer Trust and Behavioral Intention to Invest Cryptocurrency	03.45pm – 04.05pm
	186	Chakalica Widyadipraja, Agung Kurniawan, Yuniarty, Christopher Joshua Leksana, Hartiwi Prabowo, Lily Leonita	Understanding Antecedents Subscription Intentions for Video Streaming	04.05pm – 04.20pm
	399	Azhar Muhammad Fikri Fuadi, Cecep Nurul Alam, Dian Sa'adillah Maylawati, Wildan Budiawan Zulfikar, Agung Wahana, Rifqi Syamsul Fuadi	Football Supporters Club Opinion Analysis using Reccurent Neural Network	04.20pm – 04.45pm
	049	Amarena Nediari, Yunida Sofiana, Hervina Dyah Aprilia	The Study of Space Circulation on IKEA Kreativ Application for Sustainable Business in Furniture Industry	04.45pm – 05.05pm

Tuesday, 7th November 2023

B. Room 2: TS 2-1 & TS 2-2

Link : https://bit.ly/ICCED2023
Meeting ID : 828 9858 5060
Passcode : icced2023
Room : LR 10, KICT IIUM Malaysia

Session Chair : Asst. Prof. Dr. Nor Saadah Binti Md Nor (TS 2-1)
Asst. Prof. Dr. Akeem Olowolayemo (TS 2-2)

Room 2	Paper ID	Authors	Paper Title	Time
TS 2-1	093	Felix Irwanto, Jessica Jodis, Emily Indrakusuma, Anderes Gui, Richard	Decentralized Identity (DID) for Know Your Customer (KYC) Process in the Banking Industry	01.30pm – 01.50pm
	346	Arny Lattu, Deudeu Sri Rahayu, Berdyan Syahpradana, and Anton Permana	Analysis of Edlink User Satisfaction Using Pieces Framework (Case Study: University X)	01.50pm – 02.10pm
	271	Arna Fariza, Rengga Asmara, Muhammad Oktavian Fajar Rojaby, Eha Renwi Astuti, Ramadhan Hardani Putra	Automatic Tooth Enumeration on Panoramic Radiographs Using Deep Learning	02.10pm – 02.30pm
	322	Paikun, Hesri Mintawati, Ripan Kustiawan, Mahtub Tazribat, Arguna Ramli Sabriansyah, and Jasmansyah	Experimental analysis of the difference between conventional and precast WWTP septic tank costs	02.30pm – 02.50pm
	50	Bryan Vincencius, Dharmawan Ruslan, Vincent, Karli Eka Setiawan and Muhammad Fikri Hasani	Clustering Tweets for Analyzing Public Perception of AI-generated Art	02.50pm – 03.10pm
TS 2-2	008	Tobias Warbung and Devi Kurniawati Homan	Building a Better Future-A Website for YSBM Foundation to Promote Quality Education and Nutritious Meals for Underprivileged Children	03.25pm – 03.45pm
	345	Tri Gohansen Yonwijaya, and Rosidah Rosidah	A study on behavioral intention to use in Cryptocurrency applications among Generation Z using UTAUT Model	03.45pm – 04.05pm
	323	Paikun, Didi Nurjaman, Mediana Utami, Vikri Nur Alam, Richa Rahmaliya Sunhadji, and Barkah	Analysis of the quality of domestic wastewater before and after treatment using WWTP	04.05pm – 04.20pm
	325	Paikun, Ranu Muhammad Fajargde, Selvia, Moh Humaeni, Selfin Anugrah Amdani and Dana Budiman	Analysis of the design prototype for prefabricated building components in subsidized housing	04.20pm – 04.45pm
	053	Azwi Haidar, Femina Dumiyanti, Meta Amalya Dewi, and Sucianna Ghadati Rabiha	Usability Evaluation of Mobile Travoy Application Using the System Usability Scale (SUS) Method (Case Study: PT Jasamarga Tollroad Operator)	04.45pm – 05.05pm

Tuesday, 7th November 2023

C. Room 3: TS 3-1 & TS 3-2

Link : https://bit.ly/ICCED2023
Meeting ID : 828 9858 5060
Passcode : icced2023
Room : LR 11, KICT IIUM Malaysia

Session Chair : Asst. Prof. Dr. Siti Asma binti Mohammed (TS 3-1)
Asst. Prof. Ts. Dr. Hafizah Binti Mansor (TS 3-2)

Room 3	Paper ID	Authors	Paper Title	Time
TS 3-1	076	Eva Nurlatifah, Satya Wira Permana, Agung Wahana, Diena Rauda Ramdania and Yana Aditia Gerhana	The Comparison Of Lexicon-Based And Support Vector Machine Methods For Online Loan Sentiment Analysis On Twitter Social Media	01.30pm – 01.50pm
	244	Dewi Astari, Yudi Fernando, Ridho Ikhsan, Ika Sari Wahyuni-Td, Hartiwi Prabowo and Erick Fernando	Predictors of Perceived Customer Experience and Perceived Trust: Purchase Legal Woods Online on Web-Commerce	01.50pm – 02.10pm
	311	Thomas Wernbacher, Mario Platzer, Alexander Seewald, Thomas Winter, Simon Wimmer, Alexander Pfeiffer	Green E-Commerce	02.10pm – 02.30pm
	245	Novie Lilisia Sekar Wulan, Yudi Fernando, Ika Sari Wahyuni-Td, Ridho Ikhsan, Erick Fernando and Hartiwi Prabowo	Electronic Service Quality and Information Quality on Online Customer Satisfaction: A Study of Legal Woods	02.30pm – 02.50pm
	010	Andra Maret Setyo Resmi, I'in Nuraini, Muhamad Iqbal Samudra, dan Dina Fitria Murad	User Experience Analysis of BAZNAS Jombang Website Using User Experience Questionnaire	02.50pm – 03.10pm
TS 3-2	385	Fajar M Syam, Rian Maulana Yusup, Samsudin, and Muchtar Ali Setyo Yudono	Systematic Review Image Processing Based Dorsal Vein Pattern Biometric Authentication System	03.25pm – 03.45pm
	105	Hendrico Ajey , Rina Mardiati , Lia Kamelia	Automatic Presence System With Face Recognition Based Smartphone Camera Using The Haar Cascade Method	03.45pm – 04.05pm
	380	Muhammad Aqil Izdihar bin Saharudin, Muhamad Aizat Nazran bin Rosli, Dini Oktarina Dwi Handayani, Atikah Balqis binti Basri, Zainab S. Attarbashi, and Zeldi Suryady	Flood Forecasting Using Weather Parameters	04.05pm – 04.20pm
	011	Wendi Maruli Panjaitan, Ray Hansen, Rizqullah Andi Pawawoi, Dina Fitria Murad	Analyzing User Experience in SEVA Application: A User Experience Questionnaire Study	04.20pm – 04.45pm
	077	Brainnisa Ramadhani Nur Nisrina, Baskoro Azis, Milkhatussyafa'ah Taufiq, Gusti Pangestu, Muhammad Dzaki Fuad, and Felix Franklin Zebua	Design approach for child-friendly space in densely populated settlements based on behaviour settings and Bing AI Image Generator. (Study Case: Kampung Wisata Jodipan (KWJ) Malang)	04.45pm – 05.05pm

Tuesday, 7th November 2023

D. Room 4: TS 4-1 & TS 4-2

Link : https://bit.ly/ICCED2023
Meeting ID : 828 9858 5060
Passcode : icced2023
Room : LR 12, KICT IIUM Malaysia

Session Chair : Asst. Prof. Dr. Ts. Zahidah Binti Zulkifli (TS 4-1)
Asst. Prof. Dr. Atikah Balqis Binti Basri (TS 4-2)

Room 4	Paper ID	Authors	Paper Title	Time
TS 4-1	309	Anderes Gui, Frensen Antonio, Muhammad Shabir Shaharudin, Elfindah Princes, Idris Gautama So, and Razib Chandra Chanda	Drivers and Barriers of Cloud Accounting Adoption	01.30pm – 01.50pm
	352	Berren Arisandy Hermanto, Anderes Gui, Idris Gautama So, and Andi Alkila Aurelia Firjatullah Muzakkir	Digital Bank Security in Indonesia	01.50pm – 02.10pm
	078	Diena Rauda Ramdania, Cecep Nurul Alam, Afif Hani Ghuswari, Mohamad Irfan, Aldy Rialdy Atmadja and Maisevli Harika	Binary to Decimal Conversion and Subnetting Calculations using Augmented Reality	02.10pm – 02.30pm
	381	Maryam Nur Badriyyah, Novi Adistya, Salsa Dwi Sagita and Utamy Sukmayu Saputri	Green Building Assessment Based on Appropriate Site Development and Water Conservation Category at Building B Nusa Putra University	02.30pm – 02.50pm
	104	Miranti Nurul Huda, Lintang Ayu Larasati, Hindam Basith Rafiqi, and Donna Carollina	Revitalizing the UI/UX Design of Bromo Tengger Semeru National Park Website through Design Thinking Methodology	02.50pm – 03.10pm
TS 4-2	296	Annisa Luthfiasari, Citra Fadillah, and Ferri Gunawan	Fluid Geometric: An Experimentation of Designing Flexible Multi-Style Typeface Using Variable Font	03.25pm – 03.45pm
	160	Muhammad Surya Wijaya, Yudi Fernando, Ridho Ikhsan, Ika Sari Wahyuni-Td, Erick Fernando and Hartiwi Prabowo	Perceived Trust of Paylater and Relaxation Shopping: Gender as A Moderator	03.45pm – 04.05pm
	170	Agus Muhammad Mirza, Yudi Fernando, Fineke Mergeresa, Ika Sari Wahyuni-Td, Ridho Ikhsan and Erick Fernand	Psychological Risk, Security Risk and Perceived Risk of the Cryptocurrency Usage	04.05pm – 04.20pm
	139	Hideyuki Elvin Ramandhanizcha, Siti Yuniarti and Besar	Assistance of cybercrime: Practise in Indonesia	04.20pm – 04.45pm
	339	Hesri Mintawati, Paikun Paikun, Muhammad Firmansyah, Indah Alaziz, Milda Maryani and Anang Suryana	Design of a digitalized recharge system for groundwater sustainability in water exploitation areas	04.45pm – 05.05pm

Tuesday, 7th November 2023

E. Room 5: TS 5-1 & TS 5-2

Link : https://bit.ly/ICCED2023
Meeting ID : 828 9858 5060
Passcode : icced2023
Room : PG Lab 5, KICT IIUM Malaysia

Session Chair : Assoc. Prof. Dr. Muhammad Mahbubur Rashid (TS 5-1)
Asst. Prof. Dr. Zainab Senan Mahmod Attar Bashi (TS 5-2)

Room 5	Paper ID	Authors	Paper Title	Time
TS 5-1	388	Sholahudin, Yordanius Damey, Wahyu Fauji and Muchtar Ali Setyo Yudono	Indoor Air Quality Monitoring System with Automation: A Review	01.30pm – 01.50pm
	332	Wildan Budiawan Zulfikar, Edi Mulyana, Virna Aleyna Derani, Mohamad Irfan and Cecep Nurul Alam	Rule-based Approach for Air Quality Monitoring System with Internet of Things	01.50pm – 02.10pm
	146	Agus Ramelan, Feri Adriyanto, Irwan Iftadi, Luqman Hadi Dwi Satryo, Nike Sartika and Muhammad Adli Rizqulloh	IoT-Based Flow Meter Sensor for Genset Fuel Monitoring	02.10pm – 02.30pm
	240	Sofiya Alif Putri Imron, Yudi Fernando, Ridho Ikhsan, Erick Fernando and Rininta Ayu Pradhani	Investigating Perceived Digital Switching Cost and Customer Satisfaction-Loyalty Model on Video on Demand	02.30pm – 02.50pm
	333	Yunida Sofiana, Amarena Nediari, and Hervina Dyah Aprilia	User Experience in Retail Furniture (IKEA Store) as a Model for Space Circulation in Apartment Design	02.50pm – 03.10pm
TS 5-2	044	Dian Sa'adillah Maylawati, Rifqi Fajri Abdullah, Yana Aditia Gerhana, Agung Wahana, Ichsan Budiman, and Wisnu Uriawan	Changes Analysis in Public Opinion regarding Binary Option Trends using K-Means++	03.25pm – 03.45pm
	379	Muhammad Naqib Syahmi bin Ab Razak, Muhammad Imran bin Mohamad, Dini Oktarina Dwi Handayani, Zainab S. Attarbashi, Sandra Hakiem Afrizal, and Zeldi Suryady (IIUM)	Prayer Hall Vacancy Detection	03.45pm – 04.05pm
	152	Somantri, Alun Sujjada, Yusuf Saeful Bayan, Viky Rodiatul Ulum, and Fahmi Adrial Ilhami	Enhanced Plastic Detection and Classification: Advancing Recognition of Plastic Varieties Using YOLO V8	04.05pm – 04.20pm
	219	Samsul Pahmi, Nanang Priatna and Anggy Pradifta Junfithrana	Exploring the Application of Augmented Reality in Mathematics Education: A Systematic Literature Review	04.20pm – 04.45pm
	054	Muhammad Sasmito Adi Wibowo, Salsabilah Zahirah, and Meta Amalya Dewi	User Experience Evaluation On Kompas.Com Online News Portal Using User Experience Questionnaire (UEQ)	04.45pm – 05.05pm

Tuesday, 7th November 2023

F. Room 6: TS 6-1 & TS 6-2

Link : https://bit.ly/ICCED2023
Meeting ID : 828 9858 5060
Passcode : icced2023
Room : MPH, KICT IIUM Malaysia

Session Chair : Asst. Prof. Dr. Ts. Ahmad Anwar bin Zainuddin (TS 6-1)
Asst. Prof. Ts. Dr. Muhamad Sadry Abu Seman (TS 6-2)

Room 6	Paper ID	Authors	Paper Title	Time
TS 6-1	341	Moh. Wafiq Fanani, Nabila Qonitah Lishandary, Nabila Firstananda Saputri, Tiurida Lily Anita, and Teguh Prasandy	User Experience Analysis Using Usability Testing Method on Online Queue System at Hospital Service	01.30pm – 01.50pm
	102	Tegar Dwi Pangestu, Rina Mardiati, and Aan Eko Setiawan	The Implementation of Fuzzy Logic Control-Based Robot Arm Movement	01.50pm – 02.10pm
	203	Muhammad Raihan Aditia Suhendi, Alfarizi, Arief Agus Sukmandhani, and Yulius Denny Prabowo	Network Anomaly Detection Analysis using Artillery Honeypot and Wazuh SIEM	02.10pm – 02.30pm
	161	Rizky Mahesa Ramadhan, Rin Rin Nurmalasari, Rangga Julfian Hakim, Rizky Nurhadhi, Agus Sukoco and Ary Setijadi Prihatmanto	Smart Electric Meter: Monitoring and Control for Electrical Consumption and Safety based on IoT	02.30pm – 02.50pm
	373	Anggy Pradiftha Junfithrana, Dani Mardiyana, Somantri Somantri and Satish Kumar Damodar	Enhancing Waste Management and Air Quality through Dual Chamber Incinerator with Filtration for Electrical Energy Generation	02.50pm – 03.10pm
TS 6-2	103	Nurfitria Khoirunnisa, Rina Mardiati and Taufan Abdurrachman	Prototype Urban Farming Assistant (WUFARM) using Web of Things for Family Food Security	03.25pm – 03.45pm
	097	Ichsan Taufik, Mohamad Irfan, Dicky Wahyudi, Wildan Budiawan Zulfikar, and Aldy Rialdy Atmadja	Implementation of the Forward Chaining and Dempster Shafer Methods in Diagnosing Tonsillitis	03.45pm – 04.05pm
	150	Nadya Riezka Azzahra Putri, Yudi Fernando, Ridho Ikhsan, Erick Fernando, Yudhita Prasarry and Hartiwi Prabowo	Digital Payment Experience at Coffee Shop: Customers Satisfaction and Repurchase Intention	04.05pm – 04.20pm
	127	Friska Amalia, and Ahmad Fitriyansah	Case Study of 360 Image Viewer Software Utilization in Interior Design Presentation to Improve Product Immersion	04.20pm – 04.45pm
	166	Setyo Supratno, Rohamid Rohamid, Putra Wisnu Agung Sucipto, Annisa Firasanti, Reza Anggriyashati Adara and Eki Ahmad Zaki Hamidi	Obstacle Avoidance Behavior Design in Hexapod Robots using Finite State Machine	04.45pm – 05.05pm

Tuesday, 7th November 2023

G. Room 7: Poster Room

Link : https://bit.ly/ICCED2023
Meeting ID : 828 9858 5060
Passcode : icced2023
Room : LR 13 – LR 14, KICT IIUM Malaysia

Session Chair : Tulus Rega Wahyuni E, S.Kom.i., M.Sn & Sudin Saepudin, S.Kom., M.Kom

Room 7	Paper ID	Authors	Paper Title	Time
TS 7-1	43	Khadijah Kibtiyah, Muhamad Ridwan Nullah, Aden Rahmat Ramdani, Mega Putri Utami, Alun Sujjada, Kamdan Kamdan and Hermanto Hermanto	Crime Data Identification Based On Events Locations In West Java Using K-Means Algorithm	03.00pm – 03.10pm
	52	Anggun Fergina, Putri Anugrah Simanjorang, Armelia Isabela Taek, Falentino Sembiring, Dhea Adela and Siti Sarah Sobariah	Decision Support System For Food Recommendations To Support Web-Based Diet With Simple Additive Weighting Method Additive Weighting (Saw)	03.10pm – 03.20pm
	123	Kamdan Kamdan, Chelika Patricia Handraputri, Muhammad Azmi Fauzan, Bibin Aripin, Ivana Lucia Kharisma, Gina Purnama Insany and Alun Sujjada	Design And Develop A First Person Shooter Game With Unity Based On Windows	03.20pm – 03.30pm
	168	Muhammad Akbar, Firman Ramdhany, Ivana Lucia Kharisma and Kamdan Kamdan	Design And Development Of An IOT-Based Air Purifier	03.30pm – 03.40pm
	340	Abi Yusup, Indra Maajid Aditama, Risa Nursania , Falentino Sembiring	Analysis Of The Influence Of Artificial Intelegence (Ai) Base Application On Technological Life Of Communities With Support Vector Machine (Svm)	03.40pm – 03.50pm
	314	Ajeng Wulan Suci, Novitasari, Rijal Pahlepi, Sudin Saepudin and Carti Irawan	Application Of Decision Tree Algorithm With Iterative Dichotomiser 3 In Steel Sales	03.50pm – 04.00pm
	91	Falentino Sembiring, Mayang Gunawan, Rosalinda Hakim and Vemi Januarita Putri	Comparison Of Global Stock Price Movements Using Support Vector Machine (Svm) And Naïve Bayes Algorithms Post-Pandemic (Case Study: Xiaomi And Samsung)	04.00pm – 04.10pm
	326	Santana Santana, Merti Nurmiati, Riri Ramadani, Tasya Sabila Aulia, Rina Rustiana, Purnamawati Sabat, Venti Venti and Dudih Gustian	Decision Support System For Consumer Delay Using Weighted Product Method At Perumda Air Tirta Jaya Mandiri	04.10pm – 04.20pm
	132	Indra Yustiana, Nuraiman and Siti Syarah Sevia	Designing The Sundanese Dictionary Application As A Medium For Learning Regional Languages With The Android-Based Fuzzy Method	04.20pm – 04.30pm
	39	Reka Reka, Irpanudin Irpanudin, Reni Nur Anggraeni, Panji Pratama, Alun Sujjada, Anggun Fergina and Muhammad Ikhsan Thohir	Implementation Of Data Mining Poverty Data Grouping In Bolang Village Using The K-Means Clustering Method	04.30pm – 04.40pm
	40	Ivana Lucia Kharisma, Sri Rahmawati, Zulia Nur Permatasari, Alvira Fauziah Rahmah, Rizal Fadli,	Implementation of K-Means Clustering And Agglomerative Hierarchical Clustering Methods	04.40pm – 04.50pm

		Kamdan Kamdan and Hermanto Hermanto	To Determine The Nutritional Status Of Toddler	
	169	Anggun Fergina, Gina Purnama Insany, Rian Raihan M, Muhammad Ardhi Septian and M Azka Misti Dzulqarnain	Improving Customer Relationship Management (Crm) Using Chatbot: Study Cv Adzkia	04.50pm – 05.00pm
	334	Destri Komalasari, Nopita Amelia, Novita Damayanti and Habi Baturohmah	Facebook Sentiment Analysis For The 2024 Presidential Candidate Election Using The Naive Bayes Method	05.00pm – 05.10pm
	316	Sudin Saepudin, Yansen Makleat, Fauzia Ramadhan and Abdul Cholis	Improving Website Intrusion Detection Using Similarity Search Vector And Deep Learning Model	05.10pm – 05.20pm
	297	Santi Rahmawati, Satyawati Yuliani, M Fedrik Arbi, Sudin Saepudin and Carti Irawan	Sports Selection Decision Support System For Healthy Body Codition Using Analytical Hierarchy Process (Ahp) Method	05.20pm – 05.30pm
	99	Tofik Hidayat, Moh. Abd Aziz Hidayat, Ivana Lucia Kharisma, Gina Purnama Insany and Kamdan Kamdan	Transforming PDF Books Into Audio: Empowering Visually Impaired Readers With Bukudio, Text-To-Speech Text-To-Speech, And Text Summarization Application	05.30pm – 05.40pm
	41	Kamdan Kamdan, Dimas Arya Pamungkas, Hana Nurcahya Sumirat, Sarah Sahira, Ivana Lucia Kharisma, Setiawati Setiawati and Anggun Fergina Fergina	Web-Based Information System For Registration Of Conservation Area Entry Permits (Simaksi) On Hiking Trails Of Mounth Halimun Salak National Park	05.40pm – 05.50pm

Wednesday, 8th November 2023

A. Room 1: TS 1-1, TS 1-2, TS 1-3

Link : https://bit.ly/ICCED2023
Meeting ID : 828 9858 5060
Passcode : icced2023
Room : LR 9, KICT IIUM Malaysia

Session Chair : Dr. Mohd. Khairul Azmi Hassan (TS 1-1)
Dr. Najhan Muhamad Ibrahim (TS 1-2)
Dr. Hamwira Sakti Yaacob (TS 1-3)

Room 1	Paper ID	Authors	Paper Title	Time
TS 1-1	072	Agus Ramelan, Feri Adriyanto, Irwan Iftadi, Muhammad Hammam Al-Choiri, Muhamad Sandya Rafiyatna, Mario Alfandi Wirawan, Bagas Setiawan, Nike Sartika, and Muhammad Adli Rizqulloh	IoT Based Smart Charger Dock for Electric Scooters Using Solar Panel	10.15am – 10.35am
	018	Arief Agus Sukmandhani, Yulyani Arifin, Muhammad Zarlis, and Widodo Budiharto	Recent Trends for Text Summarization in Scientific Documents	10.35am – 10.55am
	394	Agus Pratondo, Nanang Ismail, Aprianti P. Sujana, and Astri Novianty	Identification of Sukun (Artocarpus altilis) and Kluwih (Artocarpus camansi) Leaves using Transfer Learning	10.55am – 11.15am
	176	Teddy Mantoro, Agung Ginanjar, Media Anugerah Ayu, and Umar Aditiawarman	Features Reduction With PCA Technique For Malware Detection Using Machine Learning	11.15am – 11.35pm
	317	Ida Ayu Widhiadari, Tiffany, Valenska Wibisono Putri, Hartiwi, and Teguh Sriwidadi	Social Media User Characteristics Nowadays and its Effects on AirAsia Brand Awareness and Brand Image	11.35pm – 11.55pm
	005	Fauzi Rizky Utama, Dian Sa'adillah Maylawati, Undang Syaripudin, Diena Rauda Ramdania, Eva Nurlatifah, Muhammad Andi Septiadi	Sentiment Analysis Regarding the Name of "Nusantara" in Indonesia's New Capital City Using Convolutional Neural Network	11.55pm – 12.15pm
TS 1-2	293	Ang Swat Lin Lindawati, Bambang Leo Handoko, and Mohamad Heykal	Model of Blockchain Adoption in Financial Audit Profession	01.15pm – 01.35pm
	300	Ang Swat Lindawati, Bambang Leo Handoko, and Edwin Hendra	Behavioral Intention to Use Mobile Banking using UTAUT 2 Model	01.35pm – 01.55pm
	015	Muhammad Rizky Ajie Soelistyo, Muhammad Rifqi Naufal, Dina Fitria Murad, and Silvia Ayunda Murad	Improving User Experience Using User Experience Questionnaire Method on Online Attendance Super HANA Application	01.55pm – 02.15pm
	210	Sindy Faj Misa Putri, Muhammad Fasha Aqillah, Rina Mardiati, Aan Eko Setiawan	Prototype of Oxygen Level and Heart Rate Detector in Human Body Using MAX30100 Sensor	02.15pm – 02.35pm
	306	Anderes Gui, Idris Gautama So, Dea Novantia, Elfindah Princes, Nesti Fronika Sianipar, and Hasnah Haron	Factors that Influence E-Satisfaction and Their Impact on Online Purchase Intention of Telemedicine Applications	02.35pm – 02.55pm
	290	Anupam Agrawal and Krishna Sai Koppula	Autism Spectrum Disorder Detection through Facial Analysis and Deep Learning:	02.55pm – 03.15pm

			Leveraging Domain-Specific Variations	
TS 1-3	321	Bambang Leo Handoko, Triana Meinarsih, and Haryadi Sarjono	Behavioral Intention to Use Audit Software using DeLone-McLean and Technology Acceptance Model	03.20pm – 03.40pm
	60	Jason Susanto, Hansen Andersen Sutikno, Zaafira Sekar Safitri, Karli Eka Setiawan and Muhammad Fikri Hasani	Using Weather Patterns to Forecast Cafe Sales	03.40pm – 04.00pm
	45	Pushya Chaparala, Amar Jukuntla, V.Sasidhar Reddy, Pavani Sudha Thipparthi and Vishnu Vinayak Veera	FROM WEB PROFILES USING WEB SCRAPING of Alumni Information From Web Profiles Using Web Scraping	04.00pm – 04.20pm
	408	Media Ayu, Dimas Erlangga and Teddy Mantoro	Enhancing Security Information and Event Management (SIEM) by Incorporating Machine Learning for Cyber Attack Detection	04.20pm – 04.40pm
	262	Kamsiah Mohamed, Mohd Nazran Mohd Pauzi, Fakariah Hani Mohd Ali and Suriyani Ariffin	Improved Block Cipher in Permutation Function based on Spiral Fibonacci	04.40pm – 05.00pm

Wednesday, 8th November 2023

B. Room 2: TS 2-1, TS 2-2, TS 1-3

Link : https://bit.ly/ICCED2023
Meeting ID : 828 9858 5060
Passcode : icced2023
Room : LR 10, KICT IIUM Malaysia

Session Chair : Dr. Atikah Balqis Basri (TS 2-1)
Dr. Raini Hassan (TS 2-2)
Dr. Suriani Sulaiman (TS 2-3)

Room 2	Paper ID	Authors	Paper Title	Time
TS 2-1	017	Nur Ikhsan, Arief Agus Sukmandhani, Jenny Ohliati, and Yulius Denny Prabowo	Design and Build AAA Server using Free Radius Study Case Network Security Management at PT. XYZ	10.15am – 10.35am
	56	Ammar Yaafi Adhinegoro, Ida Bagus Gede Purwa Manik Adiputra, Vincent Colin Tionando, Karli Eka Setiawan, and Muhammad Fikri Hasani	Predicting Anger Proneness Using Deep Learning Techniques	10.35am – 10.55am
	101	Heri Andrianto, Yohana Susanthi, Vincent Jonathan, and Nanang Ismail	Design of IoT-Based Electrical Energy Meter	10.55am – 11.15am
	177	Jelita Asian, Oktavianus Tegar N. K. Putra, Media Ayu, Teddy Mantoro	Machine Learning Based Sentiment Analysis wiith N-Gram Preprocessing for Reviews in Indonesian Language on Shopee E-Commerce	11.15am – 11.35am
	354	Ben Rahman, Septi Andryana, Aris Gunaryati and Teddy Mantoro	Development of Image-Based Road Pothole Detection Model with U-Net implementation	11.35am – 11.55am
	270	Setia Sri Anggraeni and Septi Andryana	Analysis Sentiment towards Delivery Service: Case Study of Paxel	11.55pm – 12.15pm
TS 2-2	034	Abdul Rahman, Mirza Kemal Abdullah, Hamdi Zubir Koto, and Sunardi	User Experience Analysis On Digital Healthcare Website Using User Experience Questionnaire And Heuristic Evaluation	01.15pm – 01.35pm
	036	Ario Barnas Hardi, Ekaristi Simorangkir, Immanuel Hutagaol, Sunardi, and Willy Johan Widjaja Saputra	User Experience Analysis on Mobile Banking Applications with System Usability Scale and Usability Testing	01.35pm – 01.55pm
	61	Justin Arola Rusman, Kevin Chunady, Singgih Tulus Makmud, Karli Eka Setiawan, and Muhammad Fikri Hasani	Crude Oil Price Forecasting: A Comparative Analysis of ARIMA, GRU, and LSTM Models	01.55pm – 02.15pm
	181	Inayatulloh, Prasetya Cahya S, and Tripujadi	IoT and Blockchain Technology Integration Models for Transparency and Protection of Sales and Purchase Luxury Products	02.15pm – 02.35pm
	336	Titi Indahyani, Nabilla Retnaning Dewanti and Silvia Meliana	Implementation of Digital Transformation in Design Education Learning To Support The Sustainability of Tourism Area	02.35pm – 02.55pm
TS 2-3	405	Nur Rokhman, Lia Kamelia, Muhammad Syauqi Arrobani, Raka	Development of Visual Programming-Based IoT Trainer	03.20pm – 03.40pm

		Dhijan Ananda, Laode Muhammad Naufal F and Ahmad Saepul Milah	using Tuniot to Enhance Students' Technology Skills in Education	
	406	Boy Sipahutar and Teddy Mantoro	Digital Signature Chain for Security and Integrity Data Transmission	03.40pm – 04.00pm
	265	Deddy Suryo Arwoko, Yordan Baniara, Teguh Raharjo, and Emny Harna Yossy	Development Health Machine of Heavy Equipment Condition Monitoring System	04.00pm – 04.20pm
	069	Vincent Dava Sutomo, Neo Cenon, Aloysius Kang, I Dewa Agung Kayana Abhipraya Putra Bandjar, Felix Indra Kurniadi, and Riccosan	Does Deflate Outperform Huffman Lossless Compression?	04.20pm – 04.40pm
	337	Sarwo, and Yulius Denny Prabowo	Optimizing Age Classification Using Hyperparameter Tuning and Handling Imbalanced Dataset: An Algorithm Decision Forest training Algorithms Approach	04.40pm – 05.00pm

Wednesday, 8th November 2023

C. Room 3: TS 3-1, TS 3-2, TS 3-3

Link : https://bit.ly/ICCED2023
Meeting ID : 828 9858 5060
Passcode : icced2023
Room : LR 11, KICT IIUM Malaysia

Session Chair : Prof. Dr. Abdul Wahab Abdul Rahman (TS 3-1)
Dr. Ayub Abdul Rahman (TS 3-2)
Dr. Nur Hafizah Mahri (TS 3-3)

Room 3	Paper ID	Authors	Paper Title	Time
TS 3-1	032	Melani Elisabeth, Widya Intawani, Sunardi, and Siti Maryam	User Experience Analysis on Mobile-Based Payment Using Usability Testing and System Usability Scale Methods	10.15am – 10.35am
	401	Rangga Julfian Hakim, Ahmad Hafidz Fajrian, Roprop Latiefatul Millah, Ilyas Rifai, Lia Kamelia and Yudha Fitri	Automatic Farm Protection Systems from Pest Rodents based on the Internet of Things (IoT)	10.35am – 10.55am
	233	Felix Indra Kurniadi, Meta Amalya Dewi, Dina Fitria Murad, Sucianna Ghadati Rabiha, and Awanis Romli	An Investigation into Student Performance Prediction using Regularized Logistic Regression	10.55am – 11.15am
	106	Tiurida Lily Anita, Muslikhin Muslikhin, Arif Zulkarnain, and Tri Wiyana	Sociomaterial Imbrication; The Role of Chatbot on Customer Experience	11.15am – 11.35pm
	211	Betari Evandra Pratiwi, Risty Ayuningtyas, Zikri Fajriawan and Mochammad Fahlevi	Dissecting Instagram's Impact on Brand Image and Customer Behavior for Ramu Nostalgia Indonesia in an Era of Rapid Digital Marketing Evolution	11.35pm – 11.55pm
	004	Rafli Indra Gunawan, Agung Wahana, Dian Sa'adillah Maylawati, Cepy Slamet, Cecep Nurul Alam, Nunik Destria Arianti	Sentiment Analysis on the Pros and Cons of Cryptocurrencies using the Multinomial Naïve Bayes Algorithm	11.55pm – 12.15pm
TS 3-2	070	Rachmat, and Ditdit Nugeraha Utama	Service Oriented Smart Model for Flood Controlling	01.15pm – 01.35pm
	175	Ditdit Nugeraha Utama, Fauzan Affan Zaki, Intan Juliani Munjeri, and Nidya Utami Putri	Service Oriented Fuzzy Decision Model for Road Traffic Engineering	01.35pm – 01.55pm
	019	Arief Agus Sukmandhani, Suryadi, Jenny Ohliati, and Yulius Denny Prabowo	Development Based on Mobile Application for Learning Mandarin Language	01.55pm – 02.15pm
	137	Jupriyadi, Adi Sucipto, Syaiful Ahdan, Alvi Suhartanto, Ichtiar Lazuardi Putra, and Eki Ahmad Zaki Hamidi	A Ranking-Based Feature Selection For Indoor Positioning System	02.15pm – 02.35pm
	216	Inayatulloh, Indra Kusumadi Hartono , and Dwi Listriana Kusumastuti	The Blockchain Conceptual Model to Prevents Fraud and Increase Transparency In The Presidential Election In Indonesia	02.35pm – 02.55pm
	331	Imran Haqeem Azidy, Mohammad Mu'izzuddin Mohammad Ali, Nurazlin Zainal Azmi, Eman Yahya Maarof, and Kiran Fatima	Small Town Settlement Virtual Reality (VR) Game	02.55pm – 03.15pm
TS 3-3	386	Mohammad Syameer Imran, Muhammad Daniel, Zainab S. Attarbashi, Dini Oktarina Dwi	Wireless Resilience: A LoRa-Based Sensor Network and Mobile Application for Flood Victim Rescue System	03.20pm – 03.40pm

		Handayani, Saman Iftikhar, and Dania Al-Madani		
	304	Radityo Widiatmojo, Moch Fuad Nasvian and Patricia Ranizia Lakshmi Devi	Drone Technology for Disaster-Photojournalism in Indonesia	03.40pm – 04.00pm
	319	Wili Dwiyanto and Frederik Gasa	Analysis Of Website Content as an Environmental Communication Media: Case Study of Bromotenggersemeru.org	04.00pm – 04.20pm
	042	Roprop Latiefatul Millah, Ahmad Hafidz Fajrian, Rangga Julfian Hakim, Lia Kamelia, Rena Denya Agustina and Mursidin	Smart Sajadah: A System for Character Education of Elementary School Students Using IoT Technology	04.20pm – 04.40pm
	269	Safitri Safitri, Teddy Mantoro, Muhammad Agni Catur Bhakti, and Wandy Wandy (Sampoerna)	Cooking and Food Information Chatbot System using GPT-3	04.40pm – 05.00pm

Wednesday, 8th November 2023

D. Room 4: TS 4-1, TS 4-2, TS 4-3

Link : https://bit.ly/ICCED2023
Meeting ID : 828 9858 5060
Passcode : icced2023
Room : LR 12, KICT IIUM Malaysia

Session Chair : Dr. Zainab Senan Mahmod Attar Bashi (TS 4-1)
Dr. Nurul Liyana Mohama d Zulkifli (TS 4-2)
Dr. Shuhaili Talib (TS 4-3)

Room 4	Paper ID	Authors	Paper Title	Time
TS 4-1	227	Nilo Legowo, Wahyu Sarjdono, Eddy Susanto, and Ditdit Nugeraha Utama	Fuzzy Risk Model for Research and Development Department in Clinical Laboratory	10.15am – 10.35am
	120	Donna Carollina, Mita Purbasari, and Sidharta	Bibliometric Analysis of Smart Technology for Virtual Museum Research	10.35am – 10.55am
	033	Ibnu Prastowo Haryono Putro,Sri Santi,Vindo Pradana, and Sunardi	User Experience Analysis Of E-Procurement Applications In Energy Sector Companies Using User Experience Questionnaire And Usability Testing Methods	10.55am – 11.15am
	190	Yahya Ainun Najib, Rina Sry Ulina Br Tarigan, Juliana Eiren Boru Hasibuan, Riyan Leandros and Dina Fitria Murad	User Experience Analysis using System Usability Scale Method on Diskominfo Website	11.15am – 11.35pm
	351	Cecep Hidayat, Enny Noegraheni Hindarwati, and Kevin Winata	The Role of Sales Promotions and Customer Experience on Customer Satisfaction and Its Impacts on Online Shopping Repurchase Intention	11.35pm – 11.55pm
	407	Herlawati Herlawati, Rahmadya Trias Handayanto, Kusuma Hati, Prima Dina Atika, Didik Setiyadi, Sri Rejeki, Dwi Budi Srisulistiowati, Elfirda Ade Putri, and Khairunnisa Fadhilla (ubharajaya.ac.id online)	The Impact of the COVID-19 Pandemic on Land Surface Temperature Change through Remote Sensing Data Processing	11.55pm – 12.15pm
TS 4-2	226	Istia Ayu Hadiyati, Lay Sukiamnto, Uci Rahmat Amitha, Lianna Wijaya, Ng Kah CHoon, and Kin Meng Cheng	Purchase Intention of E-Commerce Platform in Indonesia: Determinants of the Motivation Hindering Factors	01.15pm – 01.35pm
	154	Salsabila Nadhifah, Yudi Fernando, Ika Sari Wahyuni-TD, Ridho Bramulya Ikhsan, Erick Fernando and Hartiwi Prabowo	New Product Launching and Hedonism: Augmented Reality as A Moderator of Impulsive Buying Behavior on Motor Show Events	01.35pm – 01.55pm
	239	Yohanes Dewantoro Patianom, Fernando Yudi, Ridho Bramulya Ikhsan, Ika Sari Wahyuni-Td, Erick Fernando and Hartiwi Prabowo	Behavioral Intention to Use Quick Response Code Indonesian Standard as Digital Payment Methods: A Moderator of Ownership	01.55pm – 02.15pm
	360	Meta Amalya Dewi, Felix Indra Kurniadi, Dina Fitria Murad, Sucianna Ghadati Rabiha, Awanis Romli	Machine Learning Algorithms for Early Predicting Dropout Student Online Learning	02.15pm – 02.35pm
	228	Manisha Gedam and Swapnili Karmore	A lightweight blockchain framework for secure and ef-ficient IoT data management	02.35pm – 02.55pm
	302	Alden Ardiwinata Putra, Princessa Fortunata Fusanto, Nebrisca Valonika,	Systematic Literature Review on IT Strategic Workspaces:	02.55pm – 03.15pm

		Maria Susan Anggreainy and Afdhal Kurniawan	Approach to Develop an Ideal Environment	
TS 4-3	367	Normaziah A. Aziz, Hareez Ishraf Hazrudden and Abdul Haziq Zulkifli	Privacy Engineering for Protection of Personal Identifiable Information	03.20pm – 03.40pm
	368	Rayhan Putra Pratama, Safira Humaira, Dea Nur Fauzi, Eric Gunawan, and Emny Harna Yossy	Analysis and Design of Android-Based Food Sharing Applications	03.40pm – 04.00pm
	371	Sara Antonijevic, Nicholas A. Hegedus, Nuri J. Omolara, Kishore Bingi, Om Prakash Yadav and Rosdiazli Ibrahim	Time Series Forecasting of Generated Power From Texas Wind Turbine	04.00pm – 04.20pm
	327	Jumadi, Wildan Budiawan Zulfikar, Fajrian Fatan Abdillah, Nurul Aulia Dewi, Aldy Rialdy Atmadja, and Muhammad Insan Al Amin	Classroom Activities Detection Using You Only Look Once V3	04.20pm – 04.40pm
	062	Diena Rauda Ramndania, Fariz Maulana Herman, Undang Syaripudin, Ichsan Taufik, Muhammad Deden Firdaus, and Ichsan Budiman (UIN)	Multiplicative Random Number Generation Algorithm in Recognition of Hiragana Letters and Katakana Game	04.40pm – 05.00pm

Wednesday, 8th November 2023

E. Room 5: TS 5-1, TS 5-2, TS 5-3

Link : https://bit.ly/ICCED2023
Meeting ID : 828 9858 5060
Passcode : icced2023
Room : PG Lab 5, KICT IIUM Malaysia

Session Chair : Prof. Dr. Akram M. Z. M. Khedher (TS 5-1)
Dr. Nor Zariyah Yahya (TS 5-2)
Dr. Noorazura Zakaria (TS 5-3)

Room 5	Paper ID	Authors	Paper Title	Time
TS 5-1	136	Haikal Andrean, Moh. Humam Mukti, Farah Hana Zhafirah, and Budiyono	Digimaps in Dashboard for Periodic Inspection Checklist for Transmission Network, Distribution Substation, and PLTU Equipment	10.15am – 10.35am
	259	Fatimatuz Zahro, Malik Fikri, Muhammad Dumairy Priyanto, GG Faniru Pakuning Desak, and Meta Amalya Dewi	Strategic Planning For Information Systems Optimization Of Vocational Higher Education Facilities And Infrastructures At The Ministry Of Education, Culture, Research And Technology (E-Sarpras)	10.35am – 10.55am
	188	Sumiatie Susanto, and Ditdit Nugeraha Utama	Object Oriented Fuzzy Decision Model for Insurance Claim	10.55am – 11.15am
	303	Jeremy Shawn, Jonathan Gunawan, Chen Zi Hao, Maria Susan Anggreainy and Afdhal Kurniawan	Analyzing Company's Share Purchase Value Based on Financial Reports Using Artificial Neural Network (ANN)	11.15am – 11.35pm
	229	Usha Kosarkar and Gopal Sakarkar	A Hybrid Deep Learning Model for robust deep fake detection	11.35pm – 11.55pm
	184	Elrica Selma Kolly, Mahaning Indrawaty Wijaya, and Tommy Andrian	Applying E-Payment for Improving MSME's Revenue in Jabodetabek: An Extended TAM Analysis	11.55pm – 12.15pm
TS 5-2	126	Nesti Julita Setyo Rini, Prasetyo Dwi Syahputra, Umairoh, Meta Amalya Dewi, and Voice Ester Ticoalu	Analysis and Design of User Experience (UX) for Human Resource Information System (HRIS) Time Management System (TMS) Module at PT Astra Daihatsu Motor	01.15pm – 01.35pm
	147	Laily Amalia Sari, Nadhia Nuri Tariana, Sri Hidarti Hadijah, and Meta Amalya Dewi	Evaluation of User Experience on Taspen Otentikasi Application Using User Experience Questionnaire (Case Study of PT. TASPEN (Persero))	01.35pm – 01.55pm
	285	I Kadek Perry Bagus Laksana, Michiko Amaya Yonatan, Putu Agus Parimartha, Vanessa Aprily Hongastu, Ivan Halim Parmonangan, and Diana	Enhancing Emotion Recognition using Contrastive Learning Representation of Paired Peripheral Physiological and EEG Signal	01.55pm – 02.15pm
	282	Andryan, Nathalia Chandra, Putu Devi Ariska Pramunita, Ivan Halim Parmonangan, and Diana	Hate Speech Detection in Indonesian Song Lyric Using BERT	02.15pm – 02.35pm
	231	Ahmad Anwar Zainuddin, Rizal Mohd Noor, Amir Aatieff Amir Hussin and Muhammad Nurzikry Mohd Sazali	MQTT-Enabled Smart Door Access System: Design and Implementation Using	02.35pm – 02.55pm

			NodeMCU ESP 8266 and HiveMQ	
	059	Jonathan Ivan, Julius Ferdinand, Brandon Steven, Karli Eka Setiawan, and Muhammad Fikri Hasani	Advancing Predicting Heart Disease: A Comparative Study of SVM, Naive Bayes, KNN, Linear Regression, and LSTM Models	02.55pm – 03.15pm
TS 5-3	363	Zainab S. Attarbashi, Tharshaan A/L Thamodharan, Mustafa Ali Abuzaraida, Saman Iftikhar, Noof Abdulaziz Alansari, Atikah Balqis Binti Basri, and Dini Oktarina Dwi Handayani	Using IoT-Based Mobile Application to Build Smart Parking System	03.20pm – 03.40pm
	366	Mohamad Asyraf Noorza bin Mohd Tamron, Zainab S. Attarbashi, Mustafa Ali Abuzaraida, Nesrine Atitallah, Saman Iftikhar, Dini Oktarina Dwi Handayani, and Atikah Balqis Binti Basri	IoT-based Heartbeats Monitoring System	03.40pm – 04.00pm
	098	Anderes Gui, Jason Vida, Raditya Andhikaputra, Samuel Marc Anthony Tumbel, Yuvaraj Ganesan, and Ridho Bramulya Ikhsan	Factors Influencing Customer's Intention to Continue Using Mobile Banking	04.00pm – 04.20pm
	338	Syaiful Anam, Fidia Deny Tisna Amijaya, Satrio Hadi Wijoyo, Dian Eka Ratnawati, Cynthia Ayu Dwi Lestari, Muhaimin Ilyas	Development of Diabetes Mellitus Diagnosis Method Based Random Forest Classifier with Particle Swarm Optimization	04.20pm – 04.40pm

Wednesday, 8th November 2023

F. Room 6: TS 6-1, TS 6-2, TS 6-3

Link : https://bit.ly/ICCED2023
Meeting ID : 828 9858 5060
Passcode : icced2023
Room : MPH, KICT IIUM Malaysia

Session Chair : Dr. Abdul Rafiez Abdul Raziff (TS 6-1)
Assoc. Prof. Dr. Lili Marziana Abdullah (TS 6-2)
Dr. Nor Zariyah Yahya (TS 6-3)

Room 6	Paper ID	Authors	Paper Title	Time
TS 6-1	151	Safiari Falianda, Ika Sari Wahyuni-TD, Yudi Fernando, Erick Fernando, Ridho Bramulya Ikhsan, and Hartiwi Prabowo	Information Quality and Electronic Service Quality in Driving Customer Satisfaction and Experience at Online Legal Woods	10.15am – 10.35am
	153	Irma Dita Andani, Ika Sari Wahyuni-TD, Yudi Fernando, Erick Fernando, Ridho Bramulya Ikhsan, and Hartiwi Prabowo	Moderator Model of Entertainment-Augmented Reality to Predict Visitor Intention: Findings from Indonesian Motor Show Events	10.35am – 10.55am
	372	Lutfi Aditya Wibowo, Nur Yunaidah Pratiwi, Martin Suhartana, and Emny Harna Yossy	Sentiment Analysis of Indonesian New Capitol (IKN) on Twitter Using Classification Algorithm	10.55am – 11.15am
	264	Lianna Wijaya, Rudolf Gruenbichler, Sylvia Samuel, and Tiurida Lily Anita	Determinant Factors of Continuance Intention to Use MOOCs: An Empirical Evidence from Indonesia	11.15am – 11.35pm
	246	Sumaiya Tabassum and Mahamudul Hasan	An Efficient Book Recommendation System by Combining Popularity	11.35pm – 11.55pm
	376	Agus Pratondo, Nanang Ismail and Astri Novianty	Browser Preference Prediction for Computer Users using Machine Learning	11.55pm – 12.15pm
TS 6-2	213	Ikrar Adinata Arin, Dina Fitria Murad, Harco Leslie Hendric Spits Warnars, and Meyliana	Examining the impact of attitude, availability, price, and quality of service on broadband Internet customer satisfaction	01.15pm – 01.35pm
	065	David Alfonso Sihotang, Rika Yuliani, Nabilah Ridhanti Zikra, Riyan Leandros, Silvia Ayunda and Siti Maryam	User Experience Analysis on Dinotis Application Web PT Davel Surya Cipta Jakarta	01.35pm – 01.55pm
	071	Gusti Pangestu, Baskoro Aziz, Febby Candra Pratama, Agung Purnomo, and Chasandra Puspitasari	The Transfer Learning Influence on YOLO v8 Performance For Motorbike Detection	01.55pm – 02.15pm
	191	Luthfi Hidayati, Novanti Lumban Tobing, Puspita Laras Anggraini, Riyan Leandros and Haikal Andrean	User Experience Analysis Of The Attendance Module In E-Kemenkeu Application Using Design Thinking Method	02.15pm – 02.35pm
	247	Mahamudul Hasan and Sumaiya Tabassum	An Ensemble Weighted User Based Collaborative Filtering Recommender System	02.35pm – 02.55pm
	048	Frederick Nathan Irmawan, Nicholas Hans Muliawan, Edbert Valencio Angky, Karli Eka Setiawan, and Muhammad Fikri Hasani	Comparison of Machine Learning Algorithms for Diabetes Classification	02.55pm – 03.15pm

TS 6-3	361	Hardhika Surya Nugraha, Muhammad Afief Farista, Muhamad Fitra Kacamarga, and Emny Harna Yossy	Market Basket Analysis on Telecommunications Prepaid Packages using the Apriori Algorithm	03.20pm – 03.40pm
	362	Muhammad Satria Prawira, Faiz Abdussalam, and Emny Harna Yossy	Database Implementation using Citus on Telecommunication Data	03.40pm – 04.00pm
	369	Amir 'Aatieff Bin Amir Hussin, Harith Syazwan Bin Haril Muzammil, Muhammad Afiq A. Bin Shaharuddin, Amelia Ritahani Binti Ismail, and Ahmad Anwar bin Zainuddin	Utilizing Different Edge Detection and Preprocessing Techniques to Improve the Accuracy of Durian Cultivar Detection using Convolutional Neural Networks	04.00pm – 04.20pm
	342	Sitti Rachmawati Yahya, Satria Abadi and Fitri Aulia Dewi	Minimizing Negative Words on Social Media Using the Naive Bayes Classifier Algorithm	04.20pm – 04.40pm
	058	Dian Sa'adillah Maylawati, Ichsan Taufik, Irgiawan Fhutuh, Wildan Budiawan Zulfikar, Cecep Nurul, and Muhammad Ali Ramdhani	Analysis of K-popers Sentiment of Indonesian Entertainment World with Convolutional Neural Network Algorithm	04.40pm – 05.00pm

Presentation Guideline

Presentation of papers accepted in ICCED 2023 is done by hybrid presentation. Presentation are arranged through technical sessions. There are 5 technical sessions with 2 parallel tracks in Day 1 and 3 parallel tracks in Day 2. The session chairs and time keepers are assigned for each technical session-track.

The amount of the time allocated for each hybrid presentation in the technical session is 20 minutes including the questions and answers (Q & A) session. It is recommended to make the first 15 minutes for presentation by the author and 5 minutes for Q & A.

Presentation is done in english and it is highly recommended to be done using powerpoint slides on an LCD projector. The technical session room will be equipped with the following items :

- A laptop computer running Windows operating system with office application and acrobat reader
- An LCD projector with VGA cable connector

We highly recommend that presenters can filling their presentation by Power Point (PPT) or Video depends on type of presentation is online or offline by the link google form that we are already sent to author(s). Presentation using your own laptop is not allowed due to the limited time available.

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IMPORTANT DATES

31 January 2024	:	Full Papers Submission
01 March 2024	:	Decision Notification
25 May 2024	:	Early Registration
31 May 2024	:	Camera Ready
10 June 2024	:	Final Registration and Payment
10-11 July 2024	:	Conference Day

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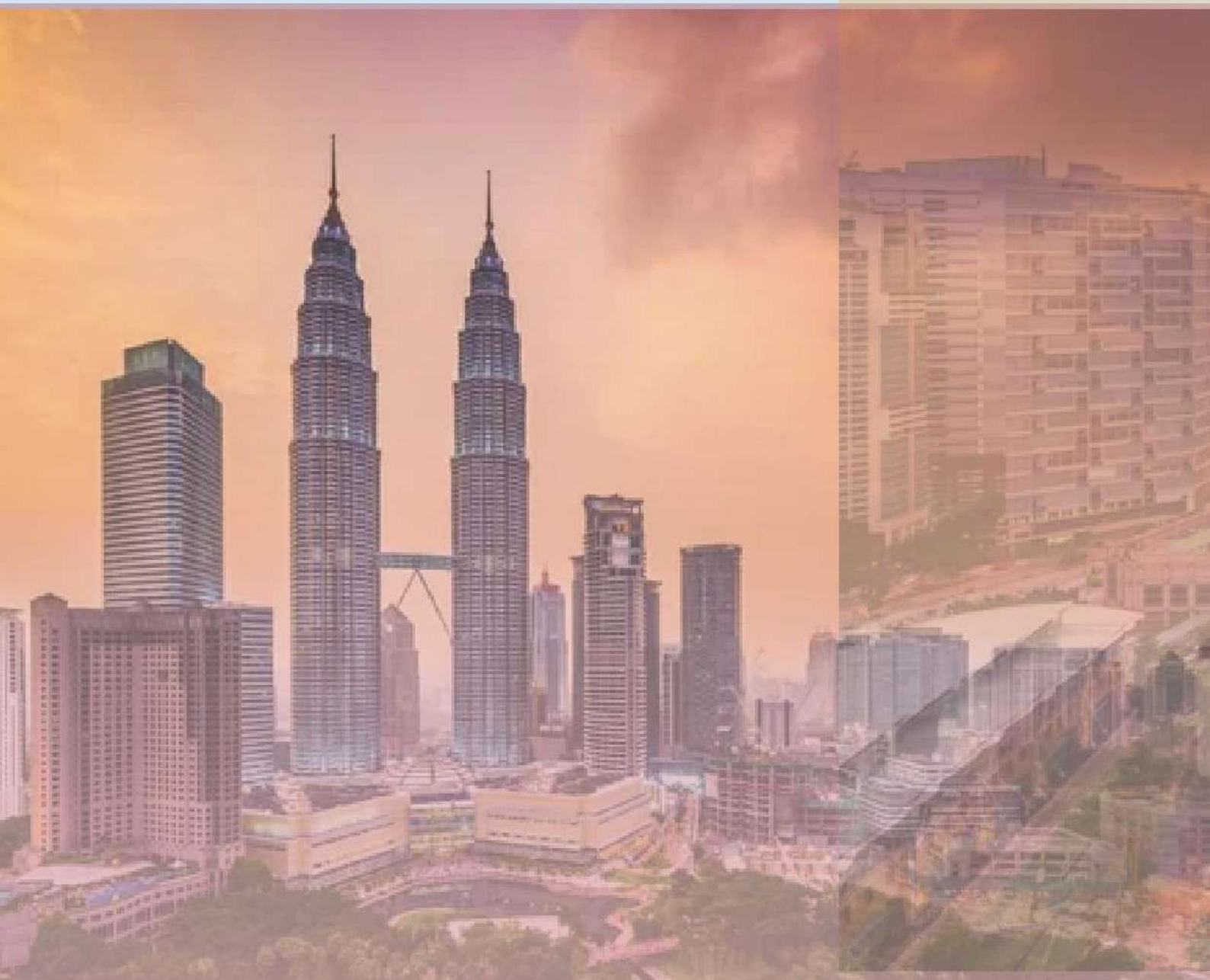

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