KICT NEWSLETTER

ISSUES 1/2023 JANUARY 2023

EDITORIAL BOARD MEMBERS

Advisor:
- Assoc. Prof. Dr. Norsaremah Salleh

Chief Editor:
- Asst. Prof. Dr. Noor Azura Zakaria

Editors:
- Asst. Prof. Ts. Dr. Hafizah Mansor
- Asst. Prof. Ts. Dr. Dini Oktarina Dwi Handayani
- Asst. Prof. Dr. Elin Eliana Abdul Rahim
- Asst. Prof. Dr. Atikah Balqis Basri
- Asst. Prof. Dr. Nor Saadah Md Nor

Designer:
- Sr. Nurlaili Sanadi

TABLE OF CONTENTS

ARTICLE OF THE MONTH 1
KICT EXPERT 6
ACHIEVEMENTS AND RECOGNITIONS 8
ACTIVITY 10
TALK/SEMINAR 11
PUBLICATIONS 17
PATENT 20

Motivational Quote

"Yesterday I was clever, so I wanted to change the world.
Today I am wise, so I am changing myself."

-Jalāl al-Dīn Rūmī -

ARTICLE OF THE MONTH

Nor Saadah Md Nor

Nur Leyni Nilam Putri Junurham

Safeguarding Audiovisual Collections: Between Responsibility and Interest.

On 27th October 2022, the National Archives of Malaysia celebrated the World Day for Audiovisual Heritage (WDAH) with the theme of “Enlisting documentary heritage to promote inclusive, just and peaceful societies.” The WDAH is a global effort to safeguard and preserve moving images and sounds andaims at raising general awareness of the need to take urgent measures and acknowledge the importance of audiovisual documents. Up to 2021, the National Archives of Malaysia (NAM) has safeguarded 185,000 materials such as films, magnetic tapes, videotapes, open reels, CDs, DVDs, phonograph records, cassettes, images, etc. The celebration was officiated by the Chairman of the Advisory Board, Ybhg. Tan Sri Dato’ Hj. Alimuddin Bin Hj. Mohd Dom.

There were many activities conducted, and among them were a documentary film screening, audiovisual materials management exhibition, archival materials conservation demonstration, online finding aid (OFA) registration, government records management consultation clinic, and heritage exhibition tour. NAM also conducted an audiovisual discourse by four notable speakers, Ybhg. Dato’ Prof. Ts. Dr. A. Razak Hj. Mohaideen (UiTM), Mdm. Zuramashana Zakaria (National Film Development Corporation Malaysia, FINAS), Mdm. Rokiah Abdul Samat (Department of National Heritage) and Ts. Azharul Azmir Kamarulzaman (World Heritage Moving Image Centre, WHMIC). The discourse discussed audiovisual collections’ issues and initiatives at national level to respond to the urgency of acknowledging the audiovisual documents in Malaysia.

Surely, we can all agree that movies reflect society. Previous societies' histories and cultures will be passed down to current and future generations. As a result, significant moments or situations captured using audiovisual methods must be preserved so that future generations can recognise their identity. The audiovisual industry has undergone significant transformations. If our parents read a printed sheet of newspaper 35 years ago, we now read a digital newspaper on the screen of an electronic device without having to touch a sheet of paper. Have we considered what will happen to our current collection of audiovisual recordings in a hundred years? Thus, audiovisual collections must be preserved because information technology's sophistication cannot accurately predict how long audiovisual materials will be able to last in the future. The audiovisual collection is a historical record that future generations will find invaluable.

In general, the audience is most interested in horror, comedy, romance, and action films. While historical films do not fall into the audience's preferred genre. Local historical films, such as Leftenan Adnan, Bukit Kepong, Hang Tuah, and Puteri Gunung Ledang, are scarce. Recently, the film 'Mat Kilau' has become a phenomenon, earning the highest gross in the history of film production not only at national but also at international level. There is no denying that historical films are gaining popularity among the general public. Creating a Malay historical film, for example, relies heavily on historical materials stored in NAM and FINAS as the primary reference for film directors and producers. However, historical films are difficult to make, especially when it comes to bringing the element of human-interest value (HIV) to life. The explosion of online content creators has now presented a challenge to the national film industry because the content produced is laced with HIV and frequently captures the attention of the audience who watches it.

FINAS serves as a conservation agency and is currently transforming into a repository for the country's audiovisual collection. A total of 80,000 audiovisual materials in various formats are acquired and stored. Some of these collections are 67 years old and were created as early as 1946. Materials received from 1946 to 2012 are stored in analogue, while materials received from 2013 to the present are stored digitally. These films are easily damaged due to their frequent use. FINAS has used a variety of methods for the preservation and conservation of audiovisual materials, including archive management, analogue restoration, and digital restoration.

The process of receiving materials by the owner is completed at the archive management level, and the materials are then recorded using the e-lab system. Audiovisual materials are kept in a warehouse at 10 degrees Celsius and 35 percent humidity. Following that, at the analogue restoration stage, all audiovisual materials will be aired, selected, and inspected to determine the level of damage to the material, and which materials will need to go through the total damage restoration process. Finally, the audiovisual materials will go through the restoration process of ultrasonic cleaning, scanning, density adjustment, and colour grading during the digital restoration stage. NAM and broadcasting agencies will receive audiovisualmaterials that have completed the preservation and conservation process for storage and screening.

Meanwhile, the Heritage Registry Division of Malaysia's Department of National Heritage is also involved in the preservation of the audiovisual collection. The division is in charge of gazetteing audiovisual materials as heritage objects under the National Heritage Act 2005 (Act 645). Intangible heritage objects include audiovisual content. Before audiovisual material can be gazetted under Act 645, several criteria must be met, including interest or connection with Malaysian history, scientific or technological innovations and achievements, and educational potential. The curator conducts additional research to verify the facts before proceeding with the declaration process. For the purpose of data collection, facts are verified by referring to archival materials. The heritage object expert committee will then review the complete report before recommending it to the commissioner for the subsidiary legislative process to be carried out. Finally, under Act 645, an official declaration is made to recognise audiovisual material as a national heritage object.

ARTICLE OF THE MONTH

Since the 1990s, UNESCO has designated audiovisuals as a form of endangered heritage, owing to the loss of many films that can no longer be viewed. Attempts to preserve original copies of analogue films pose a challenge for Malaysian audiovisual treasures. Only films in their original form can keep up with the ever-changing technological landscape. As a result, WHMIC is in charge of mobilising advocacy activities as well as documentation work on contemporary audiovisual materials in order to preserve audiovisual materials. Aside from the preservation and conservation of archival materials, the issue of access to the audiovisual collection necessitates a more integrated and comprehensive discussion. Now, one method of making it easier for users to access information on cultural heritage materials in national archives is through online finding aid (OFA). But how effective is OFA use among archive users? Is there a way to improve public access to existing audiovisualmaterials information?

To summarise, audiovisual archives tell us stories about the lives and cultures of people from all over the world. They are a priceless legacy that affirms our collective memory and serves as a valuable source of knowledge because they reflect the cultural, social, political, economic, and linguistic diversity of our communities. They aid in our development and comprehension of the world in which we all live. Conserving this heritage and making it accessible to the public and future generations is a critical goal for all memory institutions and the general public. In this regard, the Department of Library and Information Science is concerned about preserving KICT audiovisual records dating back to the inception of KICT. To begin, an initiative must be started by archiving records on key persons' contributions from the KICT's early development until today. This is to ensure that the history, success stories, and achievements of KICT are well-preserved to inspire its community and support the sustainable growth of the Kulliyyah. This information is important and beneficial not only to the Kulliyyah of ICT staff and students but may also benefit the university.

Suhaila Samsuri

Encouraging Effects of Electronic Games on Mental Health Treatment: A Perspective

Part 1
Electronic Games

Electronic games are potential to be used as an alternative or complementary treatment for mental health has received scarce attention. As games have features that can engage players and attract attention through content and characters, so it could change player behaviour. Various related literatures were examined and analyzed to investigate the benefits or positive effects of electronic games. Some findings show that electronic games have the potential for mental health issues treatment instrument

Playing electronic games is not uncommon during this Covid 19 pandemic. This is an alternative activity to spend time while being locked in the house. For teenagers in particular, this is like a "space" to go between online classrooms to other activities. Electronic Games has been widely associated with adverse mental health implications. While the research-based evidence is scarce, the subject has become the focus of parents' discussions due to the influences observed not only on children, but also on adults and occupational groups. The role of electronic games has been expanded pervasively. It is no longer limited as a hobby or activity to fill leisure time, but electronic games have become a essential alternative that contributes to a major part of people’s lives. Electronic games have become a catalyst and an instrument played for human entertainment, education and occupancy in electronic sport. Furthermore, electronic games are used as one of the best treatment methods for several types of health issues such as mental health. A number of research studies have been conducted to examine the development of mental health treatment and intervention using digital games. Related studies have been conducted on children and adult who have mental health problems which include depression, autism and schizophrenia. The findings indicate that some positive effects have been observed in children and adults with depression. The positive effects were observed after the subjects playing selected commercial digital games available in the market. Additionally, some research have embarked to design and develop digital games through collaboration with game developers, psychologist and psychiatrist dedicated for intervention of stress among autistic children.

Defining Electronic Games

Electronic game is a general term to refer to several other terms that have similar concepts, namely digital games, video games and computer games. All of these are interactive games that are operated by computer circuits and variety of appropriate electronic devices. Digital Games are played not limited only using computer, but also mobile, console and stand-alone platforms, like arcade game. There are several types of games available in the market, which are created for wide range of age, for instance: Role Playing Game (RPG), First-Person Shooter (FPS), puzzle, simulator, gamification and many more. Each of the game type offers many choices of genre according to the player preferences, for instance, war or battle, fantasy, love, history and so forth. From time to time, digital games and content designers will analyse and probe into the current trends of the players' interest to invent and create the game's challenges and storylines.

Games Components and Structure

Games is a system made of a set of parts that interrelate to form a complex whole. This system consists of elements such as, players, artificial characters, conflict, rules, and quantifiable outcomes. In designing a good game, a game designer may create a storyline or gameplay with creative combination of important qualities. The qualities are clear game objective, understandable rules, interesting reward system, fascinating characters, challenging obstacles, compelling environment including appropriate weapons or vehicles to be used by the character to achieve a particular mission. In the game environment, the character is a representation of the player who will be engaged and playing the role to complete the gameplay.

Depending on the type of games, not all suggested components are always needed to be included in one game development. For example , in a simulator, the artificial characters are not necessary to be included because it will be replaced by the person who is playing the game. There are examples of simulators such as X-Plane, Madden NFL, Trauma Center, and so on. A similar context is applied in the mechanics of gamification, since it is created for real and specific ends, such as, losing weight program, managing hypertension and diabetic problem or mental health treatment; therefore, it will not require artificial characters, games environment and weapons for fighting. The most important components in these games genre are absolute mission, engaging rules and valuable real reward to ensure the player's commitment and to persuade the player to continue to be in the games.

NURAZLIN BINTI ZAINAL AZMI

ASSISTANT PROFESSOR
DEPARTMENT OF INFORMATION SYSTEMS

RESEARCH EXPERTISE

Natural User Interface, 3D [Graphics/ Modelling/ Games], Game Technology

QUALIFICATION

PhD (Natural User Interface)

CONTACT

nurazlinazmi@iium.edu.my

ABOUT ME

I am an enthusiastic problem-solver with passion in 3D graphics, game development and computer programming. I am keen to apply my skills and knowledge to design and innovate new ideas within the multimedia field. I have had much experience supervising students in multimedia application development, and enjoy building good working relationships with a variety of people, locally and internationally. Prior to joining IIUM, 6 Final Year Project students under my supervision had won 1st, 2nd & 3rd places in three consecutive Innovation Day events (2017-2019).

RECENT PUBLICATIONS

- Zainal Azmi, N. (2022). The role of 3D modelling in sustainable development. KICT Newsletter (9). Retrieved from https://www.iium.edu.my/media/85006/Newsletter%2009-2022_compressed.pdf
- Zainal Azmi, N., Wyvill, G. and Knott, A. (2014). Adapting a cheap game controller as a natural 3D input. Proceedings of 7th International Conference on Human System Interaction '14. Lisbon, Portugal.
- Zainal Azmi, N., Wirza, R. and Mahmod, R. (2006). Modeling expressive wrinkles on human face. Proceedings of the 4th International Conference on Computer Graphics and Interactive Techniques in Australasia and Southeast Asia 2006. Kuala Lumpur, Malaysia.

SHARIFAH NUR AMIRAH BT. SARIF ABDULLAH

ASSISTANT PROFESSOR
DEPARTMENT OF LIBRARY & INFORMATION SCIENCE

RESEARCH EXPERTISE

Bibliographic Control, Metadata Quality, Information Visualization, Digital Humanities, Information Seeking Behaviour.

QUALIFICATION

Ph.D (Library and Information Science) - Doctor of Philosophy, International Islamic University Malaysia

PROFESSIONAL MEMBERSHIP

Librarians Associations of Malaysia (Professional Member), myHCI-UX Kuala Lumpur ACM SIGCHI Local Chapter (Professional Member)

ACHIEVEMENT AND AWARDS

Leader, IIUM Flagship 2.0 (Humanising Digital Education)

CONTACT

shnuramirah@iium.edu.my

https://orcid.org/0000-0001-8346-1213

ABOUT ME

I started my career as an academic in International Islamic University Malaysia (IIUM) in 2017. Currently, I am serving the Department of Library and Information Science, Kulliyyah of Information and Communication Technology. I obtained my Doctoral and Master's degrees in Library and Information Science from IIUM. I obtained my Bachelor of Human Sciences (Psychology) with Honors from the same university. My areas of expertise are Bibliographic Control, Metadata Quality, Information Visualization, Digital Humanities, Information Seeking Behaviour. Prior to joining IIUM as an academic, I was a Graduate Research Assistant during my postgraduate studies. I have secured National and University grants as Principal Researcher and Co-researcher. I am a member of University Research Group under IT for Development and e-Government (ITDEG) and Digital Humanities Research group under KICT. I am currently the Leader for Humanising Digital Education Flagship and the Coordinator for KICT Resource Centre.

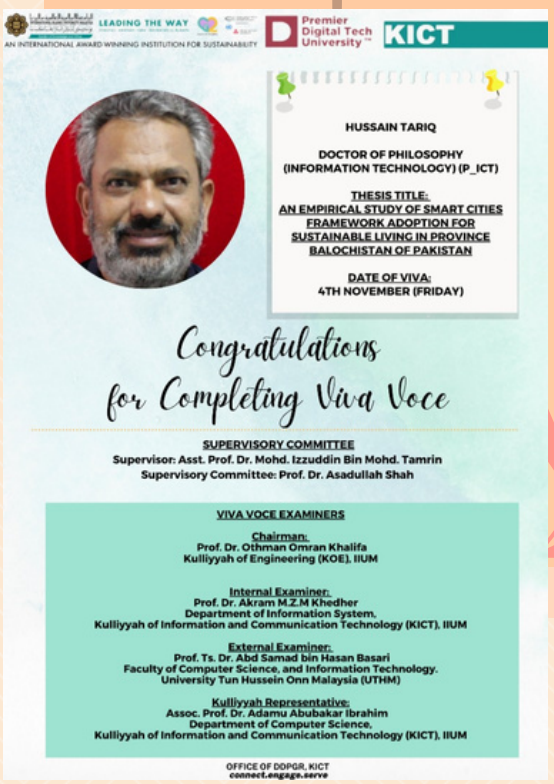
RESEARCH GRANTS

- Kajian Hukum Mengenai Kesan Permainan Digital Terhadap Masyarakat, JAKIM, Co-Researcher, 2020 - 2022, RM68,850.00
- FUNCTIONALITIES OF BIBLIOGRAPHIC CONTROL MODULE IN OPEN SOURCE INTEGRATED LIBRARY SYSTEM (ILS) AMONG CATALOGERS, IRAGS, Principal Researcher, 2018 - Present, RM20,000.00
- User Preferences Model for Information Visualization Features of Bibliographic Catalogues in Library Resource Discovery, FRGS (RACER), Principal Researcher, 2019 - Present, RM39,500.00

RECENT PUBLICATIONS

- Connexion@DLIS; The DLIS 30th Anniversary. KICT Newsletter Special Issues, July 2022.
- Kajian hukum mengenai kesan permainan digital terhadap masyarakat (2022). Technical Report.
- Cataloguer Acceptance on Cataloguing Module in Open-Source Integrated Library System in Academic Library in Malaysia (2021). Library Philosophy and Practice (e-journal). pp. 1-20. ISSN 1522-0222
- Learning resource centres (LRC) services and reading motivation among secondary school in Sultanate of Oman (2020). Multi-Knowledge Electronic Comprehensive Journal For Education And Science (MECSJ) (36). pp. 1-15. ISSN 2617-9563

VIVA VOCE

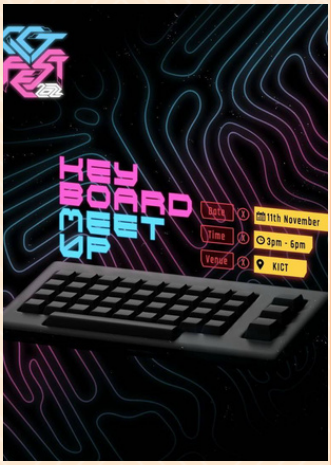


DISSERTATION

SECURED GRANT

ICTSS

FOOD TRUCK
X
TEA TIME STAR
COMING SOON
9 - 11 NOVEMBER
Have a picnic at KICT Roundabout and enjoy the performances!
Burger | Pasta | Mango Shake | Krispy Kreme | Boba Tea | Coffee | Corndog | Takoyaki | Kayaball | English Breakfast


KEY BOARD MEET UP
Date
11th November
Time
3pm - 6pm
Venue
KICT

ICTSS
λambda
DSC IIUM
BUILDING BETTER SOFTWARE AND COMMUNITY
VENUE KICT LECTURE THEATHER 2
DATE 11/11/22
TIME 1500-1700
MEET UP
REGISTER NOW
*LEARN LATEST TREND IN CYBERSECURITY
*CONNECT WITH PEERS
*EXPAND MIND WITH NEW PROGRAMMING PARADIGMS
AIMAN RAHIM
FINAL YEAR BIOCHEMICAL ENGINEERING STUDENT
ABDULLAH ABDELGAWAD
GDSC IIUM LEAD
SHAILA SHARMIN
MASTER OF COMPUTER SCIENCE STUDENT

OWNER
BOARD
KEYCAPS
SWITCHES
EXTRA

KICT INTELLECTUAL TALK SERIES NO. 4

Predictive Analytics takes second in the top 10 Data Science Trends in 2022-2025. The market size of Data Science platform has the potential to grow, up to $140.9 USD billion by 2024.

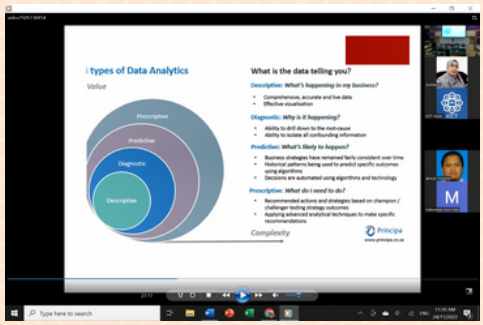
To address this potential, the Semantic Body of Knowledge and Technology Research Unit (RU52) and the Office for the Head of Responsible Research and Innovation, Kulliyyah of ICT have hosted the KICT Intellectual Talk Series No. 4/2022 focusing on this latest trend, via a hybrid platform.

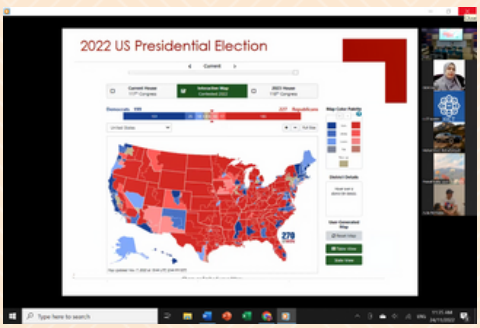
RU52 and HORRI's Office thanked the speaker and the moderator for the interactive session attended by a total of 103 participants comprising academic members, administrative members, and students from IIUM, Management Science University, PeCAMP, UiTM, MEDIU, Universitas YARSI, Indonesia, and Maldives.

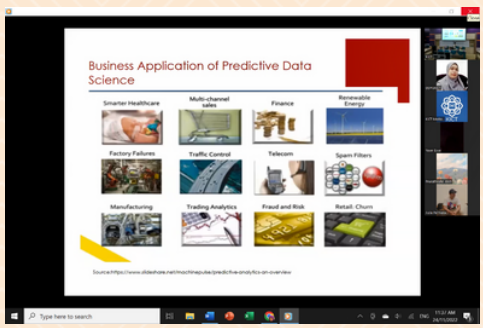
An inspiring dialogue session was hosted after the Talk, with students who were planning for their specialization track. Both the Talk and Dialogue sessions were concluded with two agendas. First, RU52's plans for Predictive Data Science Themes and Projects and second, the Data Science Advisory Team led by Prof. Emeritus Tengku Mohd Tengku Sembok.

We shall welcome everyone onboard.

Prof. Datin Dr. Roslina Othman, Head, Semantic Body of Knowledge & Technology Research Unit
Asst. Prof. Dr. Noor Azura Zakaria, Head, Office for Responsible Research and Innovation, KICT
Prof. Emeritus Dr. Tengku Mohd Tengku Sembok, Kulliyyah of ICT



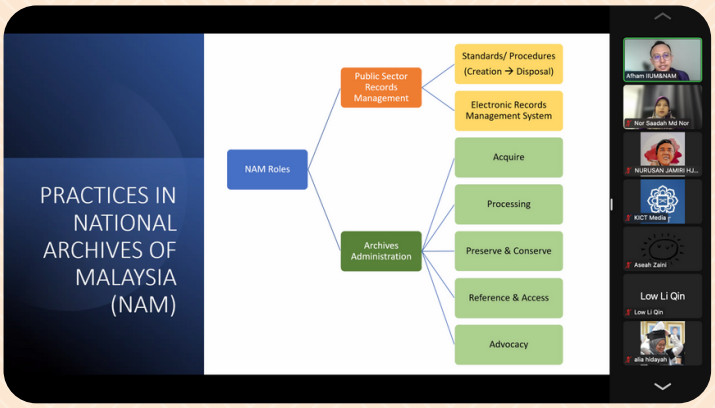


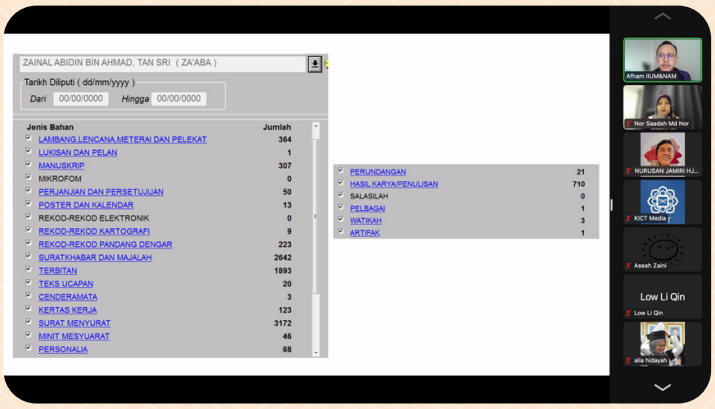


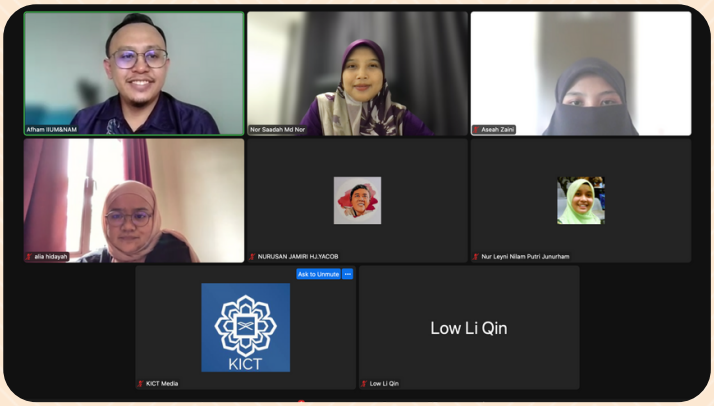
KICT INTELLECTUAL TALK SERIES NO. 4

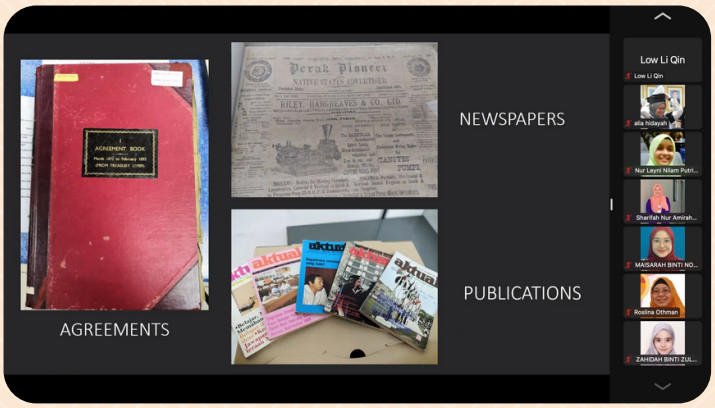
TALK/SEMINAR

DLIS TALK SERIES NO. 1









INTERNET SOCIETY (ISOC)

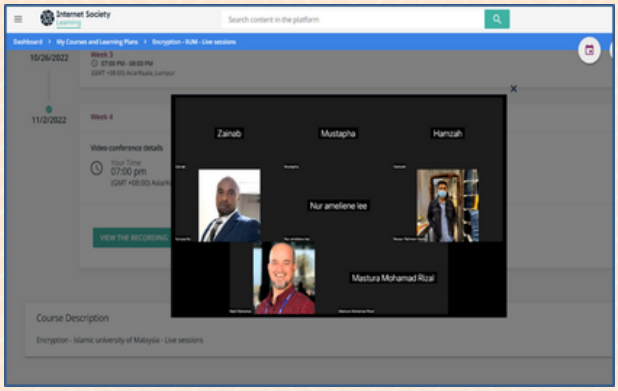
On 20th October, KICT arranged the first seminar together with Internet Society (ISOC) with the title “Share, Promote, and build your Strength with Internet Society”. The seminar was organised to introduce the students to one of the international boards working on Internet related matters and encourage them to go global and participate in shaping the Internet. ISOC Representative Dr. Sonny Zulhuda (from AIKOL IIUM) and Sister Puteri Ameena Hishammuddin (KICT Alumni, current vice president of ISOC Malaysia) shared their experiences in working with ISOC, ICANN, Internet Governance Forum, and other international events.

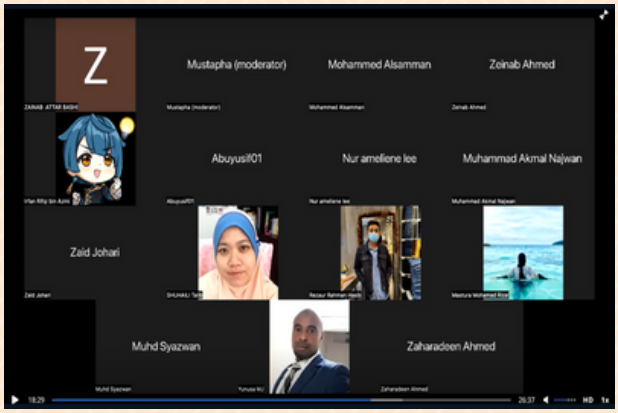
In collaboration with Internet Society, an Encryption online course was conducted for KICT students from 28th September to 19th October 2022. The course explained in detail the effect of having weak encryption on the safety of the communities. The course introduces the students to the encryption concepts and let them understand what actions they can take to advocate for strong encryption in their community. Twenty-three students who attended both synchronous and asynchronous sessions got the certification from Internet Society

TALK/SEMINAR

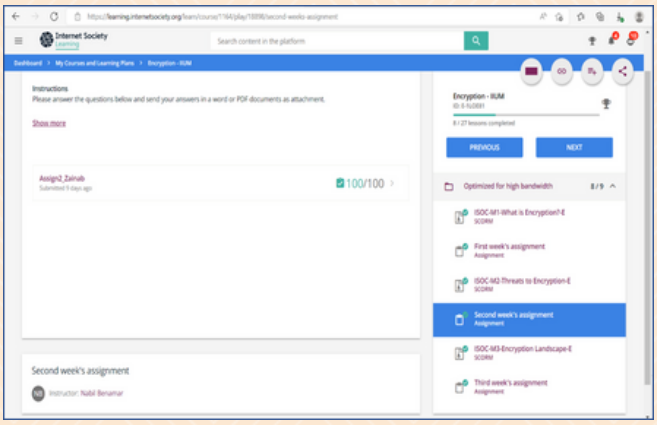
INTERNET SOCIETY (ISOC)

Onboarding Session on Zoom

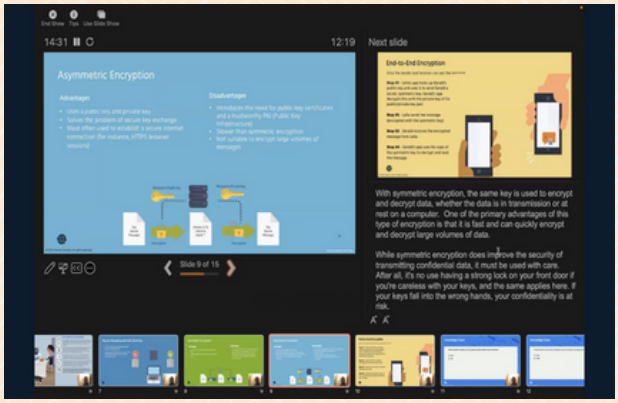




Encryption Course Platform

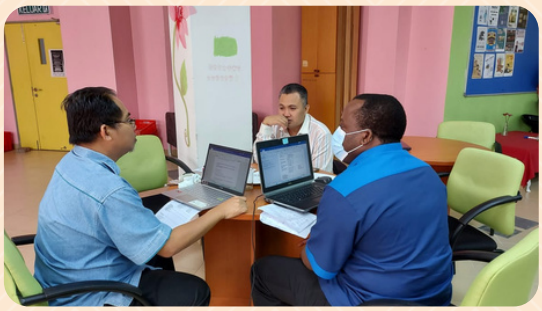


Live Session #2



TALK/SEMINAR

RESEARCH FAST TALK SERIES



WORKSHOP ON ICT AND FUTURE UMMAH NEEDS

PUBLICATIONS

(Submission in IREP for November 2022)

1. Lawal, Ibrahim A. and Ibrahim, Adamu Abubakar and Zammarah, Nuha Abdullah (2022) Improving the quality of service of fixed WiMAX networks by decreasing application response time using a distributed model. International Journal of Interactive Mobile Technologies, 16 (22). pp. 75-93. E-ISSN 1865-7923
2. Abubakar, Adamu and Ahmed, Mohamud Abdulkadir (2022) Examining the performance of software defined virtual local area network. International Journal of Innovative Computing, 12 (2). pp. 25-30. E-ISSN 2180-4370
3. Abubakar Ibrahim, Adamu and Abdulghafor, Rawad Abdulkhaleq Abdulmolla and Wani, Sharyar (2022) A new concept of duplicate address detection processes in IPv6 link-local network. International Journal of Innovative Computing, 12 (2). pp. 9-16. E-ISSN 2180-4370
4. Othman, Roslina and Noordin, Mohamad Fauzan and Ahmed, Mahfooz and Ahmad, Nadzrah and Kassim, Salina (2022) How do muslim scholars and experts posit cryptocurrencies in social media. Journal of Theoretical and Applied Information Technology, 100 (21). pp. 6272-6295. ISSN 1992-8645 E-ISSN 1817-3195
5. Yahya, Norzariyah and Maidin, Siti Sarah (2022) The waterfall model with agile scrum as the hybrid agile model for the software engineering team. In: 2022 10th International Conference on Cyber and IT Service Management (CITSM), 20-21 September 2022, Yogyakarta, Indonesia.
6. Zulkifli, Che Zalina and Garfan, Salem Abullah and Talal, Mohammed and Alamoodi, A. H. and Alamleh, Amneh and Ahmaro, Ibraheem Y. Y and Sulaiman, Suliana and Ibrahim, Abu Bakar and Zaidan, B. B. and Ismail, Amelia Ritahani and Albahri, Osamah Shihab and Albahri, Ahmed Shihab Ahmed and Chin, Fhong Soon and Harun, Nor Hazlyna and Ho, Hong Chiang (2022) *IoT-based water monitoring systems: a systematic review*. Water, 14 (22). pp. 1-29. E-ISSN 2073-4441
7. Ismail, Amelia Ritahani and Muhd Affendy, Nur Shairah and Ismail, Ahsiah and Ahmad Puzi, Asmarani (2022) Social distancing monitoring system using deep learning. Knowledge Engineering and Data Science (KEDS), 5 (1). pp. 17-26. ISSN 2597-4602 E-ISSN 2597-4637
8. Khedher, Akram M.Z.M. and Issa, Hamed and Wasiq, Shafiullah (2022) Automatic Mind Maps Generation for The Holy Quran. Journal of Information and Knowledge Management (JIKM). ISSN 2231−8836 (In Press)
9. Gamage, Sehan Amandu and Subramaniam, Krishnan and Zainuddin, Ahmad Anwar (2022) Comparative analysis of CMOS based full adders by simulation in DSCH and Microwind. Malaysian Journal of Science and Advanced Technology, 2 (4). pp. 183-187. E-ISSN 2785-8901 (In Press)
10. Abdul Jalil, Mohammad Khairi and Hassan, Raini (2022) The application of business intelligence and analytics to drive better business outcomes in BSSB: a small tissue paper converting establishment. International Journal on Perceptive and Cognitive Computing (IJPCC), 8 (2). pp. 43-55. E-ISSN 2462-229X
11. Sarif Abdullah, Sharifah Nur Amirah and Zulkifli, Zahidah and Md Nor, Nor Saadah and Junurham, Nur Leyni Nilam Putri and Abdul Rahman, Alia Hidayah and Mohamad Suandi, Fawdatuzzihan and Zaini, Aseah and Johaidi, Nur Lina Khalida and Roslan, Nurul Nadiah (2022) Connexion@DLIS; The DLIS 30th Anniversary. KICT Newsletter Special Issues. (Unpublished)
12. Sarif Abdullah, Sharifah Nur Amirah and Zulkifli, Zahidah and Md Nor, Nor Saadah and Junurham, Nur Leyni Nilam Putri and Abdul Rahman, Alia Hidayah and Mohamad Suandi, Fawdatuzzihan and Zaini, Aseah and Johaidi, Nur Lina Khalida and Roslan, Nurul Nadiah (2022) Connexion@DLIS; The DLIS 30th Anniversary. KICT Newsletter Special Issues, July 2022.
13. Santoso, William and Nurjannah, Wilda and Shudhuashar, Mahgrisya and Fadilah, Asyifa Tasya and Junas, M. Destamal and Handayani, Dini (2022) *The development of Telegram Bot Api to maximize the dissemination process of Islamic knowledge in 4.0 era.* Jurnal Teknik Informatika, 15 (1). pp. 52-62. ISSN 1979-9160 E-ISSN 2549-7901

PUBLICATIONS

(Submission in IREP for December 2022)

1. Naser, Yaqubi and Abubakar Ibrahim, Adamu (2022) The use of robots for delivery of packages in food industries and its impact on job loss. Journal of Information Systems and Digital Technologies, 4 (2). pp. 179-197. E-ISSN 2682-8790
2. Al-Mamun, Abdullah and Olowolayemo, Akeem and Sharyar, Wani and Mohamed Sofiadin, Aidrina (2022) *Exploring the impact of digital entrepreneurship education among graduates in Bangladesh.* Journal of Information Systems and Digital Technologies, 4 (2). pp. 58-76. E-ISSN 2682-8790
3. Oleolo, Ibrahim and Abdullah, Hayati and Mustapha, Ismail and Mohamad, Maziah and Mohd Jaafar, Mohammad Nazri and Olowolayemo, Akeem and Sulaiman, Sapiah (2022) Long short-term memory neural network model for the control of temperature in a multi-circuit air conditioning system. CFD Letters, 14 (12). pp. 84-98. ISSN 2180-1363
4. Sofiadin, Aidrina (2022) Students' perspective on sustaining education and promoting humanising education through e-learning: a qualitative focus group study. International Journal of Advanced Computer Science and Applications, 13 (11). pp. 589-595. ISSN 2158-107X E-ISSN 2156-5570
5. Zainuddin, Ahmad Anwar (2022) What are the main future opportunities in the IoT domain for Computer Science and Information System Prospects? KICT Newsletter, 2022 (10). pp. 1-3.
6. Muhammad, Aisha and Ali, Mohammed A.H. and Turaev, Sherzod and Abdulghafor, Rawad Abdulkhaleq Abdulmolla and Shanono, Ibrahim Haruna and Alzaid, Zaid and Alruban, Abdulrahman and Alabdan, Rana and Dutta, Ashit Kumar and Almotairi, Sultan (2022) A generalized laser simulator algorithm for mobile robot path planning with obstacle avoidance. Sensors, 22 (21). pp. 1-27.
7. Arisantoso, Arisantoso and Mantoro, Teddy and Olowolayemo, Akeem and Alkalbani, Abdullah (2022) Multiple criteria decision analysis in HDMI splitter selection using complex proportional assessment method. Indonesian Journal of Computing, Engineering, and Design, 4 (2). pp. 58-70. ISSN 2656-1972 E-ISSN 2656-8179
8. Ndububa, Emmanuel E. and Ijirotimi, I. O and Olowolayemo, Akeem (2022) Concrete characteristics modelling for minimal cost and optimum performance of Abuja housing infrastructures. Open Journal of Engineering Science (OJES), 3 (2). pp. 1-12. ISSN 2734-2115
9. Ariffin, Adlina and Abdul Khaiyom, Jamilah Hanum and Kartiwi, Mira and Azizan, Awis Rumaisya (2022) Alleviating psychological distress via social media: the voices from working-from-home Malaysian women. e-Jurnal IPPTAR, 2022. pp. 1-22.
10. Abd Majid, Mohamed Ibrahim and Sahak, Rohilah and Subramaniam, Krishnan and Zainuddin, Ahmad Anwar and Abdul Rahman, Siti Husna and Ahmad Puzi, Asmarani and Mohd Mansor, Ahmad Fairuzabadi and Mohamad Yunos, Muhammad Farhan Affendi and Svpk, Satya Devu (2022) Analysis and design of low power consumption 8T and 10T full adder CMOS technology. In: 2022 IEEE 13th Annual Information Technology, Electronics and Mobile Communication Conference (IEMCON), Vancouver, BC, Canada.
11. Basri, Atikah Balqis and Handayani, Dini Oktarina Dwi (2022) Community engagement at Bintan Island, Indonesia. KICT Newsletter, 2022 (9). pp. 4-5.
12. Yusof Ali, Hazirah Bee and Abdullah, Lili Marziana (2022) Big data and cloud readiness. International Journal of Computer Science & Information Technology (IJCSIT), 14 (3). pp. 67-85. ISSN 0975-4660 E-ISSN 0975-3826
13. Serajee, Nasheed and Mannan, Saad and Abdulghafor, Rawad Abdulkhaleq Abdulmolla and Wani, Sharyar and Abubakar, Adamu and Olowolayemo, Akeem Koye (2022) Breast cancer prediction using machine learning. International Journal on Perceptive and Cognitive Computing (IJPCC), 8 (1). pp. 24-28. E-ISSN 2462-229X

14. Abdul Molok, Nurul Nuha and Zulkifli, Zahidah and Wahiddin, Mohamed Ridza (2022) Pendekar Siber: empowering young people to combat cyber threats. In: International Conference on Cyber Resilience (ICCR) 2022, 6-7 Oct 2022, The Meydan Hotel, Meydan Racecourse Al Meydan Road, Nad Al Sheba, Dubai, UAE. (In Press)
15. Abdulghafor, Rawad Abdulkhaleq Abdulmolla and Turaev, Sherzod and Mohammed, Ali (2022) Body language analysis in healthcare: an overview. Healthcare, 10 (7). ISSN 2227-9032
16. Mamat, Normaisharah and Othman, Mohd and Abdulghafor, Rawad Abdulkhaleq Abdulmolla and Belhaouari, Samir Brahim and Mamat, Normahira and Mohd Hussein, Shamsul Faisal (2022) Advanced technology in agriculture industry by implementing image annotation technique and deep learning approach: a review. Agriculture, 12 (7). ISSN 2077-0472
17. Nordin, Nur Hazimah and Abdul Rahman, Ainul Husna and Abdul Wahab, Norshahriah and Tengku Sembok, Tengku Mohd and Mohd Shukran, Mohd Afizi and Mohd Yunus, Mohd Sidek Fadhil and Isnan, Sarah and Abdul Shukur, Mohamad Rushd 'Afif 'Abda (2022) Monitoring of mangroves changes in Pulau Kukup using geographical information system (GIS). In: 11th IGRSM International Conference and Exhibition on Geospatial and Remote Sensing, IGRSM 2022, 7- 9 March 2022, Kuala Lumpur, Malaysia.
18. Piam, Emrul Hasan and Mahmud, Ashik and Abdulghafor, Rawad Abdulkhaleq Abdulmolla and Wani, Sharyar and Abubakar, Adamu and Olowolayemo, Akeem Koye (2022) Face authentication-based online voting system. International Journal on Perceptive and Cognitive Computing, 8 (1). pp. 19-23.
19. Sofiadin, Aidrina (2022) Education 4.0, industry 4.0, lifelong learning: a descriptive literature review. International Journal of Research Publications, 113 (1). pp. 147-161. E-ISSN 2708-3578
20. Mohamad Fauzi, Mohamad Aniq Fakhrul and Abdullah, Lili Marziana (2022) Malicious/phishing URL detection system in a network with Raspberry Pi (NETBITS). International Journal on Perceptive and Cognitive Computing (IJPCC), 8 (2). pp. 30-36. E-ISSN 2462-229X
21. Alshami, Mahmood and Abdulghafor, Rawad Abdulkhaleq Abdulmolla and Aborujilah, Abdulaziz (2022) Extending the unified theory of acceptance and use of technology for COVID-19 contact tracing application by Malaysian users. Sustainability, 14 (11). ISSN 2071-1050

PATENT

TITLE

A SYSTEM AND METHOD FOR MONITORING COMMUNICATION BETWEEN A PLURALITY OF AUTOMATED GUIDED VEHICLES

NAME OF INVENTOR

ADAMU ABUBAKAR IBRAHIM
ELBARA ELDAW ELNOUR MOHAMED
MURNI BINTI MAHMUD
AKRAM M Z M KHEDHER

DATE OF GRANT

27 OCTOBER 2022