









KICT NEWSLETTER

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FEBRUARY 2024

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Motivational Quote

"Knowledge is that which benefits not that which is memorized" Imam As-Shafi'i



FEBRUARY 2024

STUDENT ACTIVITIES: CYBERSECURITY SIG



The Journey of Empowering Future Cyber Security Professionals

By Hafizah Mansor Advisor for Cyber Security SIG, Kulliyyah of ICT hafizahmansor@iium.edu.my

Cyber Security Special Interest Group (SIG), IIUM is established with the objectives of educating students and the IIUM community with cybersecurity knowledge and awareness. Our activities range from awareness programmes, and technical workshops to cater for the different needs and interests of students.

In the year 2023, our main focus had been preparing students for CTF competitions. CTF competitions are seen as a way to start the cybersecurity career path.

To win CTF competitions, it requires a combination of technical skills, strategic thinking, and effective teamwork. Among the elements required are technical skills, tools proficiency, problem-solving skills, continuous learning, teamwork, time management, documentation, experience, and legal and ethical considerations. To be able to grasp all these skills, and elements in winning CTF competitions, we prepared several activities.



ACTIVITIES

CTF Workshop Series

CTF: Race for Flag

CTF Participations

KICT Fest Cybersecurity Talk

Our programmes

CTF Workshop Series

A series of workshops were conducted ranging from various relevant topics usually covered in CTF competitions. Most of the workshops were conducted by our students, which shows their confidence and interest in the field. This also managed to capture other students to be more involved in the group, as they feel more relatable.

No.	Workshop	Date	Speaker
1.	Introduction to CTF	18 March 2023	Br. Abubakar Abubakar Yusif, 4th year KICT student
2.	Kali Linux & Cryptography	25 March 2023	Br. Abubakar Abubakar Yusif, 4th year KICT student
3.	Forensics	6 May 2023	Sir. Shahriman, Senior Manager at Deloitte
4.	Open-Source Intelligence (OSINT)	19 May 2023	Br. Muhammad Aniq bin Abdul Rahim, 2nd year KICT student
5.	Steganography	20 May 2023	Br. Nazmy Asnawi Bin Hamidun Majid, 2nd year KICT student

CTF: Race for Flag

After the series of workshops, an internal CTF was conducted to test and validate the skills acquired. The CTF, namely CTF: Race for Flag Competition was conducted on 27-28 May 2023. It was an online competition with 31 students (from KICT and KOE) participating in the CTF. Communications during the CTF were conducted on Discord. The committee worked hard to prepare the platform for the online competition. The closing ceremony, which included the prize-giving session was conducted at the MotionU room.

$CTF\ Participations$

The interest gained by students from participating in the workshops and internal CTF was then amplified by their continuous participation in national and ASEAN-level CTF competitions. Some of the CTFs were conducted online, and some were face-to-face competitions. On the participation fee, some competitions were free, while others were paid, where the fees were sponsored by KICT.

No.	стғ	Date	No. of participants
1.	Battle of the Hackers 2023	2 Dec 2023	8 teams (24 students)
2.	Curtin Malaysia Capture the Flag Hackaton 2023	14-15 Oct 2023	10 teams (30 students)
3.	Petronas Inter University CTF	9-10 Oct 2023	4 teams (16 students)
4.	Bahtera Siber Malaysia 3108 CTF	26-28 August 2023	5 students
5.	CYDES2023 Cyber War Zone CTF	10 July 2023	1 team (4 students)

The highest achievement was when one of the teams (0x94fbr) won the 1st runner-up in the Petronas Inter University CTF.



KICT Fest Cyber Security Talk

As part of our community service, we conducted a talk on awareness during KICT Fest. The talk titled KICT Fest Cyber Security Talk: From the Perspective of a Practitioner was conducted on 21 Oct 2023 by Br. Ahmad Ashraff Bin Ahmad, who is a practising security consultant. The talk was mainly aimed at encouraging students to join the cybersecurity career path and giving them exposure to the real-world industry applications of cybersecurity.



The Support System

Apart from the above-mentioned activities, we have an active Telegram group where students are always sharing about CTF competitions, available workshops and also useful write-ups.

The team of lecturers from Centre of Excellence for Cyber Security (CoExCys), especially, Dr. Andi Fitriah and Dr. Normaziah has always been the strong anchor to SIG and its activities. The support from Kulliyyah and the University in terms of transportation, budget and other services such as providing class excuse letters and the recording of star points for representatives is critical and without a doubt, a contributing factor in the success of our initiatives to empower the future cyber security professionals.

"Knowledge without action is wastefulness, and action without knowledge is foolishness."

-Imam Ash-Shafi'i

ACHIEVEMENTS AND RECOGNITIONS

Congratulations on the Promotion





Congratulations on the Appointment

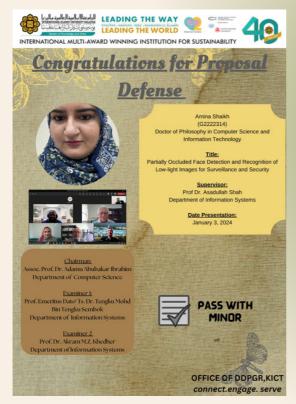


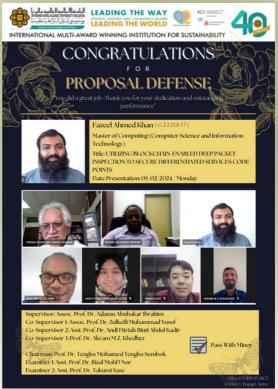
Congratulations Book Publication in Springer



ACHIEVEMENTS AND RECOGNITIONS

Congratulations for completing Proposal Defense







ACTIVITY



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LEADING THE WAY LEADING THE WORLD







AN INTERNATIONAL AWARD-WINNING INSTITUTION FOR SUSTAINABILITY

Community Service Collaboration between MA PUTRI PUI TALAGA with International Islamic University Malaysia (IIUM) with theme "Assisting Youth in Strengthening Digital Literacy and Engagement Digital Empowerment Initiative for Youth (AISHA)"





Introduction

This mobility program aims to help the students of Madrasah Aliyah Putri Pui Talaga, Indonesia to enhance their ability in digital literacy and engagement in digital empowerment. We were invited to help them by providing a workshop on digital literacy and motivating them to further their studies since they originated from rural areas. They have the capability to produce many products, but they need some help in promoting the products. Hence the objective of this mobility is to provide workshops to the community besides encouraging them to enhance their knowledge through our knowledge-sharing sessions.





List of Activities

program and community

Day 2: Opening Ceremony Introduction of IIUM by Assoc Prof Dr Normi Sham Introduction of KICT by Asst Prof Dr Atikah Balqis **Entrepreneurship by Mdm Noor Azian** Motivation by Asst Prof Dr Dini Oktarina Dwi Handayani

Day 3: Further Study Exploration and Vision Board Explanation Online session on Further Study Exploration by Prof Dr Mira Kartiwi Vision Board Explanation by Asst Prof Dr Dini Oktarina Dwi Handavani

> Day 4: Home industry visit and social activity "Tahu" home industry visit "Minyak Cengkih" factory visit "Terasering" onion garden Panyaweuyan Hill social visit

Day 5: Business Model Canvas and Flag ship sharing session **Business Model Canvas by Mdm Noor Azian** Siber Sejahtera by Asst Prof Dr Atikah Balqis

Day 6: Cooking demo, independent day Celebration and Cultural Exchange

Day 7: Closing session with school management at Majalengka, and Closing

Day 8: Return preparation for the Malaysia team







The mobility team consists of four staff have completed the activities as planned and the response from the students and teachers was beyond our expectations. We are very humbled to acknowledge that we could have done more because Madrasah Aliyah Putri PUI Talaga has become like a family to us with their warmest hospitality. What we shared and delivered to them was so little compared to everything that they had prepande and provided while we were there. This was clearly Indonesia hospitality at its best, and an example of following sunnah as per Hadis Bukhari No 5673 which in Bahasa Melayu means المعادد ال

MQA AUDIT FOR BACHELOR OF COMPUTER SCIENCE & BACHELOR OF INFORMATION TECHNOLOGY REACREDITATION EXCERCISE





















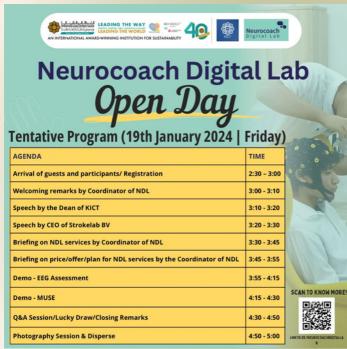








NEUROCOACH DIGITAL LAB (NDL) OPEN DAY















ACTIVITY

HUMANITARIAN TECHNOLOGY CONFERENCE, KARACHI

























JUMAAT • 19 JAN 2024 • 8:30 MLM
Tonton di Saluran 501 | Live TV- astroawani.com & Aplikasi Astro AWAN









Date: Tuesday 30 January 2024 Time: 11.30 am to 1:00 pm Venue: DIS meeting room, level 4, KICT, IIUM











PUBLICATIONS

(SUBMISSION IN IREP FOR JANUARY 2024)

- 1. Abd Rahim, Noor Hayani and Abdul Rashid, Nuhairi and Muhammad Irfan Danial, Baharim (2024)

 <u>FamLogger: the development of keylogger tools for parental online monitoring.</u> International Journal on Perceptive and Cognitive Computing (IJPCC), 10 (1). pp. 51-58. E-ISSN 2462-229X
- 2. Abdul Kadir, Andi Fitriah and Lashkari, Arash Habibi and Firoozjaei, Mahdi Daghmehchi (2024)

 <u>Understanding cybersecurity on smartphones: challenges, strategies, and trends.</u> Progress in IS.

 Springer, Switzerland. ISBN 978-3-031-48864-1
- 3. Abubakar, Adamu and Muhammed Yusof, Zulkefli (2024) <u>Streams of data flow in transmission control protocol (TCP) request-response cycle efficiency.</u> International Journal on Perceptive and Cognitive Computing, 10 (1). pp. 79-89. E-ISSN 2462-229X
- 4. Abubakar Ibrahim, Adamu and Muhammed Najmuddin, Nadhirah and Mohd Alwi, Rabiatul Adawiyah and Mohamad Faizal, Nur Amirotul Izzah (2024) <u>Examining potential threats of eavesdropping in TCP stream of personal interactive transmission session.</u> International Journal on Perceptive and Cognitive Computing (IJPCC), 10 (1). pp. 98-104. E-ISSN 2462-229X
- 5. Gunawan, Teddy Surya and Kartiwi, Mira and Saifudin, Ali and Nur, Levy Olivia and Nugroho, Bambang Setia (2024) Optimizing livestock productivity with computer vision-based cow estrus detection in free stall barns using various YOLOv8 models. In: IEEE 9th International Conference on Smart Instrumentation, Measurement and Applications (ICSIMA 2023), 17th 18th October 2023, Kuala Lumpur, Malaysia.
- 6. Gunawan, Teddy Surya and Mansor, Hasmah and Kartiwi, Mira and Md Yusoff, Nelidya (2024) <u>Palm fruit ripeness detection and classification using various YOLOv8 models.</u> In: IEEE 9th International Conference on Smart Instrumentation, Measurement and Applications (ICSIMA 2023), 17th 18th October 2023, Kuala Lumpur, Malaysia.
- 7. Khedher, Akram M Z M (2024) <u>Research and publications in Islamic perspective (part 5: innovation and creativity).</u> KICT Newsletter (1). p. 1.
- 8. Mohd Aman, Azana Hafizah and Shaari, Nor Azuwan and Attarbashi, Zainab and Iftikhar, Saman and Bawazeer, Shaikhan and Osman, Siti Hasanah and Hasan, Nor Shahida (2024) <u>A review of residential blockchain internet of things energy systems: resources, storage and challenges.</u> Energy Report, 11. pp. 1225–1241. ISSN 2352-4847 E-ISSN 2352-4847
- 9. Muhammad Zamri, Fatin Najihah and Zulkurnain, Nurul Fariza and Gunawan, Teddy Surya and Kartiwi, Mira and Md Yusoff, Nelidya and Nur, Levy Olivia (2024) Real-time safety helmet detection using enhanced YOLOv5 object detection. In: IEEE 9th International Conference on Smart Instrumentation, Measurement and Applications (ICSIMA 2023), 17th 18th October 2023, Kuala Lumpur, Malaysia.
- 10. Nazurin, Jamaludin and Ahmad Kamran, Alya Aqilah and Azlin, Nordin (2024) <u>Collaborative requirements</u> <u>review tool (collaborev) to support requirements validation.</u> International Journal on Perceptive and Cognitive Computing, 10 (1). pp. 105-112. E-ISSN 2462-229X
- 11. Salleh, Norsaremah and Kassim, Salina and Muhammad, Niaz Makhdum and Mohd Yusoff, Syarah Syahira and Mahadi, Nur Farhah and Md Ariffin, Kartina (2024) <u>Application of blockchain technology in the management of waqf institutions: concepts, challenges and recommendations.</u> In: IEEE International Conference on Computing (ICOCO 2023), 9th 12th October 2023, Langkawi, Malaysia.
- 12. Zainuddin, Ahmad Anwar and Zakirudin, Muhammad Ammar and Zulkefli, Ahmad Syameer Syafiq and Mazli, Ahmad Muhsin and Mohd Wardi, Muhammad Al Syahmi and Fazail, Muhammad Nazmi and Mohd Razali, Muhammad Irfan Zaki and Yusof, Muhammad Haziq (2024) <u>Artificial intelligence a new paradigm for distributed sensor networks on the internet of things: a review.</u> The International Journal on Perceptive and Cognitive Computing (IJPCC), 10 (1). pp. 16-28. E-ISSN 2462-229X
- 13. Muhamad Ibrahim, Najhan and Hassan, Mohd Fadzil and Drs Nasrul, Muhammad Amrullah (2024) Multiagent system in web services. International Journal on Perceptive and Cognitive Computing, 10 (1). pp. 40–50. E-ISSN 2462–229X

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Title:

World-Level American Sign Language Recognition from Hand Gestures Using Long Short-Term Memory (LSTM) Recurrent Neural Networks (RNN)

Inventor and co-inventor:

- 1. Asst. Prof. Dr. Raini Hassan
- 2.Md Asif Kabir Emon