



# KICT NEWSLETTER

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August 2024

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## Table of Contents

Article of the month	1
Islamisation Tips	2
Achievements and Recognitions	3
Activity	4
Talk/Seminar	5
Publications	6

## Motivational Quote

*The Prophet Muhammad (peace be upon him) said: "The best of friends is the one who guides you to the truth and supports you in times of need."*

*(At-Tirmidhi)*



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## Navigating Security and Privacy Through the Eyes of Developers and Consumers (Part 1)

Security and privacy are terms that are commonly used in today's digital world. Do we understand these two concepts? Can we use the terms interchangeably? Which one should be our concern as consumers and developers?

In this first part of the series, let us delve into the basics: definitions and purposes of security and privacy.

### Definition

Security refers to the protection of information systems from theft, damage, disruption, or unauthorised access. It involves implementing measures to guard data and systems against a wide range of threats, ensuring the integrity, confidentiality, and availability of information.

On the other hand, privacy refers to the right of individuals to control their personal information and how it is collected, used, and shared. It involves the protection of personal data and ensuring that individuals have control over their own information.

### Purpose

The primary purpose of security is to protect data and systems from malicious attacks, unauthorised access, and other threats. This includes protecting information from being stolen (confidentiality), ensuring that data remains unaltered and accurate (integrity), and ensuring that systems and data are accessible to authorised users when needed (availability). Other security goals include non-repudiation, authentication, authorisation and accountability.

The primary purpose of privacy, on the other hand, is to protect individuals' personal information from being misused or disclosed without their consent. This includes ensuring that personal data is collected for specific and legitimate purposes (purpose limitation and transparency), minimising the amount of data collected (minimisation), and providing individuals with rights over their own information (consent), such as the right to access, correct/update/rectify, and delete their data, and data portability. Among the measures to implement privacy include anonymity/pseudonymity. This method can unlink the data/information to the person.

### Use case scenario

Let us look at these examples.

How would you feel if someone knew your shopping habits? When you buy a product at your favourite retail store, where you are a loyalty club member, your data is stored by the retail store. How much information do you share with the retail store? Why do you need to share this information?

How would you feel if someone knew your private/personal chatting messages? When you use a messaging app to chat with a close friend to tell them about your bad encounter of the day. How is this personal information being kept confidential?

Think about these scenarios from two different perspectives: you as the consumer, and you as the developer of the retail store's system and the messaging app.

### Conclusion

Security and privacy are distinct concepts, although they are closely related and often discussed together. Understanding the differences and interdependencies between them is crucial for both consumers and developers.

# ISLAMISATION TIPS

ICT - IOHK TIPS: # 28

يقول الله تعالى: ولتكن منكم أمة بدعون إلى الخير وتأمرون بالمعروف وتنهون عن المنكر. وأولئك هم المفلحون (آل عمران: 104)

Allah Almighty says: Let there arise out of you a band of people inviting to all that is good, enjoining what is right, and forbidding what is wrong: They are the ones to attain felicity. (Al Imran: 104)

يقول الله تعالى: كنتم خير أمة أخرجت للناس تأمرون بالمعروف وتنهون عن المنكر وتؤمنون بالله (آل عمران: 110)

Allah Almighty says: Ye are the best of peoples, evolved for mankind, enjoining what is right, forbidding what is wrong, and believing in Allah. (Al Imran: 110)

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## WEEKLY IOHK TIPS

### ENJOINING GOOD AND FORBIDDING EVIL

The role of the lecturer during the teaching of the material is to:

- Promote virtue and prevent vice in the educational environment.
- Offer continuous advice to learners, especially related to the subject matter.
- Foster ongoing reform (Islah) of the individual and society.
- Encourage good behavior of learners inside and outside the classes.

ICT - IOHK TIPS: # 29

يقول الله تعالى: صبغة الله ومن أحسن من الله صبغة. وتحنن له عابدون (البقرة: 138)

Allah Almighty says: (Our religion is) the Baptism of Allah: And who can baptize better than Allah? And it is He Whom we worship. (Al-Baqarah: 138)

يقول الله تعالى: ومن أعرض عن ذكري فإن له معيشة ضنكا ونحشره يوم القيامة أعمى (طه: 124)

Allah Almighty says: But whosoever turns away from My Message, verily for him is a life narrowed down, and We shall raise him up blind on the Day of Judgment. (Ta-Ha: 124)

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## WEEKLY IOHK TIPS

### PROMOTING ISLAMIC CULTURE

The role of the lecturer during the teaching of the material is to:

- Disseminate Islamic culture through both direct and indirect methods.
- Present material using examples that emphasize Islamic history, civilization, and teachings to illustrate key points.
- Provide relevant references and cases related to Islamic culture whenever appropriate.

ICT - IOHK TIPS: # 30

قال رسول الله صلى الله عليه وسلم: إنما بُعِثْتُ لأَتَمِّمَ مَكَارِمَ الْأَخْلَاقِ (السلسلة الصحيحة).

The Messenger of Allah (peace be upon him) says: I was only sent to fulfill the honors of morals. (al-Silsilah al-Sahihah).

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## WEEKLY IOHK TIPS

### ISLAMIC ETHICS IN ACADEMIA

The role of the lecturer during the teaching of the material is to:

- Highlight Islamic ethics relevant to the academic subject, such as honesty, justice, generosity, pride, and modesty.
- Emphasize the potential harm to science and knowledge when ethical considerations are neglected.
- Demonstrate the importance of Islamic values in the development of science.

ICT - IOHK TIPS: # 31

يقول الله تعالى: ما أرسلناك إلا رحمة للعالمين (الأنبياء: 107).

Allah Almighty says: And We have not sent you, [O Muhammad], except as a mercy to the worlds. (Al-Anbiya: 107)

يقول الله تعالى: فبما رحمة من الله لنت لهم ولو كنت فظا غليظ القلب لانفضوا من حولك فاعف عنهم واستغفر لهم وشاورهم في الأمر فإذا عزمت فتوكل على الله إن الله يحب المتوكلين (آل عمران: 159).

Allah Almighty says: And by the Mercy of Allah that you dealt with them gently. And had you been severe and harsh-hearted, they would have broken away from about you; so pass over (their faults), and ask for (Allah's) forgiveness for them; and consult them in affairs. Then, when you have taken a decision, put your trust in Allah. Certainly, Allah loves those who put their trust (in Him)" (Ali 'Imran: 159).

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## WEEKLY IOHK TIPS

### EDUCATING WITH MERCY

The role of the lecturer during the teaching of the material is to:

- Show kindness to students.
- Demonstrate mercy and compassion towards students.
- Simplify the educational process to make learning easier for students.
- Treat students with respect.
- Provide support to students academically and socially.

# Congratulations FOR COMPLETING VIVA VOCE/PROPOSAL DEFENSE


INTERNATIONAL MULTI-AWARD WINNING INSTITUTION FOR SUSTAINABILITY

LEADING THE WAY LEADING THE WORLD 40

CONGRATULATIONS FOR PROPOSAL DEFENSE

"You did a great job. Thank you for your dedication and outstanding performance"

**Abdelrahman Mohamed Shaaban Makhmouch (G2014293)**  
 Master of Computer Science and Information Technology  
 Title: The Analysis of Body Language of Patients Using Deep Learning Techniques  
 Date/Presentation: 26/07/2024 - Friday



Supervisor: Asst. Prof. Dr. Amir 'Ati'q Bin Amir Hussain  
 Co-Supervisor: Asst. Prof. Dr. Sharif Wani  
 Co-Supervisor: Asst. Prof. Dr. Mubillah Khatun Binti Basri  
 Chairman: Assoc. Prof. Dr. Norsarimah Salleh  
 Examiner 1: Assoc. Prof. Dr. Anzlia Rizkani Ismail  
 Examiner 2: Asst. Prof. Dr. Mubillah Ismail

Pass with honor

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CONGRATULATIONS FOR PROPOSAL DEFENSE

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**Siti Syazira Anwar Binti Sidi Walhi (G2131180)**  
 Master of Computer Science and Information Technology  
 Title: Synthetic Ambiguity Detection Framework For Software Requirement Systems (SRS)  
 Date/Presentation: 23/07/2024 - Tuesday



Supervisor: Asst. Prof. Dr. Mira Noridha  
 Co-Supervisor: Assoc. Prof. Dr. Norsarimah Salleh  
 Chairman: Prof. Emeritus Dato' Dr. Tengku Mohamad Bin Tengku Serdik  
 Examiner 1: Asst. Prof. Dr. Siti Azzah Mohamed  
 Examiner 2: Asst. Prof. Dr. Noor Anura Zakaria

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**Wan Adzwa Binti Wan Mohamad (G2131290)**  
 Master in Computer Science and Information Technology  
 Title: Event Based Cybersecurity Risk Assessment for the Malaysian Public Sector  
 Date/Presentation: 16/07/2024 - Tuesday



Supervisor: Asst. Prof. Dr. Nurul Nohaitun Akid Mohd.  
 Co-Supervisor: Asst. Prof. Dr. Noor Hayati Binti Abd Halim  
 Chairman: Assoc. Prof. Dr. E.B. Marjiana Binti Abdallah  
 Examiner 1: Prof. Dr. Abdul Rahman Bin Aklan  
 Examiner 2: Asst. Prof. Dr. Shuhaili Talib

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CONGRATULATIONS FOR PROPOSAL DEFENSE

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**Hiba Shaleh Amir Osman (G2013710)**  
 Doctor of Philosophy (Computer Science and Information Technology)  
 Title: The Impact of IT in Managing Pandemics for Healthcare Services  
 Date/Presentation: 22/07/2024 - Monday



Supervisor: Assoc. Prof. Dr. E.B. Marjiana Binti Abdallah  
 Co-Supervisor: Asst. Prof. Dr. Noor Adiah Binti Mohamad Ali  
 Co-Supervisor: Asst. Prof. Dr. Nurul Huda Binti Zainal Arni  
 Chairman: Prof. Datin Dr. Roslina Binti Othman  
 Examiner 1: Prof. Dr. Abdul Rahman Bin Aklan  
 Examiner 2: Asst. Prof. Dr. Noor Anurazli Zakaria

Pass


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LEADING THE WAY LEADING THE WORLD 40

CONGRATULATIONS FOR PROPOSAL DEFENSE

"You did a great job. Thank you for your dedication and outstanding performance"

**Syaidi Shahrul Meraaj (G2217200)**  
 Doctor of Philosophy (Computer Science and Information Technology)  
 Title: Artificial Intelligence Enabled Smart Diagnosing of Tuberculosis  
 Date/Presentation: 29/07/2024 - Monday



Supervisor: Prof. Dr. Asadullah Shah  
 Co-Supervisor: Prof. Emeritus Dato' Is. Dr. Tengku Mohd. Tengku Sembok  
 Co-Supervisor: Asst. Prof. Dr. Mubillah Khatun Binti Basri  
 Chairman: Assoc. Prof. Dr. Adnan Abubakar Ibrahim  
 Examiner 1: Asst. Prof. Dr. Amir 'Ati'q Bin Amir Hussain  
 Examiner 2: Asst. Prof. Dr. Nurul Huda Binti Mohamad Zulhairi

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LEADING THE WAY LEADING THE WORLD 40

CONGRATULATIONS OF COMPLETING VIVA VOCE (PTEM)

"You did a great job. Thank you for your dedication and outstanding performance"

**ANWAL SAMIAH SUED MOHAMMED (G221900)**  
 Doctor of Philosophy (Computer Science and Information Technology)  
 Title: Investigating the Success of Massive Open Online Courses from al-camers Perspective  
 Date/Presentation: 24/07/2024 - Wednesday




Chairperson: Assoc. Prof. Dr. Noor Fatmah Lady Bin Noridin  
 Secretariat: Nur Dina Qistina Ibrahim  
 External Examiner: Prof. Dr. Abd. Samad bin Hasan Kasari  
 Internal Examiner: Prof. Dr. Asadullah Shah  
 Jubbayal Representative: Assoc. Prof. Dr. Adnan Abubakar Ibrahim  
 Supervisor: Assoc. Prof. Dr. Norsarimah Bt Salleh  
 Co-Supervisor: Asst. Prof. Dr. Mira Noridha  
 Co-Supervisor: Asst. Prof. Dr. Muhammad Sa'dy Abu-Sman

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ACHIEVEMENT AND RECOGNITIONS

# IUM TAKRIM 2024

# ACTIVITY




**UTM** Fakulti Kecerdasan Buatan  
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**AI**  
 INSIGHTS  
 SERIES

**SIRI KULIAH PROFESOR ADJUNG FAI :**  
**“PHILOSOPHY OF ARTIFICIAL INTELLIGENCE AND MADANI”**

 22 Julai 2024 | Isnin  
 9.00 pagi - 10.30 pagi  
 Dewan Banquet, Menara Razak, UTM Kuala Lumpur



**PROF. DATO' DR. MOHAMAD FAUZAN BIN NOORDIN**  
 Profesor Adjung FAI



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**WEBINAR-4 SERIES 2024**

**Strengthening the Security of Interconnected Information in the Cyber World**



**PROF. DR. TEDDY MANTORO**  
CHAIR OF ISE CS, INDONESIA CHAPTER



**DR. PRATAMA PERSADHA**  
CHAIRMAN OF CIBSEC



**DR. NURUL NUHLA ABDUL MOLOK**  
HEAD OF INFORMATION SECURITY DIVISION, INFORMATION ASSURANCE & SECURITY DIVISION, CYBERSECURITY DIVISION



**DR. ENG. HANDRI SANTOSO**  
DEAN OF FACULTY OF SCIENCE AND TECHNOLOGY, PRADITA UNIVERSITY

 **Saturday**  
27 July, 2024  
 **Time**  
07:30 - 10:30 PM  
 +62851 5664 4717 - Gilang

**AGENDA**

- Addressing the Rising Threat of State and Non-State Cyber Attacks
- Protecting the confidentiality, integrity & availability of organizational information
- Optimizing Industrial Control Systems with AIoT



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<https://bit.ly/Webinar-4Series2024>

<https://bit.ly/REGISTRASWebinarSeries-4>





DIS Seminar  
**CRAFTING INNOVATIVE TEACHING: LEVERAGING GENERATIVE AI**

**Speaker: Assoc. Prof. Ts. Dr. Izwan Nizal Mohd Shahraneer**  
 Director of the University Teaching and Learning Centre (UTLC), UUM

 **Thursday, 8th August 2024**  
 **2:30 pm - 3:30 pm**






**CTD POINT WILL BE GIVEN**

TALK AND SEMINAR

# PUBLICATION

(SUBMISSION IN IREP FOR JULY 2024)

1. Annas, Ammar Haziq and Zainuddin, Ahmad Anwar and Ramlee, Afnan Wajdi and Ya Omar, Ahmad Solihin and Md Saifuddin, Muhammad Hafiz Faruqi and Sidik, Nur Fatnin Izzati and Sapuan, Muhamad Syariff and Amerolazuam, Amysha Qistina and Hairul Nizam, Muhammad Haziq Zulhazmi and Mazlan, Farah and Omar, Nur Faizah and Abdul Rahman, Nur Alia Alina and Rosdi, Nur Nisa Humairah and Ahmadzamani, Nur Zafirah Adira (2024) *Analyses of 6G-network and Blockchain-network application security: future research prospect*. International Journal on Perceptive and Cognitive Computing (IJPCC), 10 (2). pp. 31-50. E-ISSN 2462-229X
2. Faza Amal, Sophian and Abu Saiid, Ismail and Mansor, Hafizah (2024) *An empirical study for the dynamic and personalised learning experience of the AI course generator*. International Journal on Perceptive and Cognitive Computing (IJPCC), 10 (2). pp. 23-30. E-ISSN 2462-229X
3. Gumaida, Bassam and Abubakar, Adamu (2024) *A Novel Polytope Algorithm based on Nelder-mead method for localization in wireless sensor network*. International Journal of Sensors, Wireless Communications and Control, 14 (1). pp. 21-35. ISSN 2210-3279 E-ISSN 2210-3287
4. Gumaida, Bassam and Ibrahim, Adamu Abubakar (2024) *IWDSA: a hybrid Intelligent Water Drops with a Simulated Annealing for the localization improvement in wireless sensor networks*. International Journal of Applied Information Technology, 8 (1). pp. 14-42. E-ISSN 2581-1223
5. Khan, Fazeel Ahmed and Abubakar, Adamu (2024) *Machine learning-based enhanced deep packet inspection for IP packet priority classification with differentiated services code point for advance network management*. Journal of Telecommunication, Electronic and Computer Engineering, 16 (2). pp. 5-12. ISSN 2180-1843 E-ISSN 2289-8131
6. Mahmud Attar Bashi, Zainab Senan and Basri, Atikah Balqis and Senan, Shayma (2024) *Next-Generation Hotspot (NGH): advancing automatic roaming and seamless wi-fi network logins*. International Journal on Perceptive and Cognitive Computing, 10 (2). pp. 87-91. E-ISSN 2462-229X
7. Mansor, Hafizah (2024) *Student activities: Cyber Security SIG - the journey of empowering Cyber Security professionals*. KICT Newsletter.
8. Rafa, Elean Sugafta and Mahmooda, Adeeba and Sase, Takumi (2024) *Suicide risk prediction using artificial intelligence*. International Journal on Perceptive and Cognitive Computing (IJPCC), 10 (2). pp. 1-7. E-ISSN 2462-229X
9. Seh Wali, Siti Syara Aiman and Nordin, Azlin (2024) *Design and development of a requirements conformance tool (RCT)*. International Journal on Perceptive and Cognitive Computing (IJPCC), 10 (2). pp. 74-79. E-ISSN 2462-229X
10. Zainal Abidin, Nadzurah and Ismail, Amelia Ritahani and Amir Hussin, Amir 'Aatieff and Shafie, Muhammad Laziem and Muhamad Ridzuan, Aishah Nabilah (2024) *Deep learning generative adversarial network model for automated detection of diabetic retinopathy*. In: 16th International Engineering and Computing Research Conference (EURECA), 24th November 2021, Subang Jaya, Selangor, Malaysia.
11. Zainuddin, Ahmad Anwar and Amir Hussin, Amir 'Aatieff and Annas, Ammar Haziq and Bharudin, Mohamad Syafiq Asyraf and Abdul Rajat @ Abdul Razak, Alin Farhain and Mahazir, Muhammad Nur Badri and Ahmad Puzi, Asmarani and Handayani, Dini Oktarina Dwi and Abdul Raziff, Abdul Rafiez (2024) *Selective of IoT applications for water quality monitoring in Malaysia*. International Journal on Perceptive and Cognitive Computing (IJPCC), 10 (2). pp. 8-16. E-ISSN 2462-229X
12. Zainuddin, Ahmad Anwar and Handayani, Dini Oktarina Dwi and Mohd Ridza, Isyraq Haziq and Abdul Rahman, Siti Husna and Kamarudin, Saidatul Izyanie and Ahmad, Khairul Zakwan and Mahazir, Mirza Darwisy and Sukhaimi, Muazzam Hazmi and Subramaniam, Krishnan and Firdaus Basri, Mohamad Irfan and Mohd Dhuzuki, Nurul Hanis (2024) *Converging for security: blockchain, Internet of Things, Artificial Intelligence - why not together?* In: 14th IEEE Symposium on Computer Applications & Industrial Electronics, 24-25 May 2024, Penang.

# PUBLICATION

(SUBMISSION IN IREP FOR JULY 2024)

13. Zainuddin, Ahmad Anwar and Mohd Dhuzuki, Nurul Hanis and Ahmad Puzi, Asmarani and Johar, Mohd Naquiuddin and Yazid, Maslina (2024) *Calibrating hand gesture recognition for stroke Rehabilitation Internet-of-Things (RIOT) using MediaPipe in smart healthcare systems*. International Journal of Advanced Computer Science and Applications, 15 (7). pp. 568-583. ISSN 2158-107X E-ISSN 2156-5570
14. Zainuddin, Ahmad Anwar and Mohd Nor, Rizal and Amir Hussin, Amir 'Aatieff and Mohd Sazali, Muhammad Nurzikry and Mohd Razali, Muhammad Irfan Zaki and Khalid, Muhammad Nor Syahmi and Fazail, Muhammad Nazmi and Norazman, Nik Muhammad Faris Firdaus (2024) *IoT-powered protection: the smart door access system*. In: *APS Proceedings*. Academica Press Solution, Kelantan, Malaysia, pp. 183-190.
15. Jamaludin, Nazurin Qamarina and Ahmad Kamran, Alya Aqilah and Zainal Abidin, Aisyah Najibah and Shamsuddin, Sakinah and Ahmad Dahlan, Abdul Rahman (2024) *A conceptual Educoach multi-sided business model: online tutoring platform to improve career opportunities of B40s and unemployed graduates as digital entrepreneurs*. Journal of Science and Technology, 29 (1). pp. 18-30. E-ISSN 2410-5163
16. Mohamed Sofiadin, Aidrina (2024) *Threats of Extended Reality (XR) applications to teaching and learning: instructors' perspectives*. In: 25th International Symposium on a World of Wireless, Mobile and Multimedia Networks (WoWMoM 2024), 4th - 7th June 2024, Perth, Australia.
17. Zainal Azmi, Nurazlin (2024) *Outcome-Based Education series #1 - writing the course learning outcomes the OBE way*. KICT Newsletter (4/2024). p. 2.