



الجامعة الإسلامية العالمية
INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA
بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ
Garden of Knowledge and Virtue

LEADING THE WAY
KHAUFAH - AMANAH - IGTI - RAHMATAN UL ALAMIN



AN INTERNATIONAL AWARD-WINNING INSTITUTION FOR SUSTAINABILITY

8th INTERNATIONAL CONFERENCE ON INFORMATION AND COMMUNICATION TECHNOLOGY FOR THE MUSLIM WORLD

4th – 6th June 2021

KUANTAN, PAHANG
MALAYSIA

ICT4M 2021

Embracing eHealth in
Facing the Challenges
of IR 4.0 in the
Muslim World

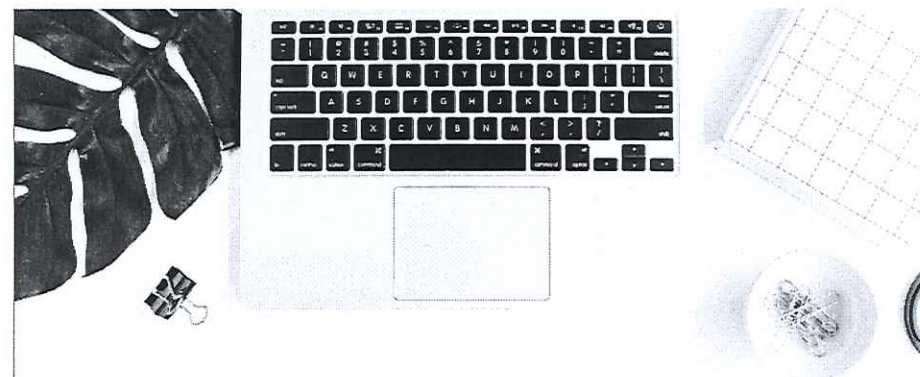
<http://ict4m.iium.edu.my/>

Program Book

Table of Contents

Conference Overview	1
Organizing Committees	2
Messages	3
Keynote Speakers	7
Conference Program	14
Parallel Sessions	19
Paper Abstracts	39

ICT₄M • June. 04-06, 2021



Conference Overview

ICT4M is a conference that gathers academicians, researchers, practitioners, professionals, and students to address the challenges of Information and Communication Technology (ICT) for the Muslim world. It is hosted by the Kulliyah of Information and Communication Technology, International Islamic University Malaysia (KICT, IIUM). This conference has been conducted seven times so far with the most recent location in Kuala Lumpur, Malaysia on 23-25 July 2018.

For this upcoming event, ICT4M 2021 will be conducted as a virtual conference on the 4th – 6th of June 2021 at the IIUM Kuantan Campus due to the current COVID-19 pandemic crisis.

The theme for this year is “Embracing eHealth in Facing the Challenges of IR4.0 in the Muslim World”. The ICT4M 2021 conference is to be conducted in collaboration with CENTRIS, IIUM and will be organized in conjunction with the 2021 World Congress for Integration and Islamization.

Areas of interest include, but are not limited to:

- TRACK 1 Islamic Application for Ummah Development
- TRACK 2 Information System Implementation, Governance and Challenges
- TRACK 3 Commercialization and Entrepreneurship
- TRACK 4 Innovation in Islamic Finance
- TRACK 5 Computing Technologies and Applications
- TRACK 6 Uncertain Data Management in Big Data and Open Data/Open Science
- TRACK 7 Blockchain-Inspired Custodial Solutions

DAY 2 CONGRESS
5th June 2021 | Saturday

TIME	PROGRAMME/EVENT																											
8:00 am – 8.50 am	Registration through link																											
Theme: Humanising Technology in Line with the Principles of Maqasid Al-Shari'ah.																												
9:00 am – 10:00 am	PLENARY 2 (9.00pm, 4th June 2021 at Wisconsin Time) Speaker: Associate Professor Dr. Aasim Padella <i>Emergency Physician, Muslim health disparities and Islamic Bioethics, Faculty of Medicine, Chicago University</i>																											
Theme: Harm Reduction: Balancing between Biomedical Advances and Shari'ah Principles.																												
10.15 am – 11.15 am	PLENARY 3 Speaker: Prof. Dr. Mohammad Hashim Kamali <i>Funding CEO, International Institute of Advanced Islamic Studies</i>																											
11.30 am – 1.30 pm	Parallel Sessions 2 <table><tr><th>Congress</th><th>Themes/Tracks</th><th>Breakout Room</th></tr><tr><td>WCII</td><td>Humanising Technology in line with the Principles of Maqasid al-Shari'ah</td><td>1</td></tr><tr><td>WCII</td><td>Harm Reduction: Balancing Between Biomedical Advances and Shari'ah Principles</td><td>2</td></tr><tr><td>WCII</td><td>Cyberpsychology and Wellbeing in the Age of 4th Industrial Revolution</td><td>3</td></tr><tr><td>WCII</td><td>Integration of Spirituality & Mental Health</td><td>4</td></tr><tr><td>WCII</td><td>Poster presentation show room</td><td>5</td></tr><tr><td>ICT4M</td><td>Track 4: Innovation in Islamic Finance</td><td>6</td></tr><tr><td>ICT4M</td><td>Track 5: Computing Technologies and Applications</td><td>7</td></tr><tr><td>ICT4M</td><td>Track 6: Uncertain Data Management in Big Data and Open Data/Open Science</td><td>8</td></tr></table>	Congress	Themes/Tracks	Breakout Room	WCII	Humanising Technology in line with the Principles of Maqasid al-Shari'ah	1	WCII	Harm Reduction: Balancing Between Biomedical Advances and Shari'ah Principles	2	WCII	Cyberpsychology and Wellbeing in the Age of 4th Industrial Revolution	3	WCII	Integration of Spirituality & Mental Health	4	WCII	Poster presentation show room	5	ICT4M	Track 4: Innovation in Islamic Finance	6	ICT4M	Track 5: Computing Technologies and Applications	7	ICT4M	Track 6: Uncertain Data Management in Big Data and Open Data/Open Science	8
Congress	Themes/Tracks	Breakout Room																										
WCII	Humanising Technology in line with the Principles of Maqasid al-Shari'ah	1																										
WCII	Harm Reduction: Balancing Between Biomedical Advances and Shari'ah Principles	2																										
WCII	Cyberpsychology and Wellbeing in the Age of 4th Industrial Revolution	3																										
WCII	Integration of Spirituality & Mental Health	4																										
WCII	Poster presentation show room	5																										
ICT4M	Track 4: Innovation in Islamic Finance	6																										
ICT4M	Track 5: Computing Technologies and Applications	7																										
ICT4M	Track 6: Uncertain Data Management in Big Data and Open Data/Open Science	8																										
02.30 pm – 3.30 pm	PLENARY 4 (9.30am at Riyadh Time) Speaker: Prof. Dr. Omar Hassan Kasule <i>Professor in Epidemiology & Islamic Medicine, King Fahad Medical City, Riyadh, Kingdom of Saudi Arabia</i>																											
3.30 pm – 5.00 pm	Parallel Sessions 3 <table><tr><th>Congress</th><th>Themes/Tracks</th><th>Breakout Room</th></tr><tr><td>WCII</td><td>Humanising Technology in line with the Principles of Maqasid al-Shari'ah</td><td>1</td></tr><tr><td>WCII</td><td>Harm Reduction: Balancing Between Biomedical Advances and Shari'ah Principles</td><td>2</td></tr><tr><td>WCII</td><td>Cyberpsychology and Wellbeing in the Age of 4th Industrial Revolution</td><td>3</td></tr><tr><td>WCII</td><td>Integration of Spirituality & Mental Health</td><td>4</td></tr><tr><td>WCII</td><td>Poster presentation show room</td><td>5</td></tr><tr><td>ICT4M</td><td>Track 1: Islamic Application for Ummah Development</td><td>6</td></tr><tr><td>ICT4M</td><td>Track 2: Information System Implementation, Governance and Challenges</td><td>7</td></tr><tr><td>ICT4M</td><td>Track 3: Commercialisation and Entrepreneurship</td><td>8</td></tr></table>	Congress	Themes/Tracks	Breakout Room	WCII	Humanising Technology in line with the Principles of Maqasid al-Shari'ah	1	WCII	Harm Reduction: Balancing Between Biomedical Advances and Shari'ah Principles	2	WCII	Cyberpsychology and Wellbeing in the Age of 4th Industrial Revolution	3	WCII	Integration of Spirituality & Mental Health	4	WCII	Poster presentation show room	5	ICT4M	Track 1: Islamic Application for Ummah Development	6	ICT4M	Track 2: Information System Implementation, Governance and Challenges	7	ICT4M	Track 3: Commercialisation and Entrepreneurship	8
Congress	Themes/Tracks	Breakout Room																										
WCII	Humanising Technology in line with the Principles of Maqasid al-Shari'ah	1																										
WCII	Harm Reduction: Balancing Between Biomedical Advances and Shari'ah Principles	2																										
WCII	Cyberpsychology and Wellbeing in the Age of 4th Industrial Revolution	3																										
WCII	Integration of Spirituality & Mental Health	4																										
WCII	Poster presentation show room	5																										
ICT4M	Track 1: Islamic Application for Ummah Development	6																										
ICT4M	Track 2: Information System Implementation, Governance and Challenges	7																										
ICT4M	Track 3: Commercialisation and Entrepreneurship	8																										

DAY 3 CONGRESS
6th June 2020 | Sunday

TIME	PROGRAMME/EVENT																											
8:00 am – 9:00 am	Registration through link																											
Theme: Cyberpsychology and Wellbeing in the age of 4th Industrial Revolution.																												
9:00 am – 10:00 am	PLENARY 5 Speaker: Associate Professor Dr. Nora Mat Zin Consultant in Psychiatry, Department of Psychiatry, Kulliyyah of Medicine International Islamic University Malaysia																											
10:15 am – 11:15 am	PLENARY 6 Speaker: Professor Dr. Abdul Wahab Abdul Rahman Professor in Neuroscience Computer Engineering and the Dean of Kulliyyah of Information and Communication Technology, International Islamic University Malaysia																											
11:30 am – 12:30 pm	Parallel Sessions 4 <table><tr><th>Congress</th><th>Themes/Tracks</th><th>Breakout Room</th></tr><tr><td>WCII</td><td>Humanising Technology in line with the Principles of Maqasid al-Shari'ah</td><td>1</td></tr><tr><td>WCII</td><td>Harm Reduction: Balancing Between Biomedical Advances and Shari'ah Principles</td><td>2</td></tr><tr><td>WCII</td><td>Cyberpsychology and Wellbeing in the Age of 4th Industrial Revolution</td><td>3</td></tr><tr><td>WCII</td><td>Integration of Spirituality & Mental Health</td><td>4</td></tr><tr><td>WCII</td><td>Poster presentation show room</td><td>5</td></tr><tr><td>ICT4M</td><td>Track 4: Innovation in Islamic Finance</td><td>6</td></tr><tr><td>ICT4M</td><td>Track 5: Computing Technologies and Applications</td><td>7</td></tr><tr><td>ICT4M</td><td>Track 6: Uncertain Data Management in Big Data and Open Data/Open Science</td><td>8</td></tr></table>	Congress	Themes/Tracks	Breakout Room	WCII	Humanising Technology in line with the Principles of Maqasid al-Shari'ah	1	WCII	Harm Reduction: Balancing Between Biomedical Advances and Shari'ah Principles	2	WCII	Cyberpsychology and Wellbeing in the Age of 4th Industrial Revolution	3	WCII	Integration of Spirituality & Mental Health	4	WCII	Poster presentation show room	5	ICT4M	Track 4: Innovation in Islamic Finance	6	ICT4M	Track 5: Computing Technologies and Applications	7	ICT4M	Track 6: Uncertain Data Management in Big Data and Open Data/Open Science	8
Congress	Themes/Tracks	Breakout Room																										
WCII	Humanising Technology in line with the Principles of Maqasid al-Shari'ah	1																										
WCII	Harm Reduction: Balancing Between Biomedical Advances and Shari'ah Principles	2																										
WCII	Cyberpsychology and Wellbeing in the Age of 4th Industrial Revolution	3																										
WCII	Integration of Spirituality & Mental Health	4																										
WCII	Poster presentation show room	5																										
ICT4M	Track 4: Innovation in Islamic Finance	6																										
ICT4M	Track 5: Computing Technologies and Applications	7																										
ICT4M	Track 6: Uncertain Data Management in Big Data and Open Data/Open Science	8																										
12:30 pm – 1:30 pm	Closing Ceremony and Award Announcement Professor Dr Kamaruzzaman Yunus Organising Chairman of 3 rd World Congress on Integration & Islamicisation 2021 and the Director of Campus Director, International Islamic University Malaysia, Kuantan.																											

ISLAMIC APPLICATION FOR UMMAH DEVELOPMENT

ICT₄M • June. 04-06, 2021

20

PID	PAPER TITLE	AUTHORS
1A	Assessment of the Influence of ICT Facilities for Sustainability of Modern Teaching Excellence in Education	Ibrahim Dahiru Idriss, Jaafar Zubairu Maitama, Usman Haruna, Adamu Mamman Adamu, Abubakar Idriss Barde and Adamu Abubakar Ibrahim
3A	The Internet of Everything from Islamic Perspective	Ismail Faizi
33A	Contribution of Information Technology (IT) in Conceptualizing the Qur`anic Approach on Programmed Systems of Biology	Ibrahim Shogar and Mohd Zulfaezal Che Azemin
34A	The Effects of Persuasive Technology on End-Users' Information Security Awareness	Mohammed Abdullah Bawazir, Murni Mahmud and Nurul Nuha Abdul Molok
41A	Neurofeedback training to improve the efficiency of wudu to promote psychological wellbeing: A conceptual study.	Nurhafizah Mahri and Nurul Liyana Mohamad Zulkufli
14B	Brain Behaviour Analysis of Mental Stress Before and After Listening to Quranic Recitation Based on EEG Signals	Hana Silabdi, Raini Binti Hassan, Nurhafizah Binti Mahri and Norzaliza Binti Md Nor