

"Digitalization in Education Catalyst for Sustainability and Society Transformation"

ICTE 2023

INTERNATIONAL CONFERENCE OF ICT IN EDUCATION

30-31 OCTOBER 2023

VIRTUAL CONFERENCE



ORGANIZED BY

FACULTY OF COMPUTING & META-TECHNOLOGY
UNIVERSITI PENDIDIKAN SULTAN IDRIS
TANJONG MALIM, PERAK



ICTE 2023

INTERNATIONAL CONFERENCE OF ICT IN EDUCATION

INTRODUCTION:



The 6th International Conference on ICT in Education, 2023 (ICTE'23) is an ongoing effort by the Faculty of Computer and META-Technology (FKMT), Sultan Idris Educational University (UPSI), Malaysia. By gathering researchers, educators, and practitioners from diverse backgrounds, ICTE'23 aims to foster collaboration, inspire new research directions, and contribute to the advancement of ICT education. It provides a platform for participants to present their work, gain insights from peers, and establish connections with experts in the field, ultimately driving innovation and improvement in ICT education worldwide. The first ICTE conference was held in 2016 and the following year in 2017.

OBJECTIVES:

- Gain knowledge from research and discoveries through discourse that includes post-graduate students, professors, researchers, educational practitioners, and entrepreneurs in the field of computing and meta-technology.
- Produce competent, confident, critical thinking, and innovative human capital through international scientific discourse.
- Empowering the role of universities in research and knowledge sharing related to the integration of computing and meta-technology in the field of education

THEMES:

"Digitalization in Education Catalyst for Sustainability and Society Transformation"

DATE & MODE:

30-31 October 2023
(Monday & Tuesday)
Online Mode

FEES:

Participant : RM 200.00 (USD 50)
Participant (student) : RM 150.00 (USD 35)
Presenter : RM 420.00 (USD 100)
Presenter (student) : RM 320.00 (USD 70)

CONTACT US:

Faculty of Computing and Meta-Technology,
Sultan Idris Education University, 35900 Tanjong Malim, Perak

Tel : 05-450 6000

Email : icte@upsi.edu.my

Web: <https://sites.google.com/siswa.upsi.edu.my/icte-2023>

Registration



PROGRAMME SCHEDULE

Day 1, 30th October 2023 (Monday)

8.00 a.m – 8.30 a.m	Online attendance to the ICTE2023 (Webex)
8.30 a.m – 8.50 a.m	ICTE2023 Plenary Speech #1 Speaker : Ts. Dr Pajuzi bin Awang Deputy Director, Teacher Education Institute, Dato Razali Ismail Campus, Terengganu Title : “Pendidikan ICT Guru Pelatih : Isu dan Halatuju Masa Depan”
9.00 a.m – 10.30 a.m	Parallel Session #1
10.30 a.m – 11.00 a.m	Break
11.00 a.m – 11.50 a.m	ICTE2023 Keynote Speech #1 Speaker : Datin Dr. Norrizan Razali Founder & Managing Director, Tech Capacity Sdn Bhd Title : “Digital Learning: Humanising the people, shaping the future”
12.00 p.m – 1.00 p.m	Opening Ceremony of the ICTE 2023 Welcoming Remarks by The Chairman, and The Dean of Faculty Computing & Meta-Technology
1.00 p.m – 02.30 p.m	Break
02.30 p.m – 2.50 p.m	ICTE2023 Plenary Speech #2 Speaker : Associate Professor Ts. Dr. Shamsul Arrieya Ariffin Faculty of Computing & Meta-Technology, Universiti Pendidikan Sultan Idris Title : “Designing an Effective Educational Software for Local Cultural Context: A User-centered Perspective”
2.50 p.m – 3.10 p.m	ICTE2023 Plenary Speech #3 Speaker : Associate Professor Ts Dr Koo Ah Choo Faculty of Creative Multimedia, Multimedia University Title : “Integrating Wellness, Resilience, and Personal Growth in the Digital Learning Era”
3.10 p.m – 3.20 p.m	Break
3.20 p.m – 4.30 pm	Parallel Session #2

PROGRAMME SCHEDULE

Day 2, 31th October 2023 (Monday)

8.30 a.m – 9.00 a.m	Online attendance to the ICTE2023 (Webex)
9.00 a.m – 9.40 a.m	ICTE2023 Keynote Speech #2 Speaker : YBhg Datu Dr Azhar Hj Ahmad Director, Sarawak State Education Department Title : "Educational Transformation: Challenges and Future Directions"
9.40 a.m – 10.00 a.m	Break & Networking
10.00 a.m – 10.20 a.m	ICTE2023 Plenary Speech #4 Speaker : Professor Ts. Dr Nor Azan Mat Zin Honorary Professor, Faculty of Information Science & Technology, Universiti Kebangsaan Malaysia Title : "Computing Education for a "Post-Truth" World: New Directions for Research and Practice"
10.20 a.m - 10.40 a.m	ICTE2023 Plenary Speech #5 Speaker : Ts Ahmad Hadzramin Abdul Rahman Founder and Managing Director, OR Technologies Sdn. Bhd Title : "Learning Analytics to develop future competences in education – potential and implications"
10.40 a.m - 11.30 a.m	Parallel Session #3
11.30 a.m – 12.10 p.m	ICTE2023 Keynote Speech #3 Speaker : Professor. Dr. Kusriani, M. Kom Universitas AMIKOM Yogyakarta, Indonesia Title : "Transforming Education with Artificial Intelligence"
12. 20 p.m – 1.00 p.m	Closing Ceremony Deputy Dean (Research & Innovation) Faculty of Meta-Technology, Universiti Pendidikan Sultan Idris

Datin Dr Norrizan Razali

Founder and Managing Director Tech Capacity



Datin Dr Norrizan Razali is widely recognized as a pioneering figure in the field of education technology in Malaysia. She founded Tech Capacity Sdn Bhd, which is focused on helping organizations, education institutions, educators and leaders build relevant skills for a seamless quality education amidst the rapidly evolving digital environment. Under her leadership, Tech Capacity has successfully guided numerous companies through the complex process of digital transformation. Her visionary approach and deep understanding of technology trends have ensured that Tech Capacity remains at the forefront of innovation.

Datin Dr. Norrizan Razali has garnered an illustrious 27-year career in education. This encompasses the academia at the National University of Malaysia, as well as program management, consultancy and policy formulation at the Institute of Strategic and International Studies and the Multimedia Development Corporation. Having led the management of sales operations at Microsoft and Apple, Datin Dr. Norrizan Razali is now a resolute entrepreneur dedicated to pursuing her passion in building relevant skills amongst educators and leaders for quality education delivery. Through Tech Capacity, she helps people gain the best experience on digital platforms.

Her recent niche is dedicated to building people knowledge and skills to self-regulate and remain resilient when navigating online. She is highly accomplished in building programs, relevant frameworks, standards and content to educate and raise awareness on online safety for different age groups from pre- schoolers to senior citizens.

She is an Ivy League qualified educationalist who has been featured in local and global forums and engages with students through mentoring and lecturing. She has received numerous honours as well, including the China Wenhui-UNESCO Award for the Rural Smart School Benchmark Programme. She holds a PhD in Education from the University of Pennsylvania, United States.

Datu Dr Hj Azhar Hj Ahmad

Director of Sarawak State Education Department



YBhg. Datu Dr. Haji Azhar bin Haji Ahmad dilahirkan di Simunjan, Sarawak pada 15 November 1964. Beliau berkelulusan Doktor Falsafah Pendidikan Islam (Cemerlang) dari Universiti Kebangsaan Malaysia (UKM) pada tahun 2006 dan Sarjana Muda Pengajian Islam (Kepujian) (Usuluddin & Falsafah) dari universiti yang sama pada tahun 1988. Beliau juga memperoleh Ijazah Sarjana Sains (Pembangunan Sumber Manusia) dari Universiti Malaysia Sarawak pada tahun 1998. Beliau memperolehi Diploma Pendidikan (Pendidikan Islam dan Bahasa Arab) dari Maktab Perguruan Islam pada tahun 1989.

Beliau dilantik ke jawatan Pengarah Pendidikan Sarawak (PPS) pada 1 Mac 2022. Sebelum menjawat jawatan PPS, beliau pernah menjawat jawatan sebagai Pengarah Bahagian Perancangan dan Penyelidikan Dasar Pendidikan, Kementerian Pendidikan Malaysia (KPM) bermula pada 6 Mei 2020 hingga 14 Mac 2021, Pengarah Bahagian Profesionalisme Guru, KPM dari Mac 2021 hingga Mac 2022, Pengarah di Jabatan Pendidikan Negeri Sarawak pada 26 November 2018 hingga 05 Mei 2020 dan Pengarah di Bahagian Pendidikan Islam, Kementerian Pelajaran Malaysia (KPM) pada 1 Julai 2017 hingga 25 November 2018.

Beliau merupakan seorang tokoh yang disegani khususnya dalam bidang Pendidikan Islam dan banyak menyumbang idea dan saranan yang bernas untuk kemajuan agama, bangsa dan negara. Antara sumbangan besar beliau adalah sebagai pakar rujuk Pendidikan Islam di peringkat KPM, panel penilai Buku Teks Pendidikan Islam, panel penilai Buku Generasi Wawasan, panel penggubal kurikulum Latihan JAKIM, panel penggubal Kurikulum Ijazah Sarjana Pengajian Islam serta panel pakar bidang bagi kajian Doktor Falsafah (PhD).

Professor Dr Kusrini, M.Kom

Universitas AMIKON Yogyakarta, Indonesia



Professor Dr. Kusrini is the Director of the Postgraduate Program at Universitas Amikom Yogyakarta, Indonesia. She received her Ph.D in Computer Science from the Universitas Gadjah Mada, Yogyakarta, Indonesia. Her research interests include Artificial Intelligence, Computer Vision, Decision Support Systems, Data Mining, and Databases. She is the recipient of many awards including the World Class Professor Program 2019 from the Ministry of Research, Technology and Higher Education, Indonesia.

She has authored many books namely Learning Database Through Some Cases, Data Mining Algorithm, Data Mining – Concept and Application, and Decision Support Systems. She has also produced more than 100 published research papers. Her papers were published in internationally reputable journals namely the Indonesian Journal of Electrical Engineering, Computer Science, International Journal of Electrical and Computer Engineering, Applied Sciences (Switzerland). She also holds more than 30 copyrights in software and computer applications.

Ts. Ahmad Hadzramin Abdul Rahman

Founder and Managing Director,
OR Technologies SdnBhd



Ts. Ahmad Hadzramin Abdul Rahman stands as the driving force behind OR Technologies Sdn Bhd, a pioneering data analytics consulting firm at the forefront of transforming businesses and public sectors through cutting-edge modern data analytics, data science, and data cloud solutions.

With a visionary leadership spanning more than a quarter-century in the realm of data analytics consulting, he has spearheaded innovative analytics implementations across diverse organizations, including notable entities such as LHDN, Jabatan Audit Negara, PMO Office, SME Bank, Bank Islam, CIMB, BSN, Maybank, Axiata, Digi and an impressive list of eighty others.

Ts. Ahmad Hadzramin earned his Bachelor of Information Technology (Software Engineering) from the prestigious University of Queensland, Australia. Presently, he serves as the CEO@PTJ for The Faculty of Science at Universiti Putra Malaysia. In this capacity, he leverages his extensive expertise to drive the faculty towards new heights of excellence in the ever-evolving landscape of data sciences. Furthermore, Ts. Ahmad Hadzramin plays a pivotal role on the Industry Advisory Panel (IAP) for data analytics for several renowned universities, including Universiti Teknologi Malaysia, Universiti Teknikal Malaysia Melaka, Universiti Pendidikan Sultan Idris, and Universiti Tenaga Nasional.

As an invited speaker, he actively imparts his profound knowledge of modern data analytics, big data, and advanced analytics at international conferences, organized by government bodies and private sector entities. His contributions continue to shape and accelerate the progress of data-driven innovation, inspiring countless professionals and students in their journey toward data excellence. Ts. Ahmad Hadzramin's dedication to the advancement of data analytics remains an invaluable asset to the industry, fostering a brighter future for data-driven decision-making.

Professor Dr Nor Azan Mat Zin

Honorary Professor
Universiti Kebangsaan Malaysia



Dr. Nor Azan Mat Zin has been an honorary professor of computing science at the Faculty of Information Science and Technology, Universiti Kebangsaan Malaysia, since 2021. She received a PhD in Information Science/Multimedia from Universiti Kebangsaan Malaysia, UK, in 2005 and is currently a Professor at the University Malaysia of Computer Science and Engineering (UNIMY).

Previously, she was a professor in the field of information technology at Universiti Kebangsaan Malaysia. In 2020, Prof. Nor Azan was nominated as a visiting professor at Marmara University, Istanbul, Turkey. Her basic research has spanned contemporary computer science disciplines such as serious games, accessibility, adaptive/intelligent web-based systems, multimedia instructional design, affective computing, and e-learning technologies.

She has published 218 peer-reviewed papers, including journals, chapters in books, and proceedings, which have received more than 2485 citations (cf. Google Scholar) and are ranked in the 16 H index in Scopus. She has contributed as an Editorial Board member and associate editor for the International Journal of Game-Based Learning (IJGBL), the International Journal of Interactive Digital Media, and the Journal of Theoretical and Applied Information Technology (JATIT).

She has successfully supervised over thirty-three doctoral students, with twenty-one as principal supervisors and twenty-seven master's students, successfully. He also holds intellectual property rights (IP) for six inventions in various fields, including interface design, computer game software, educational software, and software design.

Associate Professor Dr Koo Ah Choo

Faculty of Creative Multimedia
Multimedia University



For over 25 years, Dr Koo has been teaching and conducting research, in the Faculty of Creative Multimedia at Multimedia University (MMU), targeting her sights on technology-enhanced learning and the quality of life. She has authored and co-authored around 107 articles for top peer-reviewed academic journals and conference proceedings. She shares copyrights for the creation of character designs, video interviews with cancer survivors, a micro website on wellness, and gamification workshop methodologies for promoting green behaviors. Ongoing areas of research specialization have included media usage, design, and content creation to promote wellness, lifelong learning and the multi-disciplinary Health Education for All (HEFA) initiative.

Currently, she heads a new team researching the development of teaching models for Building Resilience among senior students in higher institutions. Dr Koo has also recently completed projects on e-health for mental wellness and on mobile design and services for aging women in Malaysia.

She graduated with a Bachelor of Science and Computers degree from Universiti Teknologi Malaysia (UTM) back in 1995 and a PhD in Educational Technology from Multimedia University in 2006. During her academic career at MMU, she has held appointments as the Deputy Director for the Industrial Collaborations & Engagement Centre, the Deputy Director of The Digital Cities Research Institute, and as Dean and Deputy Dean of the Learning Institute for Empowerment and Creative Multimedia respectively.

Ts. Dr Pajuzi bin Awang

Deputy Director, Teacher Education Institute
Dato Razali Ismail Campus, Terengganu



Ts. Dr. Pajuzi Awang now is the Deputy Director of IPGK Dato' Razali Ismail, Kuala Nerus, Terengganu, Malaysia. Previously, he was a Deputy Director of IPGK Sultan Mizan, Bachok, Terengganu, Malaysia. He also held a position as the Head of the Educational Technology Department at IPG Dato' Razali Ismail, Kuala Nerus, Terengganu Campus starting January 1, 2019. Has a Doctor of Philosophy (PhD) degree in Resources and Information Technology from the National University of Malaysia, a Master's Degree in Science (Information Technology) from Universiti Utara Malaysia and a Bachelor of Science and Computer and Education from Universiti Teknologi Malaysia.

Experienced as an Assistant Teacher at SM Sains Pokok Sena Kedah (1996-2000). Began serving as a lecturer at the IPG Science Department Dato Razali Ismail Kuala Nerus Campus on 1.11.2002 and held the position of Secretary of the Administrative and Professional Management Council (MPPP), IPG Management Short Course Coordinator and Grade Outstanding Lecturer (Chemistry) in 2013 -2016.

In the professional field, was recognized as a Professional Technologist and Graduate of Technologist by the Malaysia Board of Technologists (MBOT) and a member of the Malaysian STEM Teachers Association. Involved as IBSE National STEM Center Lead Trainer and STEM Trainer. Has received several awards such as the Excellent Service Award (APC) in 2019, the Terengganu State Level Innovative IPGM Lecturer Award in 2017, the Excellent Service Award (APC) in 2007, the KLD Tunas Samudera Certificate of Excellence Award in 2011 and the Certificate of Excellence Award as a Participant Best in Chemistry at Universiti Putra Malaysia in 1999.

Assoc Prof. Ts. Dr. Shamsul Arrieya Ariffin
Faculty of Computing & Meta-Technology
Universiti Pendidikan Sultan Idris



Biodata: Associate Professor Ts. Dr Shamsul Arrieya Ariffin is an IT Technologist from the Faculty of Computing and Meta Technology, UPSI. He is originally from historic Melaka and has a PhD in Software Engineering from the University of Technology of Sydney, Australia. Obtained a Bachelor's honors degree in Computer Science from the University College of London, United Kingdom, and a Master's degree in Information Technology from Universiti Technology of MARA, Malaysia.

He also has over 25 years of experience in Information Technology. He has 80 research publications and more than 50 writing in news article related to information technology. He has been referred to Astro Awani for the digitization of education. He is also an advisor for mobile learning for the Department of Community Health, Faculty of Medicine HUKM.

He is also the Lead Researcher of the National Grant Ministry of Higher Education, for the Educational Usability Testing SIG with UPSI as satellite in developing design guidelines for creative industries digital content. His experience includes 7 years of working experience as analyst programmer, software engineer, system engineer in International IT companies from USA, UK, and India. His research aims to bridge the community's digital gap

CONFERENCE SUB-THEME

SUB-THEME : Sub-theme 1: Curriculum and Practice of Computing and Meta-Technology in Education

Philosophy and Curriculum
Teaching and Learning
Assessment, Measurement and Evaluation
Administration and Management

Sub-theme 2: Borderless Learning Through Computing and Meta-Technology

Game-based Learning
Blended Learning
Online Learning
Metaverse Learning
Mobile Learning

Sub-theme 3: Innovation and Technology of Computing and Meta-Technology in Education

Big Data and Data Science
Machine Learning and Artificial Intelligence
Internet of Things
Cloud Computing
Web Semantics
Natural Language Processing
Knowledge Management
Information Security
Virtual Reality and Augmented Reality
Software and System
Animation and Simulation
Gamification and Learning Analytics