PROF. MADYA TS. DR. NIK ZULKARNAEN BIN KHIDZIR (01167A)
PENSYARAH UNIVERSITI (TETAP)
FACULTY OF CREATIVE TECHNOLOGY AND HERITAGE
UNIVERSITI MALAYSIA KELANTAN
BEG BERKUNCI NO. 1
BACHOK

Email: zulkarnaen.k@umk.edu.my
Tel: 09-7797000

Scopus ID: **36138701400**
Google Scholar: **QSsBWngAAAAJ**
WOS: **AAE-8705-2021**

A. PERSONAL DETAILS

UMK JOIN DATE	06-Apr-2014
DATE OF APPOINTMENT FOR CURRENT POSITION	06-Apr-2014
DATE OF CONFIRMATION FOR CURRENT POSITION	11-Apr-2016
EDUCATION(S)	• **(2018) LEMBAGA TEKNOLOGIS MALAYSIA** PROFESIONAL • **(2013) UNIVERSITI TEKNOLOGI MARA** IJAZAH DOKTOR FALSAFAH INFORMATION TECHNOLOGY AND QUANTITATIVE SCIENCES • **(2007) UNIVERSITI TEKNOLOGI MARA** IJAZAH SARJANA • **(2002) UNIVERSITI PUTRA MALAYSIA** IJAZAH SARJANA MUDA SAINS KOMPUTER • **(1999) UNIVERSITI PUTRA MALAYSIA** DIPLOMA SAINS KOMPUTER • **(1996) SEK MEN KOTA BHARU KELANTAN** SPM
GROUP OF EXPERTISE	
AWARD(S)	• Award Name: **Anugerah Perkhidmatan Cemerlang (APC) Tahun 2023 (2024)** Awarded by: Universiti Malaysia Kelantan • Award Name: **Anugerah Gemilang Universiti tahun 2019 kategori Penyelidikan dan Inovasi (2020)** Awarded by: Universiti Malaysia Kelantan • Award Name: **Anugerah Gemilang Universiti Tahun 2018 - Kategori Keusahawanan (2019)** Awarded by: Universiti Malaysia Kelantan • Award Name: **Finalist - Outstanding Entrepreneurship Mentor Award 2018 (2018)** Awarded by: Ministry of Education Malaysia • Award Name: **Silver Award - SME Innovex 2018 :Beehive Certified Social Entrepreneurial Innovator © Training Program (2018)** Awarded by: SME Innovex Secreteriat • Award Name: **Best Presenter Award - 8th International Conference on Electrical Engineering, Computer Science and Informatics 2018, Malang Indonesia. (2018)** Awarded by: IEEE Indonesia, Universitas Muhammadiah • Award Name: **Bronze Award - Digital Social Media Crowd-Teaching Strategy for Enhancing Proactive Teaching and Learning (2018)** Awarded by: MOE, UIAM, Malaysia Centre for eLearning, MEIPTA • Award Name: **Gold Award - Teaching Enhancement and Learning Innovation Carnival 2018 Facebook: Crowd Teaching Strategy for Enhancing Teaching and Independent Learning (2018)** Awarded by: Global Entrepreneurship Research and Innovation Centre, UMK • Award Name: **Best Paper Award : The 4th Information Systems International Conference 2017, Bali, Indonesia - Analysis on Factors Influencing Textile Cyberpreneurs Intention to Adopt Cloud-Based m-Retail Applicat (2017)** Awarded by: Association for Information System Indonesia (AISINDO),Institut Teknologi Sepuluh Nopember, Indonesia • Award Name: **SILVER AWARD : International Innovative Practices in Higher Education Expo 2017 / World Engineering Education Forum 2017 Research Ideation Canvas : Research Start up Blueprint (2017)** Awarded by: Universiti Teknologi Malaysia / Society of Engineering Education Malaysia • Award Name: **SILVER AWARD : International Conference and Exposition on Inventions by Institutions of Higher Learning 2017 (PECIPTA 2017) ERGOSOF (2017)** Awarded by: Ministry of Higher Education Malaysia

	• Award Name: **GOLD AWARD : The International Invention, Innovation and Design Competition 2017 ERGOSOF (2017)** Awarded by: Universiti Teknologi MARA, Johor • Award Name: **SILVER AWARD - 28th International Invention, Innovation and Technology Exhibition 2017Research Ideation Canvas © : Visualize Research Ideas from Strategic Perspectives (2017)** Awarded by: Malaysian Invention and Design Society (MINDS) & Ministry Science, Technology and Innovation Malaysi • Award Name: **BRONZE AWARD - Invention & Innovation Award: Malaysia Technology Expo 2017Cybersecurity Risk Matrix: Human Factor on Digital Social Media (2017)** Awarded by: Malaysian Association of Research Scietist (MARS) • Award Name: **SILVER AWARD PAMERAN K-NOVASI 2017 P& P UKMResearch Ideation Canvas © (2017)** Awarded by: Universiti Kebangsaan Malaysia • Award Name: **BRONZE AWARD : K-NOVASI 2017 P& P UKM An Islamic Animated Inforgraphics Model as a Tool for Dakwah Dissemination (2017)** Awarded by: Universiti Kebangsaan Malaysia • Award Name: **Anugerah Emas Penyelidikan dan InovasiProduct Innovation: Cybersecurity Risk Matrix: Human Factor on Digital Social Media (2016)** Awarded by: Pusat Pengurusan Penyelidikan dan Inovasi, UMK • Award Name: **Anugerah Perak Penyelidikan dan InovasiProduct Innovation: Conceptual Framework on Mobile Cloud Application Retails management for Textile Cyberpreneurs (2016)** Awarded by: Pusat Pengurusan Penyelidikan dan Inovasi, UMK • Award Name: **Anugerah Penyelidikan dan Inovasi 2015 (Penerbitan) (2016)** Awarded by: Fakulti Teknologi Kreatif dan Warisan, UMK • Award Name: **Anugerah Penyelidikan dan Inovasi 2015 (Penyelidikan) (2016)** Awarded by: Fakulti Teknologi Kreatif dan Warisan, UMK • Award Name: **Best Presenter Award (International Conference on Information and Education Technology 2015 (2015)** Awarded by: IACSIT and IACT
WORKING EXPERIENCE(S)	• Software Analyst/ Consultant | Elanet Sdn Bhd 01-Jan-2005 - 01-Jan-2006 • Senior System Analyst | Enche System Sdn Bhd 01-Jan-2006 - 01-Jan-2007 • System Analyst/ Solution Architect | XY Base MSC Sdn Bhd 01-Jan-2007 - 01-Feb-2008 • Lecturer | Universiti Tun Abdul Razak (UNIRAZAK) 01-Jan-2010 - 01-Jan-2011 • Lecturer | Kuala Lumpur Infrastructure University Collegue 01-Jan-2011 - 01-Jan-2012 • Lecturer | Infrastructure University Kuala Lumpur 01-Jan-2012 - 01-Mar-2014
PROFESSIONAL MEMBERSHIP(S)	• LEMBAGA TEKNOLOGIS MALAYSIA | MEMBER | NATIONAL 28-Dec-2025 - 28-Dec-2026

B. TEACHING-LEARNING ACTIVITIES

COURSES TAUGHT	• CFT1063 - BASIC MULTIMEDIA AND WEB TECHNOLOGY • CFT1073 - VISUAL ART PRESENTATION TECHNIQUES • CFT1082 - BASIC PRODUCT DESIGN • CFT1093 - COMPUTER AND ARTS • CFT3124 - RESEARCH PROJECT I • CFT4108 - INDUSTRIAL TRAINING • CFT4112 - STUDENTS IN ENTERPRISE PROGRAMME • CFT4134 - RESEARCH PROJECT II • CMT2103 - 2D AND 3D ANIMATION • CMT3243 - BASIC MULTIMEDIA PROGRAMMING • CMT4132 - SEMINAR ON CURRENT ISSUES IN MULTIMEDIA • CVT2122 - DIGITAL DESIGN • CWT3103 - RESEARCH METHODOLOGY • CWT3113 - DESIGN THEORY • JIT10703 - CYBER SECURITY • MCI5123 - BUSINESS AND DESIGN PROJECTS • MCI5356 - PROJECT 2 • MCS5213 - SOFTWARE REQUIREMENTS ANALYSIS • SCX1223 - COMPUTER AND ARTS

C. RESEARCH AND DEVELOPMENT

	1. Xu, L, Nik Zulkarnaen Khidzir, Ainul Wahida Radzuan, Gao, NN, Heng, Y, Yang, YM. (2026-03). Virtual presence and enjoyment as mediators between interaction quality and continuance intention in China¿s smart museums.

JOURNAL(S)	International Journal of Advanced and Applied Sciences , Vol. 13(3) , pp. 41-51. https://doi.org/10.21833/ijaas.2026.03.005 2. Khidzir N.Z., Shekh Abdullah-Al-Musa Ahmed, Tan, T.G., Daud, K.A.M.. (2021-07). Social Engineering (SoE) Attacks Towards Network Security in Higher Learning Institute: The Partial Least Squares Path Modeling Approach. , Vol. 2347 . https://doi.org/10.1063/5.0053677 3. Aws Naser Jaber, Shahid Anwar, NZ Khidzir, Mohammed Anbar. (2021). A Detailed Analysis on Intrusion Identification Mechanism in Cloud Computing and Datasets. Advances in Cyber Security , Vol. 1347 , pp. 550-573. https://doi.org/10.1007/978-981-33-6835-4_37 4. Liu Xu, Nik Zulkarnaen Khidzir, Ainul Wahida Radzuan, Yao Heng. (2026-03). Research on User Acceptance Mechanisms and Usage Behaviour of the Palace Museum's AR Applications in Digital Guided Tour Scenarios: Based on a Multi-Theory Integrated Model. International Journal of Creative Future and Heritage (TENIAT) , Vol. 14(1) , pp. 147-157. https://doi.org/10.47252/teniat.v14i1.1887 5. Azwan Abdul Karim, Nik Zulkarnaen Khidzir, Zukeri Ibrahim, Abdul Aziz Zalay @ Zali. (2024-09-23). INTRANS: An Emerging Design Of Malaysian National Identity In Transforming Sculpture. International Journal of Heritage, Art and Multimedia , Vol. 7(22) , pp. 29 - 44. https://doi.org/10.35631/IJHAM.722003 6. Zang Lingna, Nik Zulkarnaen Khidzir, Norazlinda Mohamed Rosdi, Wang Yiping. (2024). Reform of Teaching Methods for High School Ethnic Music Courses. Asian Journal of Research in Education and Social Sciences , Vol. 6(2) , pp. 370-375. https://doi.org/10.55057/ajress.2024.6.2.30 7. Zang Lingna, Nik Zulkarnaen Khidzir, Norazlinda Mohamed Rosdi. (2024). Investigating the Continuation of Ethnic Music in Junior High School Music Education. Asian Journal of Research in Education and Social Sciences , Vol. 6 (2) , pp. 315-320. https://doi.org/10.55057/ajress.2024.6.2.25 8. Hanizan Shaker, Syazwani Yahya, Munaliza Jaimun, Nik Zulkarnaen Khidzir. (2022). A Hybrid Approach for a Secured Information Security Using Modified Encryption Technique. International Journal For Multidisciplinary Research , Vol. 4(6) , pp. 1-12. https://doi.org/10.36948/ijfmr.2022.v04i06.1124 9. Wan Safra Diyana Wan Abdul Ghani, Nik Zulkarnaen Khidzir, Mohammad Ismail. (2021-06). The Implication of Information System (IS) Success Model on Cloud-Based M-Retail Adoption Intention Among Textile Cyberpreneur. Journal Information System and Technology Management (JISTM) , Vol. 6(21) , pp. 1 - 13. https://doi.org/10.35631/JISTM.621001 10. Shamsul Arrieya Ariffin, Faiz Daud, Hasimi Sallehuddin, Shukor Sanim Mohd Fauzi, Muh Anshar, Nik Zulkarnaen Khidzir. (2021). The Planned Requirements for a Distributed, Systematic Citizen-Centred Design, Intelligent Health Management System Post COVID-19 Pandemic for a Developing Country. Turkish Journal of Computer and Mathematics Education , Vol. 12(6) , pp. 3754-3758. 11. Nik Zulkarnaen Khidzir, SHEKH ABDULLAH AL-MUSA AHMED, Tan, Tse Guan. (2020-03-31). Mobile Device Security Issues In Digital Literacy For Higher Learning Institution. International Journal of Creative Future and Heritage (TENIAT) , Vol. 8 (1) , pp. 119-129. 12. Nik Zulkarnaen Khidzir, Abdullah-Al- Musa, Shirin Afroz. (2020). The Impact of Personal Productivity Due to the Attacks of Corona Virus Disease 2019: Using Partial Least Structural Equation Model. Innovare Journal of Health Sciences , Vol. 8(6) , pp. 1-4. 13. Shekh Abdullah-Al-Musa Ahmed, Nik Zulkarnaen Khidzir, Tan Tse Guan. (2020). Building Blocks of Social Engineering Attacks For The Organization. SSRN Electronic Journal , pp. 1-11. https://doi.org/10.2139/ssrn.3538561 14. Shekh Abdullah-Al-Musa Ahmed, NZ Khidzir, Tan, Tse Guan. (2019). Towards the Big Data and Digital Evidences Integrity. Jurnal Intelek , pp. 1-8. https://doi.org/10.24191/ji.v14i1.8544
PROCEEDING(S)	1. Nik Zulkarnaen Khidzir, Khairul Azhar Mat Daud, Rikinorhakis Ridzwan. (2024-09-05). Research Ideation Canvas ©: An Innovative Teaching and Learning Tool for Postgraduate Student and Novice Researcher. , pp. 42 - 45. Pusat Pengajaran & Pembangunan Kurikulum (Pengajaran-UKM), Universiti Kebangsaan Malaysia, Bangi, Malaysia. 2. Nik Zulkarnaen Khidzir, Khairul Azhar Mat Daud, Hidayat Hamid. (2023). Accelerating Creative Techno-preneuriship Through Innovative Design and Technology Integration. In International Conference on Art, Design, Education and Cultural Studies (ICADECS) , pp. 21¿28. KnE Publishing / KnE Social Sciences. https://doi.org/10.18502/kss.v8i15.139 3. Farrah Atikah Saari, Izati Nabila Marzuki, Norlaila Mat Yusof, Sahrudin Mohamed Som, Ayub Awang, Nik Zulkarnaen Khidzir. (2023). A Preliminary Study of the Local Community¿s Concerns the State of Pahang Old Mosques. In KnE Social Sciences , pp. 1-12. Universitas Negeri Malang. 4. Daud, K.A.M., Bhattacharyya, E, Khidzir N.Z., Balakrishnan A/L Parasuraman, Savita, KS, Rao, PV, Kumaran, J. V., Hassan, NMSN, Azman, Z. (2023). Perceptions of the Stakeholders onWork Readiness Among Graduates from Higher Education Institutions in Malaysia. In Lecture Notes in Networks and Systems , pp. 857-874. Springer International Publishing AG. https://doi.org/10.1007/978-3-031-08090-6_55 5. Khairul Azhar Mat Daud, Ahmad Azaini Abdul Manaf, Nik Zulkarnaen Khidzir, Sharulnizam Ramli. (2023). Entrepreneur-Based Learning through Digital Comic Development. In International Academic Forum on Creative Contents , pp. 43-44. Faculty of Creative Technology and Heritage. 6. Hussain, H.S, Eden Barua, Nik Zulkarnaen Khidzir, Cheang Kah Wai, Ghazali M. F. (2022). A Modified RAES Technique for a Secured Information Security. In Quest Intervarsity Science Symposium . Quest International University. 7. Daud, K.A.M., Khidzir N.Z., Parasuraman B., Bhattacharyya E., Savita K.S., Rao P.V., Kumaran, J. V., Hassan N. M.S.N., Aris R.. (2021-07). Employability skills: What do employers need?. In AIP Conference Proceedings . American Institute of Physics Inc.. https://doi.org/10.1063/5.0052149 8. Aws Naser Jaber, Shahid Anwar, Nik Zulkarnaen Khidzir, Mohammed Anbar. (2021). The Importance of IDS and IPS in Cloud Computing Environment: Intensive Review and Future Directions. In 2nd International Conference On Advances In Cyber Security (ACeS 2020) , pp. 479-491. Springer Singapore. https://doi.org/10.1007/978-981-33-6835-4_32 9. Tenh, H. K, Tan, T.G., Yusof, A.M., Khidzir N.Z., Chin, K. O.. (2017). A Review on the Application of Augmented Reality in Education. In INTED2017: 11TH INTERNATIONAL TECHNOLOGY, EDUCATION AND DEVELOPMENT CONFERENCE , pp. 9981-9981. IATED-INT ASSOC TECHNOLOGY EDUCATION & DEVELOPMENT. https://doi.org/10.21125/inted.2017.2370
	1. Nik Zulkarnaen Khidzir, Khairul Azhar Mat Daud, Hana Yazmeen Hapiz. (2026-01). Aesthetics in Creative Technology. IGI Global. https://doi.org/10.4018/979-8-3373-8069-8

BOOK(S)	2. Nik Zulkarnaen Khidzir, Shekh Abdullah-Al-Musa Ahmed. (2025-01). Guardians of Data A Comprehensive Guide to Digital Data Protection. Taylor & Francis. https://doi.org/10.1201/9781003604679 3. Nur Hafezah Hussein, Muhammad Najmi Mohd Masri, Suhaila Abdul Kadir, Nor Dalila Marican, Ahmad Zaki Amiruddin, Amaal Fadhlini Mohamed, Hadhrami Ab Ghani, Norashikin Binti Mohd Fauzi, Wan Ab Aziz Wan Daud, Nor Maizana Mat Nawi, Ayub Awang, Mohammad Sabri Abdul Rahman, Nik Zulkarnaen Khidzir, Mohd Fathi Abu Yaziz @ Mohamad. (2024-12-24). Garis Panduan Pembangunan Program dan Kursus Pengajian Berasaskan Kerja 2024 Universiti Malaysia Kelantan (UMK). Penerbitan Korporat UMK. 4. Nik Zulkarnaen Khidzir, Wan Nurulasiah Wan Mustapa, Razwan Mokhtar. (2023). Cybersecurity: Everyone Should Alert. Penerbit UMK. 5. Nik Maheran Nik Muhammad, Azila Ahmad Sarkawi, Nik Zulkarnaen Khidzir, Muhammad Najmi Mohd Masri. (2022). ENTREPRENEURIAL LEADERS - THE CATALYST OF CHANGE FOR HIGHER LEARNING INSTITUTIONS. Higher Education Leadership Academy (AKEPT). 6. Nik Maheran Nik Muhammad, Nik Zulkarnaen Khidzir, Wan Mohd Nazdrol Wan Mohd Nasir, Fadhilahanim Aryani Abdullah, Linira Ghazali, Siti Aishah Attaullah, Rikinorhakis Ridzwan. (2022). BeeHIVE Social Innovation Program: An Entrepreneurial Impact. UMK Press. 7. Nik Maheran Nik Muhammad, Anis Amira Ab Rahman, Nik Zulkarnaen Khidzir, Linira Ghazali, Siti Bahirah Saidi, Nor Hazwani Munirah Lateh, Liyana Ahmad Afip, Ismie Roha Mohamed Jais. (2021). Leading Higher Institutions - Leadership Traits, Dreams & Achievements. UMK Entrepreneurship Institute (UMKEI). 8. Khairul Azhar Mat Daud, Nik Zulkarnaen Khidzir. (2015). Asas Pembangunan Produk Aplikasi Multimedia. Penerbit UMK.
CHAPTER(S)	1. Rout, K., Sahoo, P.R., Panda, M., Nik Zulkarnaen Khidzir. (2026-01). Does Personal Innovativeness Influence the Technology Adoption Behavior of Women Entrepreneurs?: A Positivist Study. In Diversity in Women¿s Entrepreneurship: Global Sustainability in African Countries (pp. 96-106). CRC Press. https://doi.org/10.1201/9781003508953-6 2. Mohapatra S.P., Swain T.K., Rout K., Sahu K.K., Tripathy A.R., Nik Zulkarnaen Khidzir, Jayasingh S.K.. (2026). Heart Stroke Prediction Using Machine Learning Approach with Clinical and Demographic Factors. In Computing, Communication and Intelligence (pp. 323-328). CRC Press. https://doi.org/10.1201/9781003768654-67 3. Nik Zulkarnaen Khidzir, Shekh Abdullah-Al-Musa Ahmed. (2025). Legal Guardianship Navigating Data Regulations and Threat Landscapes. In Guardians of Data : A Comprehensive Guide to Digital Data Protection (pp. 32 - 50). CRC Press; Taylor and Francis Group LLC (Books) US. https://doi.org/10.1201/9781003604679-3 4. Muhd Shukri, Fatimah, Suliman, Mohd Saipuddin, Ab Aziz, Nur Asfarina, Hamid, H, Apandi S.N.A., Khidzir N.Z.. (2024). A Review of Syamsul Yusof¿s Malaysian Box Office Hit, Mat Kilau: Kebangkitan Pahlawan (2022). In Studies in Systems, Decision and Control (pp. 653 - 663). Springer Science and Business Media Deutschland GmbH. https://doi.org/10.1007/978-3-031-54379-1_57 5. Tan, Tse Guan, Remli, M.A., Khairul Nizar Syazwan bin Wan Salihin Wong, Nurul Izrin Md Saleh, Hadhrami Ab Ghani, Nik Zulkarnaen Khidzir. (2021-10). Sub Modul: The Fourth Industrial Revolution (IR4.0). In Modul Amalan Baik Pendidikan Berasaskan Hasil (Outcome-based Education) Universiti Malaysia Kelantan (pp. 99-164). AKEPT dan Universiti Malaysia Kelantan. 6. Nik Zulkarnaen Khidzir, Muhamad Saufi Che Rusuli, Sharulnizam Ramli, Khairul Azhar Mat Daud. (2020). Upin & Ipin : The Tiny Warrior of the Decade : The Concern of Its Sustainability in the Creative Industry. In CASE STUDY IN RETAIL: Challenges, Solutions & Outcomes (STUDENT EDITION) . Universiti Malaysia Kelantan Press (UMK Press).
OTHER(S)	1. Muhamad Saufi Che Rusuli, Nik Zulkarnaen Khidzir, Wan Mohd Nazdrol Wan Mohd Nasir, Kho Siew Leen, Ahmad Aiman Ahmad Nazim, Tuan Nor Azma Tuan Hussain, Hor Jie Ann, Ab Aziz, Nur Asfarina. (2024-09). UMK International at A Glance 3rd Edition. UMK International. 2. Muhamad Saufi Che Rusuli, Nik Zulkarnaen Khidzir, Wan Mohd Nazdrol Wan Mohd Nasir, Kho Siew Leen, Ahmad Aiman Ahmad Nazim, Tuan Nor Azma Tuan Hussain, Hor Jie Ann, Ab Aziz, Nur Asfarina. (2024-06). UMK International at Glimpse 2nd Edition 2024. UMK International. 3. Muhamad Saufi Che Rusuli, Nurul Akmar Che Zaudin, Nik Zulkarnaen Khidzir, Arifullah Mohammed, Kanit Sripaoraya, Chua Hui Wen, Ahmad Aiman Ahmad Nazim, Kho Siew Leen, Tuan Nor Azma Tuan Husain, Hor Jie Ann, Nurairfani Bustamam, Nur Asfarina Ab Aziz. (2024-03-18). UMK International At A Glimpse (First Edition) 2024. 4. Ng Siew Foen, Nik Zulkarnaen Khidzir, Nurul Akmar Che Zaudin, Mohammed Aurifullah, Kanit Sripaoraya, Chua Hui Wen, Kho Siew Leen, Ahmad Aiman Ahmad Nazim, Tuan Nor Azma Tuan Hussain, Hor Jie Ann, Nurairfani Bustamam. (2023-07). UMK International at Glimpse (EDITION 3). UMK Inernational. 5. Ng Siew Foen, Nurul Akmar Che Zaudin, Nik Zulkarnaen Khidzir, Kanit Sripaoraya, Chua Hui Wen, Kho Siew Leen, Arifullah Mohammed, Ahmad Aiman Ahman Nazim, Tuan Nor Azma Tuan Husain, Nurairfani Bustamam, Hor Jie Ann. (2023). UMK International At A Glimpse (Fourth Edition) 2023. 6. Nik Zulkarnaen Khidzir, Khairul Azhar Mat Daud, Sharulnizam Ramli. (2022). Wau Animation Studio: The Mastermind Behind `Ejen Ali The Movie's' RM 30 Million Box Office Haul. UMK Press. 7. Nik Zulkarnaen Khidzir. (2021-06-14). Future Direction of Creative Computing: Education, Research, Innovation and Technology. Bernama - MREM. 8. wan mohd nadzrol bin wan mohd nasir, Nik Zulkarnaen Khidzir, Vijaya Kumaran, Jayaraj, Nik Maheran Nik Muhammad, IZHARRULLAIL, Siti Aishah Attaullah. (2021). Social Innovator Talent Development Innovative Framework Certified Social Entrepreneurial Innovator Program. 9. Nik Zulkarnaen Khidzir, Khairul Azhar Mat Daud, Fatin Norsyafawati Mohd Sabri. (2020). Evolusi Teknologi Realiti Berperanta (AR) dan Aplikasinya dalam Konservasi Digital dan Warisan Maya. MajalahSains.Com. 10. Hasyamuddin Othman, Reyanhealme Rohanai, Adib Farhan Zaime, Khairul Azhar Mat Daud, Nik Zulkarnaen Khidzir, Nurul Huda Omar. (2020). Building Innovative Ecosphere in Malaysia Higher Education. PennWell Publishing Co.. 11. Attaullah, Siti Aishah, Khidzir, Nik Zulkarnaen, wan mohd nadzrol bin wan mohd nasir, ZULHAFEEQ, Nik Maheran Nik Muhammad. (2020). MULTI ¿ DIMENSIONAL TEACHING & LEARNING INNOVATIVE APPROACH FOR SOCIAL ENTERPRENEURSHIP INNOVATION SKILLS. I TELIC 2020.

RESEARCH(S)	1. A FUNDAMENTAL RESEARCH TOWARD DEVELOPING A FRAMEWORK ON MOBILE CLOUD APPLICATION RETAILS MANAGEMENT FOR TEXTILE CYBERPRENEURS | HEAD | FRGS | 2015 2. A MODEL OF DIGITAL GAME-BASED LEARNING FOR DA'WAH DISSEMINATION | MEMBER | FRGS | 2017 3. A MODEL OF DIGITAL GAME-BASED LEARNING FOR DA'WAH DISSEMINATION | MEMBER | FRGS | 2020 4. CERTIFIED SOCIAL ENTREPRENEURIAL INNOVATOR TRAINING PRGRAM | HEAD | KPM | 2020 5. EMPOWERING DIGITAL LITERACY SKILLS AMONG YOUTH IN THE STATE OF KELANTAN | MEMBER | UMK-COM | 2022 6. EXPLORING THE SOCIAL MEDIA DIGITAL CYBERSECURITY RISK FACTORS | HEAD | RAGS | 2014 7. EMPOWERING DIGITAL LITERACY SKILLS AMONG YOUTH IN THE STATE OF KELANTAN. | MEMBER | UMK-COM | 2022 8. GERAN INTERVENSI GE : ENTERPRISE DATA ANALYTICS CERTIFIED PROFESSIONAL | HEAD | KPT | 2023 9. GERAN KEUSAHAWANAN : FASHIONPRENEUR : PROGRAM KELESTARIAN BATIK KELANTAN | MEMBER | KPM | 2020 10. GERAN KEUSAHAWANAN : HOTSPOT VIDEO WARISAN BUDAYA - UNITSQ CONTENTPRENEUR PROGRAM | MEMBER | KPM | 2020 11. GERAN KEUSAHAWANAN : PROGRAM PECUTAN TRANSFORMASI EKONOMI DIGITAL BELIA "MANFAATKAN KOMPETENSI KEUSAHAWANAN DIGITAL" | MEMBER | KPM | 2020 12. KAJIAN PEMERKASAAN LITERASI KEWANGAN DIGITAL DIKALANGAN BELIA IPT : BANTERAS PENIPUAN DALAM EKONOMI DIGITAL | MEMBER | GRANT(I/A) | 2023 13. LEVEL OF ACCEPTANCE FOR ANIMATED ISLAMOGRAPHICS AS A DA'WAH ELEMENTS | MEMBER | SGJP | 2016 14. MAPPED ICGP-INDUSTRY 4.0 FRAMEWORK IN EMPLOYABILITY SKILLS AND WORK READINESS FOR FUTURE ENGINEERING GRADUATES | MEMBER | FRGS | 2020 15. MODEL PEMBANGUNAN ALAT BANTU MENGAJAR BERASASKAN TEKNOLOGI AUGMENTED REALITY (AR) BAGI PENGAJARAN DAN PEMBELAJARAN LUKISAN KEJURUTERAAN | MEMBER | UMK-MATCH | 2022 16. MODELING A FRAMEWORK OF USER EXPERIENCE ASSESSMENT FOR MALAYSIA CULTURAL HERITAGE USING VIRTUAL MUSEUM TECHNOLOGY | MEMBER | FRGS | 2022 17. NOVEL MALAYSIAN ERGONOMICS SOFA FOR SAFETY, HEALTH AND COMFORT | MEMBER | PRGS | 2020 18. PEMINDAHAN ILMU BAGI MENERAPKAN BUDAYA KESELAMATAN DAN KESIHATAN KEPADA PARA PENDIDIK DI INSTITUT PENDIDIKAN GURU (KOMUNITI) | MEMBER | KTP-USM | 2015 19. PROGRAM ENTERPRISE DATA ANALYTICS CERTIFIED PROFESSIONAL | HEAD | KPT | 2023 20. PROTOTYPE DEVELOPMENT OF INDUSTRY-DRIVEN DATA ANALYTICS PROFESSIONAL COMPETENCIES TRAINING INTELLIGENT SYSTEM | HEAD | UMK-PRO | 2022 21. STAKEHOLDER PERCEPTION ON TRANSFERABILITY OF STUDENT COMMUNICATIVE COMPETENCE IN PROFESSIONAL EMPLOYABILITY SKILLS AND WORK READINESS FROM INSTITUTION OF HIGHER LEARNING TO INDUSTRY | MEMBER | SGJP-P | 2020 22. STRUCTURED ENTREPRENEURIAL INCUBATOR PROGRAM (CREATIVE DIGIHUB @ CRE8TIVATION LAB) | HEAD | KPM | 2020 23. STRUCTURED ENTREPRENEURIAL INCUBATOR PROGRAM (CREATIVE DIGIHUB @ CRE8TIVATION LAB) - EXTENDED YEAR 2022 | HEAD | KPM | 2022
SUPERVISION	• **A COMPARATIVE STUDY ON THE VALUE ORIENTATION OF THE MUSIC CURRICULUM IN BASIC EDUCATION IN CHINA AND MALAYSIA** | MAIN SUPERVISOR FOR A PHD'S STUDENT • **AN EXPLORATORY STUDY ON ANIMATED INFOGRAPHICS MOBILE AUGMENTED REALITY CARD APPLICATION ON HERITAGE CONTENT** | MAIN SUPERVISOR FOR A PHD'S STUDENT • **CYBER SECURITY ON HUMAN BEHAVIOUR IN MALAYSIA BANKING INSTITUTIONS** | MAIN SUPERVISOR FOR A PHD'S STUDENT • **KELESTARIAN KHAZANAH WARISAN TULISAN JAWI MELALUI PENJANAAN KANDUNGAN DIGITAL DALAM PENGAJARAN DAN PEMBELAJARAN DI SEKOLAH RENDAH DI KELANTAN.** | CO SUPERVISOR FOR A MASTER'S STUDENT • **MOBILE AGENT INTEGRITUY AND AVAILABILITY FOR HOME INTELLIGENT HEALTH CARE** | MAIN SUPERVISOR FOR A PHD'S STUDENT • **SME INNOVATION INDEX TOWARDS ENHANCING COMPETENCY OF SME IN MALAYSIA** | CO SUPERVISOR FOR A PHD'S STUDENT • **THE AESTHETIC EVOLUTION OF VISUAL DESIGN UNDER THE INFLUENCE OF MULTIMEDIA DIGITAL ARTS IN THE DIGITAL AGE** | CO SUPERVISOR FOR A PHD'S STUDENT • **THE VISUAL COMMUNICATION DESIGN FOR UNDERGRADUATE STUDENT IN HIGHER EDUCATION INSTITUTE: TEHE CRITICALLY REFLECTIVE** | MAIN SUPERVISOR FOR A PHD'S STUDENT • **USER ACCEPTANCE OF VIRTUAL MUSEUM APPLICATIONS: A STUDY BASED ON THE TECHNOLOGY ACCEPTANCE MODEL (TAM)** | MAIN SUPERVISOR FOR A PHD'S STUDENT • **VISUAL ART INNOVATION IN THE CONTEXT OF DIGITAL MEDIA** | MAIN SUPERVISOR FOR A PHD'S STUDENT
	• Product Name: MYSKILL READY PORTAL Industry-Driven Data Analytics Professional Competencies Training Intelligent System Award: GOLD Role: Head Exhibition Name: CRI 2023 • Product Name: An Innovative Hajj Digital Game Award: GOLD Role: Member Exhibition Name: eCarnival Research and Innovation UMK 2020 • Product Name: CRE8TIVATION LAB - PROTOTYPE DESIGN INNOVATION Award: SPECIAL Role: Head Exhibition Name: GRAND FINAL EXHIBITION STRUCTURED ENTREPRENEURIAL INCUBATOR PROGRAM 2022 (SEIP) • Product Name: SOCIAL INNOVATOR TALENT DEVELOPMENT INNOVATIVE FRAMEWORK: CERTIFIED SOCIAL ENTREPRENEURIAL INNOVATOR PROGRAM

RESEARCH AWARD (S)	Award: SILVER Role: Head Exhibition Name: CRI 2021 • Product Name: Immersive Web Browsing : Enhansing User Experience and Benefit for Faculty of Creative Technology and Heritage, Universiti Malaysia Kelantan Award: SILVER Role: Head Exhibition Name: CRI 2023 • Product Name: Digital Savvy Youth : A Modular Module for Digital Literacy Development Award: SILVER Role: Member Exhibition Name: CRI 2023 • Product Name: "Conceptual Framework of Social Engineering (SoE) Attacking Risks and Prevention Technique" Award: SILVER Role: HEAD Exhibition Name: BIF 2020 • Product Name: MULTI-DIMENSION TEACHING & LEARNING INNOVATIVE APPROACH FOR SOCIAL ENTREPRENEURSHIP INNOVATION SKILLS Award: BRONZE Role: Head Exhibition Name: TEACHING ENHANCEMENT & LEARNING INNOVATION CARNIVAL (eTeLiC 2020) • Product Name: Lumiere Studio Service Innovation Award: NONE Role: Head Exhibition Name: GRAND FINAL EXHIBITION STRUCTURED ENTREPRENEURIAL INCUBATOR PROGRAM 2022 (SEIP) • Product Name: DeDesire Product Design Innovation Award: NONE Role: Head Exhibition Name: GRAND FINAL EXHIBITION STRUCTURED ENTREPRENEURIAL INCUBATOR PROGRAM 2022 (SEIP)

D. CONSULTATION

CONSULTATION(S)	1. CYBER SECURITY OF SECURITY OPERATION CENTER CAPACITY BUILDING | MEMBER | 2021 2. RESEARCH AND BUSINESS CONSULTATION : BUSINESS AND RESEARCH CONSULTANCY WORK FOR SP INTELLECTS | MEMBER | 2020

E. COMMUNITY SERVICES

COMMUNITY SERVICES	