



## CURRICULUM VITAE



### I. PERSONAL PARTICULARS

<b>Name</b>	Dr. MOHD RIZAL B. MOHD ISA
<b>Current Position Faculty / Department</b>	ASSOC. PROF. DS54 Faculty Defence Science and Technology Department of Computer Science

**II. ACADEMIC AND PROFESSIONAL QUALIFICATIONS**

(Please list all academic qualifications, from your first degree, in chronological order)

Year	Degree	Discipline	University
Nov 2001	Diploma	Computer Science	Universiti Teknologi Mara (UiTM), Shah Alam
Nov 2003	Bachelor of Science with Honours	Data Communication and Networking	Universiti Teknologi Mara (UiTM), Shah Alam
May 2008	Master of Science	Information Technology	Universiti Teknologi Mara (UiTM), Shah Alam
May 2016	PhD of Philosophy	Computer Engineering	University of Portsmouth, United Kingdom

**III. TITLES OF POSTGRADUATE THESES WRITTEN (At MSc/PhD Level)**

No.	TITLES OF POSTGRADUATE THESES
1.	Watermarked Face Recognition Scheme - enhancing the security while maintaining the effectiveness of the biometric authentication systems - PhD
2.	Development of FAS – Financial Accounting System for Malaysian companies listed in the main board of Bursa Malaysia (1975 – 2005) - Master

**IV. WORK EXPERIENCE (Please list your relevant experience in chronological order)**

Year	Position	Organisation	Start and End Date
2004 - 2006	Senior Programmer, (Visual Basic, Web-based application)	Peladang Heitech Sdn Bhd, Kelana Jaya	Mac 2004 – Sept 2006
2006 - 2008	SAP System Analysts	Pos Malaysia Berhad, Kuala Lumpur	Oct 2006 – Aug 2008
2008 - 2017	Lecturer	Universiti Pertahanan Nasional Malaysia (UPNM), Sungai Besi	Sept 2008 – Feb 2017
2017 - 2023	Senior Lecturer	Universiti Pertahanan Nasional Malaysia (UPNM), Sungai Besi	Mac 2017 – Jan 2023
2023 - present	Associate Professor	Universiti Pertahanan Nasional Malaysia (UPNM), Sungai Besi	Feb 2023 – present

2018 - 2020	Director of ICT	Universiti Pertahanan Nasional Malaysia (UPNM), Sungai Besi	Aug 2018 – Dec 2020
2019 - 2020	Chief of Information (CIO)	Universiti Pertahanan Nasional Malaysia (UPNM), Sungai Besi	Sept 2019 – May 2020

## 1.0 TEACHING AND SUPERVISION

### 1.1 First Degree Courses

(Please list in chronological order and state: course title, semester and year)

No.	Course Title	Semester	Year
1.	TSK 1123: Database Systems - Total No of Students: 84	Semester I	2008/09
2.	TSK 1233: System Analysis and Design – Total No of Students: 84	Semester II	2008/09
3.	TSS 3243: Wireless Network Security - Total No of Students: 22	Semester III	2008/09
4.	TSK 1123: Database Systems - Total No of Students: 68	Semester I	2009/10
5.	TSK 1233: System Analysis and Design – Total No of Students: 98	Semester II	2009/10
6.	TSK 1123: Database Systems - Total No of Students: 68	Semester I	2010/11
7.	TSK 1233: System Analysis and Design – Total No of Students: 84	Semester II	2010/11
8.	TSS 3243: Wireless Network Security - Total No of Students: 68	Semester III	2010/11
9.	TSK 1123: Database Systems - Total No of Students: 50	Semester I	2015/16
10.	TSS 3243: Wireless Network Security - Total No of Students: 57	Semester II	2015/16
11.	TSS 3243: Wireless Network Security - Total No of Students: 21	Semester III	2015/16
12.	TSS 3243: Wireless Network Security - Total No of Student: 1	Semester I	2016/17
13.	ISB42503: Internet Programming - Total No of Students: 30 (Part Time Lab Demonstrator at UniKL)	Semester I	2016/17
14.	FCS0634: Information Technology – Total No of Students: 41	Semester I	2016/17
15.	TSK3233: Computer Organization Architecture – Total No of Students: 20	Semester I	2017/18
16.	TSS 3243: Wireless Network Security - Total No of Students: 30	Semester II	2017/18
17.	FCS0634: Information Technology – Total No of Students: 25	Semester II	2017/18
18.	FCS0634: Information Technology – Total No of Students: 21	Semester I	2018/19

19.	FCS0634: Information Technology – Total No of Students: 18	Semester I	2019/20
20.	FCS0634: Information Technology – Total No of Students: 26	Semester I	2020/21
21.	FCS0634: Information Technology – Total No of Students: 26	Semester I	2020/21
22.	FCS0634: Information Technology – Total No of Students: 27	Semester II	2020/21
23.	TST3223: Database Systems – Total No of Students: 31	Semester II	2020/21

## 1.2 Diploma Courses

(Please list in chronological order and state: course title, semester and year)

No.	Course Title	Semester	Year
1.	TDK1113: Computer Literacy – Total No of Students: 38	Semester I	2016/17
2.	TDK1113: Computer Literacy – Total No of Students: 28	Semester II	2016/17
3.	TDK0013: Computer Literacy – Total No of Students: 22	Semester II	2016/17
4.	TDK0013: Computer Literacy – Total No of Students: 25	Semester I	2017/18
5.	TDK0013: Computer Literacy – Total No of Students: 25	Semester II	2018/19
6.	TDK2313: Computer Literacy – Total No of Students: 32	Semester I	2019/20
7.	TDK2323: Information System Management – Total No of Students: 37	Semester II	2020/21
8.	TDK2323: Information System Management – Total No of Students: 25	Semester V	2020/21

## 1.3 PhD Supervision

(Please list in chronological order)

No.	Name of Student	Project Title	Date of Registration	Role (Main / Co-Supervision)	Status • Completed • Submitted • In Progress	University
1.	Muhammad Naim bin Abdullah	Enhancing Feature Extraction Technique for Content Based Image	2018	Co-Supervisor	Completed	UPNM

2.	Roziyani binti Rawi	Prediction Model for Multiple WLAN Edge Network Theory Technique	2021	Main Supervisor	In Progress	UPNM
3.	Muhammad Fendi bin Osman	Optimizing Virtual Private Network (VPN) Performance Based On Software Define Networking (SDN) Approach	2022	Main Supervisor	In Progress	UPNM
4.	Kamaruzaman bin Maskat	Enhancing The Server-Side Internet Proxy Detection Technique In Network Infrastructure Using Machine Learning	2022	Main Supervisor	In Progress	UPNM
5.	Zuraidy bin Adnan	Sentiment Threat Analysis Model On Social Network Using Text Mining Technique	2017	Co-Supervisor	In Progress	UPNM
6.	Liyana Safra Zaabar	Development of Political Tweet Sentiment Analysis Model using Lexicon Based and Machine Learning Techniques	2022	Co-Supervisor	In Progress	UPNM

## 1.1 PhD External/Internal Examination

(Please list in chronological order)

No.	Name of Student	Project Title	External / Internal	Date of Viva	University
1.	Chen Chuqiao	A Blockchain-Based Framework to Handle the Security and Privacy for Data Middle Platform in IR 4.0	External	01/08/2023	City Uni Malaysia
2.	Goh Thing Thing	Question Classification According to Bloom's Taxonomy Based on Semantic Similarity	Internal		UPNM

## 1.2 MSc (by Research)

(Please list in chronological order)

No.	Name of Student	Project Title	Date of Registration	Role (Main / Co-Supervision)	Status <ul style="list-style-type: none"> <li>• Completed</li> <li>• Submitted</li> <li>• In Progress</li> </ul>	University
1.	Mohd Faizal bin Mustafa	New Challenges in constructing smart campus based on IoT and Cloud Computing in UPNM	2018	Main Supervisor	Completed	UPNM
2.	Mohd Azmi bin Mustafa@Sulaiman	Log Analysis and Network Monitoring in UPNM	2018	Co-Supervisor	Completed	UPNM
3.	Iksan bin Tamrin	Security and Privacy Challenges in Higher Education Institution During Covid-19 Pandemic	2022	Main Supervisor	In Progress	UPNM
3.	Ruhaidah binti Abu Nor	A development of Guideline on Database Connectivity	2022	Main Supervisor	In Progress	UPNM

		Between PHP and Sybase				
5.	Sari Nashikim binti Radin Iskandar	Identifying the True Meaning of Likes from the Usage of Illegal Words in the Comments	2018	Co-Supervisor	In Progress	UPNM
6.	Syed Muzzameer Bin Syed Zulkiplee	Audio Retrieval System Using Clustering System	2019	Co-Supervisor	In Progress	UPNM
7.	Lt Leenaambighai a/p Jayabalan	Comparative Study On Mixed Reality In The Future Combat Visualisation	2020	Co-Supervisor	In Progress	UPNM
8.	Mohammad Farizshah bin Ismail Kamil	Deep Learning On Data Tagging System For Sheep Disease And Inheritance Assessment	2021	Co-Supervisor	In Progress	UPNM

### 1.3 MSc External/Internal Examination

(Please list in chronological order)

No.	Name of Student	Project Title	External / Internal	Date of Viva	University
1.	M-Marwan Darwish Khabbaz	A Decentralized Privacy – Preserving Approach at Cloud Storage Via Blockchain – Based Hybrid Algorithm	External	26/08/2019	UniKL
2.	Yamunah Kathiravan A/P	Web Browser Artefacts’ Security Framework with Encryption for Counter Digital Forensics Technique	Internal	25/03/2020	UPNM
3.	Nur Atiqah binti Malizan	Emotion Mining for National Security Threats in Cyberspace Using Hybrid Kansei and Lexicon Based Approach	Internal	08/02/2023	UPNM

4.	Gong Ping	An Approach to Enterprise Resource Planning Testing using Data Factor	External	01/08/2023	UniKL
5.	Muhammad Asyraf bin Nordin	Selection of Best CODECS Techniques for Voice and Video Internet Protocol (V20IP) Version 4 and Internet Protocol Version 6.	Internal	08/02/2023	UPNM

#### 1.4 Supervision (Postgraduate Research Project or Final Year Research Project)

(Please list in chronological order)

No.	Name of Student	Project Title	Date of Registration	Role (Main/Co-Supervision)	Status • Completed • Submitted • In Progress
1.	Syamira Amira binti Salleh	A security system using motion detection camera	2009	Main Supervisor	Completed
2.	Mohammad Indera bin Aziz	PULAPOT main entrance fingerprint biometric authentication system	2009	Main Supervisor	Completed
3.	Eerman bin Dzulkurnain	Library management system using smart card for UPNM	2009	Main Supervisor	Completed
4.	Mohd Amir Haris bin Mohd Idris@Yes	Financial system for Wisma Pendeta UPNM	2009	Main Supervisor	Completed
5.	Mohd Noor Azmi bin Mohd Anuar	Token based authentication system using Thumb Drive	2010	Main Supervisor	Completed
6.	Mohd Azdeli bin Abdul Ghani @ Mat Raid	Graphical user password	2010	Main Supervisor	Completed
7.	Muhammad Aizat bin Muhammad Suhaimi	VOIP encryption system	2011	Main Supervisor	Completed
8.	Raja Muhammad Asyraf bin Raja Khalif	Examination attendance system based on face recognition	2011	Main Supervisor	Completed
9.	Mohd Faizzuddin bin Shahidon	Electrical Control system based on RFID technology	2011	Main Supervisor	Completed



10.	Siti Khadijah binti Rohan	Academician Workload Management Systems using Smart Card and Fingerprint	2011	Main Supervisor	Completed
11.	Muhammad Yusuf bin Khalid	Password generator system based on malay proverb	2011	Main Supervisor	Completed
12.	Ahmad Syazwan bin Rusli	Daily NDUM Officer Cadet Mess Attendance via Smart Card (DOCMA)	2011	Main Supervisor	Completed
13.	Nur Atikah Binti Mat Johar	File Management System for FSTP, UPNM	2015	Main Supervisor	Completed
14.	Humaira Binti Kharuddin	Weapon store Management System	2015	Main Supervisor	Completed
15.	Mohd Fazrul Zaim Bin Mohd Zaidie	Vehicles Management System for ALK	2015	Main Supervisor	Completed
16.	Muhammad Ezwan Bin Anuar	Signature based authentication system	2015	Main Supervisor	Completed
17.	Ahmad Hijazi Bin Che Ros	Sentiment Analysis System in Malay Language based on speech	2017	Main Supervisor	Completed
18.	Mohd Ridzuan Bin Sohime	Sentiment Analysis System in Malay Language based on Android application	2017	Main Supervisor	Completed
19.	Mohamad Solehudin Bin Darus	Token based authentication system based on QR code	2017	Main Supervisor	Completed
19.	Che Hazrie Ikmal Bin Che Ghazali	Sistem Pengurusan Peralatan Perbarisan	2018	Main Supervisor	Completed
20.	Syed Muzzameer Bin Syed Zulkiplee	Sistem Pengurusan Giliran Pengawal Kem Sungai Besi	2018	Main Supervisor	Completed
21.	Ken Aichner Anak Cosmas	Sistem Laporan Kerosakan Bangunan Lestari UPNM	2019	Main Supervisor	Completed
22.	Muhammad Muzakkir Afif Bin Saini	Sistem Maklumat e-Notis	2019	Main Supervisor	Completed
23.	Ahmad Anwari Bakhtiar Bin Johari	Sistem Temujanji Pensyarah	2020	Main Supervisor	Completed
24.	Mohammad Khairul Elias Bin Masrom	Final Exam Generator	2020	Main Supervisor	Completed

		Menggunakan Bloom's Taxonomy			
25.	Muhammad Aiman Bin Mangsor	Sistem Pengurusan Sampah Konsep IoT	2020	Main Supervisor	Completed
26.	Muhamad Aziq Bin Azmi	Sistem Rekod Kehadiran Staf Menggunakan Aplikasi Telefon Pintar Berdasarkan 'Geolocation'	2021	Main Supervisor	Completed
27.	Fadhil Hanafi Bin Rozali	Sistem Pengurusan Kehadiran Pelajar Menggunakan Kod QR di UPNM	2022	Main Supervisor	Completed
28.	Muhammad Hakimi Bin Amir Hamzah	Sistem Pengumpulan Maklumat Sukan Dalam Kalangan Pelajar di UPNM (We Active Mobile App)	2022	Main Supervisor	Completed
29.	Ahmad Rahimi Bin Razali	Sistem Pengundian Calon MPP Dalam Talian Dengan Pengesahan Jari	2022	Main Supervisor	Completed

## 2.0 RESEARCH, PUBLICATION AND PRESENTATION

### 2.1 Research Projects

(Please list in chronological order and state: title, list of researchers, grant/year, source/amount and status)

No.	Title	List of Researchers • Principal • Members	Grant Year	Source Amount	Status • Completed • In Progress
1.	Cyber Terrorist Capability Assessment Model Based on Case Studies of Previous Attacks on SCADA Systems	Member	Mac 2023 – Feb 2025	UPNM Self-Funded Grant	In Progress
2.	Empirical Study: Readiness of WLAN Infrastructure at Malaysian Higher Education Institutes	Member	Mac 2023 – Feb 2025	UPNM Self-Funded Grant	In Progress
3.	A Framework on Network Behaviour Monitoring Through SIEM for Efficient Campus Infrastructure	Member	Jun 2023 – Mei 2025	UPNM Self-Funded Grant	In Progress

3.	Internet of Thing (IoT) Based Smart Home Automation System	Member	Dec 2021 – Dec 2023	Geran MyRA (LPhD) UiTM – RM 20, 000	In Progress
4.	Measuring the Effectiveness of Tail Dependence on Return Periods of Multivariate Rainfall Events in Peninsular Malaysia using Copulas	Member	Sept 2022 - August 2024	UPNM Short Grant – RM 20,000	In Progress
5.	Sistem Kewangan Pelajar	Principal	Sept 2019 – March 2021	UPNM Short Grant – RM 183,200	Completed
6.	Sistem Penilaian Prestasi Akademik UPNM (e-LPPT)	Principal	Sept 2019 – Sept 2020	UPNM Short Grant – RM 27,600	Completed
7.	Securing Communication Network based on New Industry Encryption Method	Principal	Dec 2016 - Nov 2018	UPNM Short Grant – RM 50,000	Completed
8.	Internet of Thing (IoT) Based Smart Home Automation System	Member	Dec 2021 – Dec 2023	Geran MyRA (LPhD) UiTM – RM 20, 000	In Progress
9.	Development of Knowledge – Based Software With Enhanced Situational Awareness Analysis For Infantry Personnel	Member	Dec 2013 – Dec 2018	NRGS – RM 981,940	Completed
10.	A Pixel Value Password Scheme on Mobile Devices for Access Control Applications	Member	Dec 2016 - Nov 2018	UPNM Short Grant – RM 45,000	Completed
11.	UPNM Smart Greenhouse Prototype Accomodate By Internet Of Thing Technology	Member	Dec 2016 - Nov 2018	UPNM Short Grant – RM 20,000	Completed
12.	Achieving Academic Excellence Through a New Model For Teaching and Learning at NDUM	Member	Sept 2017 – Sept 2018	UPNM Short Grant – RM 5,000	Completed
13.	Measurement and Characterization of Heterogeneous Network Traffic Utilization using Simulation Modeling	Member	May 2018 – Nov 2019	UPNM Self-Funded Grant	Completed
14.	Sistem <i>Smart Pigeon Hole</i> menggunakan Khidmat Pesanan Ringkas	Member	Jan 2020 – Jan 2021	UPNM Self-Funded Grant	Completed

15.	A System for Real-time Wave Energy Detection and Early Warning	Member	Jun 2018 – May 2020	KeTTHA – RM 250,000	Completed
16.	Social Media Election? Analyzing The Performance of Campaign-Related Interactions On Facebook	Member	April 2018 – Mac 2020	UPNM Short Grant – RM 5,000	Completed

## 2.2 Publications

### 2.2.1 Academic Journal

(Please list in chronological order and state: authors, year, title, publisher/journal, volume and number of pages (Please bold your name))

No.	Authors, year, title, publisher/journal, volume and number of pages (Please bold your name)	Type of Journal • ISI • SCOPUS • Peer-Reviewed
1.	Mohammad Adib Khairuddin, Mohd Afizi Mohd Shukran, Kamaruzaman Maskat, <b>Mohd Rizal Mohd Isa</b> , "Consumers Perception on Prepaid Cards: Survey and Analysis", Modern Applied Science, Canadian Center of Science and Education, vol. 6. No. 1, pp. 131, 2012.	SCOPUS
2.	Kamaruzaman Maskat, Mohd Afizi Mohd Shukran, Mohammad Adib Khairuddin, <b>Mohd Rizal Mohd Isa</b> , "Mobile Agents in Intrusion Detection System: Review and Analysis", Modern Applied Science, Canadian Center of Science and Education, vol. 5, no. 6, 2011.	SCOPUS
3.	Puteri N.E Nohuddin, <b>Mohd Rizal Mohd Isa</b> , Mohd Afizi Mohd Shukran, "Information Technology Knowledge Management in Malaysian Armed Forces", Journal of Convergence Information Technology (JCIT), Vol. 7, No. 6, pp. 178 ~ 184, 2012.	SCOPUS
4.	<b>Mohd Rizal Bin Mohd Isa</b> , Mohd Afizi Mohd Shukran, Mohammad Adib Khairuddin, Yuhanim Hani Binti Yahaya, Mohd Hazali Mohamed Halip, Kamaruzaman Maskat, "The Design of Fingerprint Biometric Authentication on Smart Card for PULAPOT Main Entrance System", International Journal of Advancements in Computing Technology (IJACT) Vol. 4, No.16, 2012.	SCOPUS
5.	Mohd Afizi Mohd Shukran, Muhammad Naim Abdullah, Kamaruzaman Maskat, <b>Mohd Rizal Mohd Isa</b> , Mohd Nazri Ismail, Mohd Shahfee Bin Ishak, "The study of technological prevention method of road accident related to driver and vehicle", Journal of Fundamental and Applied Sciences Vol. 9, No. 3S, pp. 621-629, 2017.	ISI
6.	Mohd Nazri Ismail, Mohd Afizi Mohd Shukran, Muhammad Naim Abdullah, Kamaruzaman Maskat, <b>Mohd Rizal Mohd Isa</b> , Mohd	ISI

	Shahfee Bin Ishak, "Voice over IP using SIP Server: Wide Area Network Performance Analysis", Journal of Fundamental and Applied Sciences Vol. 9, No. 3S, pp. 637-644, 2017.	
7.	<b>Mohd Rizal Mohd Isa</b> , Salem Aljareh, Zaharin Yusoff, "A Watermarking Technique to Improve the Security Level in Face Recognition Systems", Multimedia Tools and Applications – Springer Journal, Dec 2016	SCOPUS
8.	Mohd Afizi Mohd Shukran, Muhammad Naim Abdullah, <b>Mohd Rizal Mohd Isa</b> , Mohd Nazri Ismail, Kamaruzaman Maskat, Mohammad Adib Khairuddin, "Developing A Framework for Accident Detecting and Sending Alert Message Using Android Application", International Journal of Engineering & Technology, Vol. 7, No. 4.29, pp. 66-68, 2018.	SCOPUS
9.	Mohd Afizi Mohd Shukran, Muhammad Naim Abdullah, A.M.A. Zaida, <b>Mohd Rizal Mohd Isa</b> , Mohd Nazri Ismail "An analysis of a discrete cosine transform (DCT) compression technique on low level features of image for image retrieval system", Journal of Fundamental and Applied Sciences Vol. 9, No. 3S, pp. 637-644, 2017.	ISI
10.	Puteri N.E Nohuddin, RA Ismail, <b>Mohd Rizal Mohd Isa</b> , "Knowledge management in military: A review for Malaysian Armed Forces' communities of practice ", Journal of Convergence Information Technology (JCIT), Vol. 7, No. 6, pp. 178 ~ 184, 2010.	SCOPUS
11.	Mohd Nazri Ismail, Mohd Afizi Mohd Shukran, <b>Mohd Rizal Mohd Isa</b> , Mohammad Adib Khairuddin, Omar Zakaria, "Establishing a soldier wireless sensor network (WSN) communication for military operation monitoring", International Journal of Information Technology Vol. 9, No. 1, pp. 89-95, 2018.	ISI
12.	Mohd Afizi Mohd Shukran, Muhammad Naim Abdullah, Fatimah Ahmad, <b>Mohd Rizal Mohd Isa</b> , "The Study On The Techniques of Content-Based Image Retrieval (CBIR) Using Color, Texture and Shape Features", International Journal of Engineering & Technology, Vol. 5, 2018.	SCOPUS
13.	Norshahriah Binti Wahab, Nur Syuhada Binti Muhamad Narjun, Suzaimah Ramli, Norulzahrah Mohd Zainudin, Nor Asiakin Hasbullah, Mat Razali Noor Afiza, <b>Mohd Rizal Mohd Isa</b> , "A New Model on Mixed Reality for 3 Dimensional (3D) Geospatial Terrain in Enhancing the Situational Awareness amongst Military Decision Makers", International Journal of Engineering & Technology, Vol. 7, No. 4.29, pp. 50-53, 2018.	SCOPUS
14.	Mohd Nazri Ismail, Mohd Afizi Mohd Shukran, <b>Mohd Rizal Mohd Isa</b> , Mohammad Adib Khairuddin, "Performance Analysis of Different Audio Video Codecs for Wireless and Wired VOIP", International Journal of Engineering & Technology, Vol. 7, No. 4.29, pp. 251-254, 2018.	SCOPUS
15.	Mohd Nazri Ismail, Mohd Afizi Mohd Shukran, <b>Mohd Rizal Mohd Isa</b> , Mohammad Adib Khairuddin, Omar Zakaria, "Development of Wireless Sensor Network (WSN) and Mobile Ad-hoc Network (MANET) Communciation for Military Operation and SAR (Search and Rescue) Operation", International Journal of Engineering & Technology, Vol. 7, No. 4.29, pp. 247-250, 2018.	SCOPUS
16.	<b>Mohd Rizal Mohd Isa</b> , Muhammad Naim Abdullah, Omar Zakaria, Mohd Nazri Ismail, Mohammad Adib Khairuddin, Kamaruzaman Maskat, Mohd Afizi Mohd Shukran, Mohd Fahmi Mohamad Amran, "Securing WSN and MANET communication for military operation based on ECC algorithm", International Journal of Engineering & Technology, Vol. 7, No. 4., pp. 6731-6734, 2018.	SCOPUS
17.	Mohammad Adib Khairuddin, <b>Mohd Rizal Mohd Isa</b> , Kamaruzaman Maskat, Mohd Afizi Mohd Shukran, Mohd Nazri Ismail, Mohd Fahmi Mohamad Amran, Muhammad Naim Abdullah, "An Active and Popular	SCOPUS

	<i>Facebook Page Equals Better Chances of Winning an Election? The 2013 Malaysian General Election Case</i> , International Journal of Engineering & Technology, Vol. 7, No. 4.29, pp. 260-265, 2018.	
18.	Mohd Afizi Mohd Shukran, Mohd Sidek Fadhil Mohd Yunus, Muhammad Naim Abdullah, Mohd Nazri Ismail, Mohammad Adib Khairuddin, Kamaruzaman Maskat, <b>Mohd Rizal Mohd Isa</b> , Norshahriah Abdul Wahab, Mohd Fahmi Mohamad Amran, " <i>Pixel Value Graphical Password Scheme: Compatibility of K-means Clustering Algorithm as Pixel Value Password Fault Tolerance Mechanism</i> ", International Journal of Sustainability Management and Information Technologies, Vol. 5, No. 2, pp. 39-44, 2020.	SCOPUS
19.	Noor Zuraidin Mohd Safar, Noryusliza Abdullah, Hazalila Kamaludin, Suhaimi Abd Ishak, <b>Mohd Rizal Mohd Isa</b> , " <i>Characterising and detection of botnet in P2P network for UDP protocol</i> ", Indonesian Journal of Electrical Engineering & Technology, Vol. 18, No. 3, pp. 1584-1595, 2020.	SCOPUS
20.	Muhammad Naim Abdullah, Mohd Afizi Mohd Shukran, <b>Mohd Rizal Mohd Isa</b> , Nor Suraya Mariam Ahmad, Mohammad Adib Khairuddin, Mohd Sidek Fadhil Mohd Yunus, Fatimah Ahmad, " <i>Colour Features Extraction Techniques and Approaches for Content-Based Image Retrieval (CBIR) System</i> ", Journal of Materials Science and Chemical Electrical Engineering & Technology, Vol. 9, pp. 29-34, 2021.	WOS
21.	Mohd Azmi Bin Mustafa Sulaiman, Mohammad Adib Khairuddin, <b>Mohd Rizal Mohd Isa</b> , Mohd Nazri Ismail, Mohd Afizi Mohd Shukran, Aznida Abu Bakar Sajak, " <i>SIEM Network Behaviour Monitoring Framework using Deep Learning Approach for Campus Network Infrastructure</i> ", International Journal of Electrical and Computer Engineering Systems, Special Issue ICICTM2021, pp. 9-21, 2021.	SCOPUS
22.	Mohd Afizi Mohd Shukran, Mohd Sidek Fadhil Mohd Yunus, <b>Mohd Rizal Mohd Isa</b> , Fatimah Ahmad, Muhammad Naim Abdullah, Syed Muzzameer Syed Zulkiplee, Mohammad Adib Khairuddin, Mohd Nazri Ismail, Mohd Fahmi Mohamad Amran, Norshahriah Abdul Wahab, Nur Adnin Ahmad Zaidi, " <i>Pixel Value Graphical Password Scheme: K-Means as Graphical Password Fault Tolerance</i> ", International Journal of Electrical and Computer Engineering Systems, Special Issue ICICTM2021, pp. 23-29, 2021.	SCOPUS
23.	Mohd Faizal Mustafa, <b>Mohd Rizal Mohd Isa</b> , Ummul Fahri Abdul Rauf, Mohd Nazri Ismail, Mohd Afizi Mohd Shukran, Mohammad Adib Khairuddin, Norshahriah Wahab, Noor Zuraidin Mohd Safar, " <i>Student Perception Study On Smart Campus: A Case Study On Higher Education Institution</i> ", Malaysian Journal of Computer Science. Advances in Applied Science and Technology Research Special Issue 1/2021, pp. 1-20, 2021.	SCOPUS
24.	'Atifah Hanim Rosli, Norshahriah Wahab, Syed Nasir Alsagoff, <b>Mohd Rizal Mohd Isa</b> , 'Afizi Mohd Shukran, " <i>Student Preferences of Learning Materials During Unprecedented Online Learning Due to Covid-19</i> ", Malaysian Journal of Computer Science. Advances in Applied Science and Technology Research Special Issue 1/2021, pp. 38-44, 2021.	SCOPUS
25.	Mohd Afizi Mohd Shukran, Mohd Sidek Fadhil Mohd Yunus, Muhammad Naim Abdullah, <b>Mohd Rizal Mohd Isa</b> , Mohammad Adib Khairuddin, Kamaruzaman Maskat, Suhaila Ismail, Abdul Samad Shibghatullah, " <i>Survey on Clustering Techniques for Image Categorization Dataset</i> ", Journal of Computer and Communications, Vol. 10 No. 6, pp. 177-185, 2022.	WOS
26.	Ahmad Shafiq Abdul Rahman, Sharifah Aishah Syed Ali, <b>Mohd Rizal Mohd Isa</b> , Fazilatulaili Ali, Diyana Kamaruddin, Muhammad Hakiki	WOS

	Baharuddin, “ <i>Performance Assessment of Malaysian Fossil Fuel Power Plants: A Data Envelopment Analysis (DEA) Approach</i> ”, International Journal of Renewable Energy Development, Vol. 12 No. 2, pp. 247-260, 2023.	
27.	Amin Suharjono, <b>Mohd Rizal Mohd Isa</b> , Muhammad Mukhlisin, Bambang Supriyo, Muhammad Anif, Roni Apriantoro Eni Dwi Wardihani, “MiSREd: A Low Cost IoT Enabled Platform based on Heterogeneous Wireless Network for Flood Monitoring”, International Journal on Advanced Science, Engineering and Information Technology, Vol. 13, No. 3, pp. 1137-1146, 2023.	SCOPUS
28.		

### 2.2.2 Book/Chapter in Book:

(Please list in chronological order and state: authors, year, title, publisher, volume and number of pages  
(Please bold your name)

No.	Authors, year, title, publisher, volume and number of pages (Please bold your name)	Level <ul style="list-style-type: none"> <li>• International</li> <li>• National</li> <li>• University</li> </ul>
1.	<b>Mohd Rizal Mohd Isa</b> , 2022, Watermark Face Recognition Authentication System, UPM Press, 1, pp. 119.	International

### 2.2.3 Proceeding Articles :

(Please list in chronological order and state: authors, year, title, publisher/conference, volume and number of pages (Please bold your name)

No.	Authors, year, title, publisher/conference, volume and number of pages (Please bold your name)	Level <ul style="list-style-type: none"> <li>• International</li> <li>• National</li> <li>• University</li> </ul>
1.	<b>Mohd Rizal Mohd Isa</b> , Yuhanim Hani Yahya, Syamira Amira Salleh, “Web Camera Motion Detection Application for Armsquad”, Defence & Technology Conference 2009, Hotel Istana, Kuala Lumpur, Oct 2009.	International
2.	<b>Mohd Rizal Mohd Isa</b> , Yuhanim Hani Yahya, Mohammad Indera Bin Aziz, “Fingerprint Biometrics Authentication on Smart Card”, The 2nd International Conference On Computer And Electrical Engineering (ICCEE 2009), Dubai, UAE, Dec 2009.	International
3.	Muslihah Wook, Norshahriah Wahab, Nor Fatimah Awang, Yuhanim Hani Yahaya, <b>Mohd Rizal Mohd Isa</b> , Hoo Yann Seong, “Predicting NDUM Student”, The 2 <sup>nd</sup> International Conference On Computer And Electrical Engineering (ICCEE 2009), Dubai, UAE, Dec 2009.	International
4.	<b>Mohd Rizal Mohd Isa</b> , Yuhanim Hani Yahya, Mohd Hazali Mohamed Halip, Mohammad Adib Khairuddin, Kamaruzaman Maskat, “The Design of Fingerprint Biometrics Authentication on Smart Card for	International

	PULAPOT Main Entrance Systems”, ITSIM2010, KLCC, Kuala Lumpur, Dec 2009.	
5.	<b>Mohd Rizal Mohd Isa</b> , Puteri N.E. Nohuddin, Lt. Kol Reizal A. Ismail, “A Review on Knowledge Management in Military: A Review for Malaysian Armed Forces’ Communities of Practices”, The 2nd International Conference On The Roles of the Humanities and Social Sciences in Engineering. Computer (ICoHSE’10), Bayview Beach Resort, Pulau Pinang, Nov 2010.	International
6.	<b>Mohd Rizal Mohd Isa</b> , Puteri N.E. Nohuddin, Lt. Kol Reizal A. Ismail, “A Review on Knowledge Management in Military for Malaysian Armed Forces”, The 3rd International Conference On Computer And Electrical Engineering (ICCEE 2010), Chengdu, China, Dec 2010.	International
7.	<b>Mohd Rizal Mohd Isa</b> , Mohammad Adib Khairuddin, Kamaruzaman Maskat, Mohammad Mohd Nor, “Aplikasi Password Generator Berasaskan Pengetahuan yang berkaitan dengan Pekerjaan Pengguna”, Kolokium FSTP 2010, Pusat Marin, UPNM, Jan 2011	University
8.	Suzaimah Binti Ramli, <b>Mohd Rizal Bin Mohd Isa</b> , "Watermarked Face Recognition Scheme to Enhance Security" in <i>Intelligent Systems, Modelling and Simulation (ISMS), 2012 Third International Conference on</i> , vol., no., pp.348-350, 8-10 Feb. 2012	International
9.	<b>Mohd Rizal Mohd Isa</b> and Salem Aljareh, “Biometric Image Protection Based on Discrete Cosine Transform Watermarking Technique”, In IEEE Proc. of International Conference on Engineering and Technology (ICET), 2012 , pp.1-5.	International
10.	<b>Mohd Rizal Mohd Isa</b> , Zaharin Yusoff, Salem Aljareh, Jacey-Lynn Minoi, “A Watermarking Technique to Improve the Security Level in Face Recognition Systems: An Experiment with Principal Component Analysis (PCA) for Face Recognition and Discrete Cosine Transform (DCT) for Watermarking”, <i>International Conference on Information and Communication Technology – 2016 (ICICTM’16)</i>	International
11.	Mohd Afizi Mohd Shukran, Mohd Nazri Ismail, Kamaruzaman Maskat, <b>Mohd Rizal Mohd Isa</b> , “Identification Student's Bag Using Quick Response (QR) Scanner”, <i>International Conference on Information and Communication Technology – 2016 (ICICTM’16)</i>	International
12.	Mohd Afizi Mohd Shukran, Muhammad Naim Abdullah, Mohd Nazri Ismail, Kamaruzaman Maskat, <b>Mohd Rizal Mohd Isa</b> , Mohd Shahfee Bin Ishak, Mohammad Adib Khairuddin, “Designing Intelligent Secure Android Application for Effective Chemical Inventory”, International Research and Innovation Summit 2017, Kings Green Hotel, Melaka, Malaysia, May 2017.	International
13.	Mohd Afizi Mohd Shukran, Muhammad Naim Abdullah, Mohd Nazri Ismail, Kamaruzaman Maskat, <b>Mohd Rizal Mohd Isa</b> , Mohd Shahfee Bin Ishak, Mohammad Adib Khairuddin, “Study of Intelligent Secure Chemical Inventory Management System”, International Research and Innovation Summit 2017, Kings Green Hotel, Melaka, Malaysia, May 2017.	International
14.	Ahmad Daniel Kamarul Anuar, Norshahriah Wahab, Muhammad Afif Mohd Asri, Amalina Farhi Ahmad Fadzlah, Mohd Afizi Mohd Shukran, <b>Mohd Rizal Mohd Isa</b> , Suresh A/L Thanakodi, Mohammad Adib Khairuddin, Mohd Lazim Talib, Rozita Hussain, “Comparative Analysis of Social Media for Effectiveness in User’s Experience Using Online Learning”, 4 <sup>th</sup> Inspirational Scholar Symposium (ISS) 2019, International Convention Center (ICC), Dec 2019.	International
15.	Hasan Al-Banna Mohamed, Nor Adlina Nabilla Mohd Ali, Norashikin Sahol Hamid, <b>Mohd Rizal Mohd Isa</b> , Mohd Hamran Mohamad, Nur	International



	Surayya Mohd Saudi, “Unsur-Unsur Kritikal Yang Mempengaruhi Kepuasan Pelajar Terhadap Sistem E-Pembelajaran di Universiti Awam (UA), Malaysia”, Persidangan Antarabangsa Sains Sosial dan Kemanusiaan ke-6, PASAK6 2021.	
16.	Roziyani Rawi, <b>Mohd Rizal Mohd Isa</b> , Mohd Nazri Ismail, Aznida Abu Bakar, Mohd Azmi Mustafa Sulaiman, “A Survey: Readiness of Malaysian Higher Education Institutes Towards the Adaptations of Industry Revolution 4.0”, 2022 4 <sup>st</sup> International Conference on Information System & Information Technology (ICISIT), July 2022, pp. 267-271.	International
17.	Mohammad Farizshah Ismail Kamil, Nor Azliana Akmal Jamaludin, <b>Mohd Rizal Mohd Isa</b> , Shokri Jusoh, “Prediction of Breed Lineage for Small Ruminant Production using Deep Learning Technique”, 2022 4 <sup>st</sup> International Conference on Information System & Information Technology (ICISIT), July 2022, pp. 79-84.	International
18.	Zaid Mujaiyid Putra Ahmad Baidowi, Adli Zahin Muhammad Ruslee, Norzaidah Md Noh, Mohamad Yusof Darus, <b>Mohd Rizal Mohd Isa</b> , “A Room Light Controlling System Based on Curtain and Occupants’ Motion: A Conceptual Study”, 2022 International Visualization, Informatics and Technology Conference (IVIT), Nov 2022, pp. 288-292.	International
19.	Zaid Mujaiyid Putra Ahmad Baidowi, Muhammad Danial Hakim Nazrin Izuan Gerard, Ruwaida Ramly, <b>Mohd Rizal Mohd Isa</b> , Mohamad Yusof Darus, , “Low-cost Modular Smart Home Controlling System for Minimising Energy Consumption: A Conceptual Study”, 2022 International Visualization, Informatics and Technology Conference (IVIT), Nov 2022, pp. 284-287.	International
20.	Amirah Surayya Khairol Azahar, Nurulasma bt Razali, <b>Mohd Rizal Mohd Isa</b> , Aznida Abu Bakar Sajak, “Portable Pilgrim Tracker”, AIP Conference Proceedings, Vol. 2617, No. 1, pp. 040006, 2022.	International
21.	Norshahriah Wahab, <b>Mohd Rizal Mohd Isa</b> , Amalina Farhi Ahmad Fadzliah, Mohd Norsyarizad Razali, Norshasheeda Mat Noor, Suresh A/L Thanakodi, Nur Hazimah Nordin, Mohd Afizi Mohd Shukran, Atifah Hanim Rosli, Muhammad Lazim Mohd Talib, “Visual Analytics for Debris Detection using Drone Observation (VAL-Dr1) for Go Green Concept”, AIP Conference Proceedings, Vol. 2617, No. 1, pp. 020003, 2022.	International
22.	Leenaambighai Jayabalan, Norshahriah Abdul Wahab, <b>Mohd Rizal Mohd Isa</b> , Aznida Abu Bakar Sajak, “Comparative Study on Mixed Reality in the Future Combat Visualization”, AIP Conference Proceedings, Vol. 2617, No. 1, pp. 040002, 2022.	International
23.	Hasmeda Erna Che Hamid, Noor Afiza Mat Razali, Mohd Nazri Ismail, <b>Mohd Rizal Mohd Isa</b> , “A Review Paper: Forecasting of flood in Malaysia using Machine Learning”, AIP Conference Proceedings, Vol. 2617, No. 1, pp. 0200012, 2022.	International

### 2.3 Presentation:

(Please list in chronological order)

No.	Event	Title of Paper Presented	Role (Keynote Speaker / Invited Speaker / Presenter)	Date	Organizer
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1.	Kursus Dalaman Staff	Kursus Microsoft Office Word 2007 (Asas)	Invited Speaker	30-31 Mac 2010	UPNM
2.	“Computer Security” talk and sharing session”	Information Hiding in Computer Security	Invited Speaker	02 August 2019	SEGi University
3.	“Kursus Kesedaran Keselamatan ICT”	General Information Gathering	Invited Speaker	24 June 2020	UPNM
4.	Latihan Industri	“Latihan Industri – Isu dan Cabaran dalam Norma Baharu”	Presenter	21 Feb 2023	UPNM
5.	The 1st 2023 Software & Technologies, Visual Informatics & Applications (SOTVIA) Conference		Keynote Speaker	25 Sept 2023	Sotvia, Kazakhstan

### 3.0 ACADEMIC RECOGNITION AND LEADERSHIP, CONSULTANCY, SERVICE TO THE UNIVERSITY AND SERVICE TO THE COMMUNITY

#### 3.1 Academic Recognition and Leadership

Academic recognition and leadership such as Academic Award, Academic Assessor/ /Promotion Assessor (External), Visiting Professor/Fellowship, Editorial Board and other academic recognition.

No.	Academic Recognition	Year	Level	Awarding Body / Name of Institution
1.	Microsoft Imagine Cup 2009 – Won 4 Category	2009	National	Microsoft
2.	Asia Pacific Conference on Defence and Security Technology- Best Paper Award	2009	Asia Pacific	UPNM
3.	Innovation and Invention Competition 2010, UMP – Won Silver Medal and Friendliest Booth	2010	National	Universiti Malaysia Pahang (UMP)
4.	Microsoft Imagine Cup 2010 – Won 1 Category	2010	National	Microsoft
5.	Invention, Innovation and Technology Exhibition (ITEX) 2010 - Silver	2010	International	MINDS – Malaysia Invention and Design Society KLCC, Kuala Lumpur
6.	Invention, Innovation and Technology Exhibition (ITEX) 2011 - Silver	2011	International	MINDS – Malaysia Invention and Design Society KLCC, Kuala Lumpur

7.	Invention, Innovation and Technology Exhibition (ITEX) 2016 - Silver	2016	International	MINDS – Malaysia Invention and Design Society KLCC, Kuala Lumpur
8.	Journal of Advances in Information Sciences and Service Sciences - Reviewer	2016	International	The International Association for Information, Culture, Human and Industry Technology
9.	Invention, Innovation & Design Exposition 2016 (IIDEX2016) - Gold	2016	International	Universiti Teknologi Mara (UiTM), Shah Alam
10.	Invention, Innovation & Design Exposition 2016 (IIDEX2016) - Bronze	2016	International	Universiti Teknologi Mara (UiTM), Shah Alam
11.	Copyrighted - Network Topology Design for Wave Energy Information via 4G/LTE Technology – File Num: LY2016001917	2016	International	MyIPO
12.	The Visual Informatics International Seminar 2016 – Reviewer	2016	International	Universiti Kebangsaan Malaysia (UKM)
13.	Copyrighted – Vision-Based Egg Grade Classifier Via Digital Image Processing Techniques-Methodology and Process Flow – File Num: LY2016003955	2016	International	MyIPO
14.	The Visual Informatics International Seminar 2017 – Reviewer	2017	International	Universiti Kebangsaan Malaysia (UKM)
15.	Defence Security and Sustainability 2017 (DSS 2017) – Gold Medal	2017	National	Universiti Pertahanan Nasional Malaysia (UPNM)
16.	Department Academic Staff – Best Employee Award	2017	National	Universiti Pertahanan Nasional Malaysia (UPNM)
17.	Defence Security and Sustainability 2017 (DSS 2017) – Gold Medal	2017	National	Universiti Pertahanan Nasional Malaysia (UPNM)
18.	Research and Innovation week – Silver Award	2017	National	Terengganu Science and Creativity Centre (TSCC)
19.	Copyrighted – Vision-Based Egg Grade Classifier Via Digital Image Processing Techniques-Methodology and Process Flow – File Num: LY2016003955	2016	International	MyIPO
20.	Copyrighted – Internet of Things (IoT) for Agriculture: Smart Greenhouse Design Architecture – File Num: LY2016003949	2016	International	MyIPO

21.	Copyrighted - Internet of Things (IoT) for Agriculture: Smart Greenhouse Monitoring System and Pseudo Code – File Num: LY2016003948	2016	International	MyIPO
22.	Copyrighted - Internet of Things (IoT) Home Security: Smart Home Monitoring Architecture – File Num: LY2016003956	2016	International	MyIPO
23.	Copyrighted - Operating Systems and Networks Teaching Module – File Num: LY2017005889	2017	International	MyIPO
24.	Patent Filing – Automated Vehicle Crash Notification – File Num: PI 2018002999	2018	International	MyIPO
25.	Invention & Innovation Awards 2018 – Silver Medal	2018	International	Malaysia Technology Expo (MTE)
26.	International Conference on Information and Communication Technology – 2018 (ICICTM'18) – Best Paper Award Category: Big Data	2018	International	UniKL and UPNM
27.	Invention, Innovation and Technology Exhibition (ITEX) 2018 - Silver	2018	International	MINDS – Malaysia Invention and Design Society KLCC, Kuala Lumpur
28.	Anugerah Pekerja Cemerlang (APC)	2017	National	Universiti Pertahanan Nasional Malaysia (UPNM)
29.	Sijil Prestasi Cemerlang	2019	National	Universiti Pertahanan Nasional Malaysia (UPNM)
30.	Anugerah Akademik Cemerlang (AAC)	2019	National	Universiti Pertahanan Nasional Malaysia (UPNM)
31.	Invention, Innovation and Technology Exhibition (ITEX) 2019 - Silver	2019	International	MINDS – Malaysia Invention and Design Society KLCC, Kuala Lumpur
32.	Defence, Security and Sustainability 2019 (DSS 2019) Exhibition - Two Golds	2019	International	Universiti Pertahanan Nasional Malaysia (UPNM)
33.	The Visual Informatics International Seminar 2019 - Reviewer	2019	International	Universiti Kebangsaan Malaysia (UKM)
34.	International Journal of Innovative Computing and Applications (IJICA) - Reviewer	2020	International	Inderscience
35.	International Journal of Computing and Digital Systems (IJCDS) - Reviewer	2021	International	University of Bahrain

### 3.2 Consultancy work that benefited to the University.

(Please list in chronological order and state: title, year, sponsor, value and duration of consultancy)

No.	Title	Year	Sponsor	Value	Duration
1.	Tepak Harapan Enterprise - Consultant on Networking, Security System and Disaster Recovery Plan for Mail Management System in Majlis Daerah Klang	2019	-	-	6 months
2.	R-Tag Technology Sdn. Bhd - Consultant	2019 - 2025	-	-	6 years
3.	MRSM Tun Ghafar Baba	2017	-	-	3 months

### 3.3 Service to the University

Service to the university such as Vice Chancellor/Deputy Vice Chancellor/Dean/Director, Deputy Dean/Deputy Director/Unit Coordinator/Hostel Warden, Programme Chairperson/ Assistant Warden/Fellow. Representing University in Sports and Other Non-Academic Activities. Professional/Academic Association (Committee Member).

(Please list in chronological order and state: position/membership and duration)

No.	Position/Membership	Duration
1.	Director - Pusat Teknologi Maklumat dan Komunikasi	2018-2020
2.	Chief Information Officer (CIO) - Pusat Teknologi Maklumat dan Komunikasi	2019-2020
3.	Facilitator - National Patriot Assembly (HIMPUN)	2009
4.	Participant - Invention Innovation & Technology Exhibition (ITEX)	2010-2011
5.	Committee Member (Publicity) - Conference Camp 10 UiTM/UPNM/UKM	2009
6.	University Representative - Microsoft Imagine Cup Competition	2009-2011
7.	University Representative - MSC Malaysia-IHL Business Plan Competition	2009-2011
8.	Committee Member ICT – Technical Equipment ICT	2009-2011
9.	Committee Member - Technical Specification and Pricing Assessment FSTP	2009-2011
10.	Mentor - Microsoft Imagine Cup Competition	2009-2011
11.	Mentor - Multimedia and Programming Competition 2010	2010
12.	Mentor - F-Secure National Inter Varsity Security Tech Quiz Championship 2008/2009	2009
13.	Auditee - Internal Malaysia Qualifications Register (MQA) for the following Procedures -	2009

	i) Teaching File (Syllabus, Course Outline) Management ii) Personal Responsibility File	
14.	Auditee - Internal Malaysia Qualifications Register (MQA) for Student Academic Advisor Procedure - PK(O).UPNM.AKAD.02	2010
15.	Coordinator - Computer Lab PC	2008-2011
16.	Coordinator - Faculty Website	2008-2011
17.	Student Academic Advisor - 1TSK 2 (37 students)	2008-2011
18.	Committee Member - Technical Specification Procurement FSTP	2008-2011
19.	Committee Member - Technical Specification and Pricing Assessment FSTP	2008-2011
20.	Supervisor - Industrial Training	2008-2011
21.	Supervisor - Final Year Project	2008-2011
22.	Assessor - Final Year Project	2008-2011
23.	External Advisor (Department Representative) - Electrical Engineering Department Syllabus Review	2009
24.	Committee Member - FSTP Family Day	2009
25.	Committee Member - UPNM Eid Mubarak Day	2009
26.	Committee Member - FSTP colloquium	2009-2010
27.	Liaison Officer - UPNM Convocation 2015	2015
28.	Proceeding Editor - International Conference on Information and Communication Technology – 2016 (ICICTM'16)	2016
29.	Liaison Officer - International Conference on Information and Communication Technology – 2016 (ICICTM'16)	2016
30.	Committee Member - Data Recovery Plan	2016
31.	Committee Member - UPNM Cluster System	2016
32.	Coordinator - Faculty Website	2016-2018
33.	Student Academic Advisor - Group 1TSK 2 (17 students)	2016-2019
34.	Evaluator - Graduate School Colloquium	2016
35.	Evaluator - Short Term Grant	2016
36.	MQA Coordinator - New Programme – Degree in Computer Science (Digital Forensic and Big Data)	2017

37.	Committee Member - Prepare MQA02 Documentation – Degree in Computer Science (Artificial Intelligence) and Degree in Computer Science (Computer System Security)	2017-2018
38.	Committee Member - Technical Specification Assessment FSTP – Virtual Reality Lab	2018
39.	Reviewer - International Conference on Information and Communication Technology – 2018 (ICICTM'18)	2018
40.	Programme Co-chair - International Conference on Information and Communication Technology – 2018 (ICICTM'18)	2018
41.	Presenter - International Conference on Information and Communication Technology – 2018 (ICICTM'18)	2018
42.	Session Chair - International Conference on Information and Communication Technology – 2018 (ICICTM'18)	2018
43.	Evaluator - Graduate School Colloquium – PhD Student	2018
44.	Evaluator - Graduate School Colloquium – Master Students	2018
45.	Head of Programme - Degree in Computer Science (Computer System Security)	2018-2019
46.	Interviewer Candidates - for Eurecom-UPNM Master and PhD Programme	2018
47.	Interviewer Candidates - for Degree in Computer Science Programme	2018
48.	Member Special - Interest Group (SIG) – Information Systems	2018
49.	Member Special - Interest Group (SIG) – IoT and 4IR	2018
50.	Co-ordinator - Eurecom Offset Programme	2018
51.	Judges - E&E Expo Capstone and Final Year Project	2018
52.	Committee Member - Internal Rigorous Assessment (IRA)	2019
53.	Reviewer - Doctorate Application - Nur Hazimah binti Nordin,	2019
54.	Assessor - Poster Presentation – Systems Analysis and Design	2019-2020
55.	Reviewer - Self Fund Grant Application	2019
56.	Group Member - Kumpulan Inovatif dan Kreatif (KIK) – Pusat Bahasa	2019
57.	Head of Jury - Anugerah ICT	2019-2020
58.	Chairman - ICT Technical Committee – Graduation Ceremony	2019-2020
59.	Committee Member - Continual Contract for the rental of Personal Computer and Laptop	2019
60.	Secretariat - Majlis Makan Malam FSTP	2019

61.	Secretariat - JOM MASUK IPT 2019 Carnival	2019
62.	Committee Member – Jawatankuasa Teknikal ICT (JTICT)	2018-2020
63.	Secretariat – Jawatankuasa Pemandu ICT (JPICT)	2018-2020
64.	Committee Member – Jawatankuasa Taklimat Lawatan Seri Paduka Baginda Yang Di-pertuan Agong ke UPNM	2019
65.	Chairman – Jawatankuasa Keselamatan ICT (JKICT)	2018-2020
66.	Committee Member – Majlis Pengarah-Pengarah ICT IPTA (MAPITA)	2018-2020
67.	Reviewer - Doctorate Application – Mohd Afiq bin Zamanhuri	2020
68.	Chairman – Master Viva Presentation – Nurul Aini Kasran	2020
69.	Programme Co-chair - International Conference on Information and Communication Technology – 2020 (ICICTM'20)	2020
70.	Reviewer – Geran Program Pemindahan Ilmu (KTP)	2020
71.	Journal's Reviewer - International Conference on Information and Communication Technology – 2021 (ICICTM'21)	2021
72.	Student Academic Advisor - Group 1TSK 1 (29 students)	2021-2023
73.	Committee Member - New Programme – Degree of Educational and Learning Technology in English Language	2021
74.	Technical Programme co-Chair – The 4 <sup>th</sup> International Conference on Innovation in Science and Technology	2022
75.	Committee Member – Postgraduate (Research Mode) Computer Science	2022

### 3.4 Service to the community

(Please list in chronological order)

No.	Organization	Role	Start Date	End Date	Level
1.	Malaysia University of Portsmouth Society	President	2012	2013	International
2.	CompTIA Security+ Certified CE.	Member	2017	2020	International
3.	Malaysia Board of Technologists	Graduate Technologist	2019	-	International
4.	FSTP Staff Club	Vice President	2018	2019	Faculty
5.	Advisor Diploma Programme in Information Technology (Digital Technology) – MQA	Member	2021	2022	National