



**UPNM**  
National Defence University of Malaysia  
Kewajipan • Maruah • Integriti

**JABATAN PENDAFTAR**  
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## CURRICULUM VITAE



<b>I. PERSONAL PARTICULARS</b>	
<b>Name</b>	<b>Dr Mohd 'Afizi bin Mohd Shukran</b>
<b>Current Position Faculty / Department</b>	<b>Associate Professor, Faculty of Defence Science and Technology, Department of Computer Science.</b>
<b>Position Applying for</b>	<b>Professor (VK7)</b>

**II. ACADEMIC AND PROFESSIONAL QUALIFICATIONS**

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

Year	Degree	Discipline	University
1998 - 1999	FOUNDATION STUDIES CERTIFICATE	FOUNDATION STUDIES	TRINITY COLLEGE, AUSTRALIA
1999 - 2001	BACHELOR OF INFORMATION SYSTEMS	INFORMATION SYSTEMS	MELBOURNE UNIVERSITY, AUSTRALIA
2002 - 2003	MASTER OF INFORMATION TECHNOLOGY	INFORMATION TECHNOLOGY	SYDNEY UNIVERSITY, AUSTRALIA
2004 - 2006	MASTER OF BUSINESS ADMINISTRATION	BUSINESS ADMINISTRATION	SOUTHERN QUEENSLAND UNIVERSITY, AUSTRALIA
2006 - 2010	DOCTOR OF PHILOSOPHY	COMPUTER SCIENCE	SYDNEY UNIVERSITY, AUSTRALIA

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

No.	TITLES OF POSTGRADUATE THESES
1	<b>IMAGE RETRIEVAL SYSTEM (MASTER OF INFORMATION TECHNOLOGY)</b>
2	<b>SWARM BASED OPTIMIZATION APPROACH FOR DATA CLASSIFICATION (PhD Level)</b>

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

Year	Position	Organisation	Start and End Date
2000- 2001	Tutor	Teaching	Melbourne University, Australia
2002- 2003	Research Assistant	Research	Sydney University, Australia
2003- 2006	Tutor	Teaching	Southern Queensland University, Australia
2006- 2010	Tutor and Research Assistant	Research and Teaching	Sydney University, Australia

2011-2012	Senior Lecturer	Teaching	National University of Malaysia (UPNM), Malaysia.	Defence of (UPNM), Malaysia.
2012-2014	Head of Department of Computer Science, Faculty of Science and Defence Technology, UPNM	Administration	National University of Malaysia (UPNM), Malaysia.	Defence of (UPNM), Malaysia.
2015 - 2018	Deputy Dean (Academic)	Administration	National University of Malaysia (UPNM), Malaysia.	Defence of (UPNM), Malaysia.
2019 - present	Associate Professor	Lecturer	National University of Malaysia (UPNM), Malaysia.	Defence of (UPNM), Malaysia.

## 1.0 TEACHING AND SUPERVISION

### 1.1 Postgraduate Courses

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

No.	Course Title	Semester	Year
1.	Project Management	1	2016

## 1.2 First Degree Courses

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

No.	Course Title	Semester	Year
1.	Intelligent Agent	2	2011-2014
2.	Machine Learning	2	2011-2014
3.	Fuzzy Logic	2	2011-2014
4.	Operating Systems	1	2011-2019
5.	Computer Organization and Architecture	1	2011-2019
6.	Information Technology	ASASI SEM 2	2017-2019

## 1.3 Diploma Courses

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

No.	Course Title	Semester	Year
1	Computer Literacy	1	2018 - 2019
2	Information Systems	5	2018

## 1.4 Pre-Degree Courses

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

No.	Course Title	Semester	Year
1	Introduction to Information Technology	ASASI SEM 1 & 2	2017 - 2019

## 1.5 PhD Supervision

(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	Lee Fong Yee	RESPONSIVE WEB DESIGN - AN ENHANCEMENT ON USER EXPERIENCE DESIGN WITH PERSONALIZATION	20 February 2013	Main Supervisor	Completed	UPNM
2	Nor Suraya Mariam binti Ahmad	Melanoma Cancer Diagnosis Device Using Image Processing Techniques	16 November 2017	Main Supervisor	In progress	UPNM
3	Muhammad Naim bin Abdullah	Content Based Image Retrieval System Using Clustering Technique	12 March 2018	Main Supervisor	In Progress	UPNM
4	Mohd Sidek Fadhil bin Mohd Yunus	Graphical Password Using Clustering Technique	12 March 2019	Main Supervisor	Completed	UPNM

## 1.6 PhD External/Internal Examination

(Please list in chronological order)

No.	Name of Student	Project Title	External / Internal	Date of Viva	University
1.	Shanmuga Vivekananda Nadarajan a/l	E-Commerce For Rural Agriculture Sector and Empowerment of Farmers: Case In Cambodia	External	20 March 2018	Unikl
2.	Yi Yanling	USER PREFERENCE ANALYSIS AND RECCOMENDATION METHOD FOR ONLINE LEARNING	External	15 March 2019	Segi University

## 1.7 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 Sidek Fadhil Bin Mohd Yunus	Security Image Based Authentica tion Using DCT Algorithm	18 March 2012	Main Supervisor	Completed	UPNM
2.	Muhamad Naim Bin Abdullah	Research on Automate d Vehicle's Crash Notificatio n Using Android Applicatio n	18 March 2016	Main Supervisor	Completed	UPNM

## 1.8 MSc External/Internal Examination

(Please list in chronological order)

No.	Name of Student	Project Title	External / Internal	Date of Viva	University
1.	NOORMADINAH BINTI ALLIAS	A HYBRID GINI PSO-SVM FEATURE SELECTION BASED ON TAGUCHI METHOD: AN EVALUATION ON EMAIL FILTERING	External	24 July 2014	Unkl
2.	NOR WAHIDAH BINTE ZAILAN	OPTIMAL GRID PATTERN MODEL FOR SEARCH AND RESCUE IN DIPTEROCARP FOREST	Internal	25 May 2015	UPNM
3.	Colin Tan Choon Lin	PHISHING WEBPAGE DETECTION VIA IDENTITY KEYWORDS EXTRACTION AND TAGET DOMAIN FINDER	External	28 October 2015	UNIMAS
4.	RAHMAT SHOLIHIN BIN MOKHTAR	PEMBANGUNAN PERISIAN APLIKASI MUDAH ALIH NORMA KECERGASAN DAYA TAHAN KARDIOVASKULAR UNTUK PEGAWAI-PEGAWAI KADET UPNM	Internal	17 October 2016	UPNM

### 1.9 Supervision (Final Year Research Project)

(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>
1.	Muhammad Nur Fitri Bin Hashim	Sistem Analisa Imej Statik Menggunakan Teknik Morphological Image Processing	1 March 2011	Main Supervisor	Completed
2.	Muhammad Nazirul Ikram Bin Norsidek	Sistem Penjadualan Waktu dan Tempat Kuliah di UPNM	1 March 2011	Main Supervisor	Completed
3.	MUHAMMAD SYAKIR BIN ISMAIL	Sistem Pengujian Kekuatan Kata Laluan	1 March 2012	Main Supervisor	Completed
4.	MOHAMAD IZZAT BIN MOHD SAFIAN	The Evaluation of Clusters Of CIMB Bank Credit Card Holders	1 March 2012	Main Supervisor	Completed
5.	NOOR HAIZAT BIN ABD RAHMAN	Sistem Ramalan Cerdas Pengguna	1 March 2012	Main Supervisor	Completed



		aan Kenderaan Universiti untuk Jabatan Pengangkutan Universiti Pertahanan Nasional Malaysia			
6.	HANAN BINTI BAHAROM	Perbandingan di antara Stationery Wavelet Transform (SWT) dan Discrete Wavelet Transform (DWT) di dalam Digital Watermarking	1 March 2012	Main Supervisor	Completed
7.	IDI BIN IBRAHIM	Sistem Pemantauan maklumat tentang polisi kajian FRGS	1 March 2013	Main Supervisor	Completed
8.	Syarifuddin Bin Kamal	Sistem Pengurusan Klinik di UPNM Menggunakan Biometrik	1 March 2013	Main Supervisor	Completed
9.	NOOR HAIZAT BIN ABD RAHMAN	Sistem Ramalan	1 March 2013	Main Supervisor	Completed

		Cerdas Penggun aan Kendera an Universiti untuk Jabatan Pengang kutan Universiti Pertahan an Nasional Malaysia			
10.	Muhammad Zuriyat Bin Abdullah	Perbandi ngan di antara Stationer y Wavelet Transfor m (SWT) dan Discrete Wavelet Transfor m (DWT) di dalam Digital Waterma rking	1 March 2013	Main Supervisor	Completed
11.	LUQMAN HAKIM BIN AHMAD FAISAL	Sistem Makluma t Penguru san Aset Makmal Jabatan Sains Kompute r	1 March 2014	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.	<i>RESEARCH ACCULTURATION COLLABORATIVE EFFORT (RACE): A Novel Approach for Network Intrusion Detection Using Pattern Recognition and Data Mining Techniques</i>	PRINCIPAL	2012	50,000.00	Completed
2.	Knowledge Transfer Programme (KTP): Memupuk Kesedaran dan Keselamatan FACEBOOK di Kalangan Remaja di Malaysia, Kajian Kes di Sek. Men. Islam Al-Amin Gombak, Selangor.	MEMBER	2012	51,819.00	Completed
3.	<i>RESEARCH ACCULTURATION COLLABORATIVE EFFORT (RACE): Establishing Information Security Awareness Framework</i>	MEMBER	2012	47,500.00	Completed
4.	Dana Pembudayaan Penyelidikan (RAGS): A New Network Intrusion Detection Technique in Distributed Environment	MEMBER	2012	60,000.00	Completed
5.	Fundamental Research Grant Scheme (FRGS): Establishing A Framework On Controlling Rumours Propagation On Twitter: A Case of CNII Organizations	MEMBER	2013	76,000.00	Completed

No.	Title	List of Researchers • Principal • Members	Grant Year	Source Amount	Status • Completed • In Progress
6.	<i>RESEARCH ACCULTURATION COLLABORATIVE EFFORT (RACE): Context-Based Keyword Pattern Cluster Analysis Technique on Tacit Knowledge of Military Tactics Centre of Expertise (COE)</i>	MEMBER	2013	50,000.00	Completed
7.	<i>RESEARCH ACCULTURATION COLLABORATIVE EFFORT (RACE): Cyber Forensics Analyzer Tool for Smartphones To Secure Cloud Network From Malware Attack</i>	MEMBER	2013	50,000.00	Completed
8.	<i>RESEARCH ACCULTURATION COLLABORATIVE EFFORT (RACE): Theoretical Analysis Of Heavy Buoy Wave Energy Converter (WEC)</i>	MEMBER	2013	50,000.00	Completed
9.	EXPLORATORY RESEARCH GRANT SCHEME (ERGS): Improvement Of Case Retrieval Using CBR-PSO For Medical Data Classification.	MEMBER	2013	74,205.00	Completed
10.	GPJP: UPNM Clinic Management System (UCMS)	PRINCIPAL	2019	75,600.00	In Progress
11.	FRGS(Flood Management) Impact on environmental assets: Development of low cost mass suppliable water purifier for flood disaster	PRINCIPAL	2015	81,600.00	Completed
12.	(Ref: RAGS/1/2015/ICT04/UPNM /03/1) Intelligent Flood Detection	MEMBER	2015	35,000.00	In Progress

No.	Title	List of Researchers • Principal • Members	Grant Year	Source Amount	Status • Completed • In Progress
	System Using MMS Technology				
13.	(Ref: RAGS/1/2015/ICT02/UPNM/03/1) VERIFICATION OF A BATTLEFIELD VISUALIZATION FRAMEWORK IN MILITARY DECISION MAKING USING HOLOGRAMS TECHNOLOG	MEMBER	2015	35,000.00	Completed
14.	INTERNATIONAL GRANT CSIG: QR TAG SCANNER FOR INVENTORY SYSTEM	PRINCIPAL	2016	USD23,780.00	Completed
15.	GPJP: Illuminance Relative Density For Bad Weather Image Destoration	MEMBER	2019	20,000	In Progress
16.	Penyelidikan Tanpa Geran: Secure Disaster Management Support System for Malaysia	MEMBER	2019	Nil	In Progress
17.	Penyelidikan Tanpa Geran: Compatibility Study of Atmospheric Water Generator (AWG) for Military and Disaster Support	MEMBER	2019	Nil	In Progress
18.	GPJP: A Pixel Value Password Scheme on Mobile Devices For Access Control Applications	MEMBER	2016	45,000.00	Completed
19.	NRGS: Development of Knowledge – Based Software With Enhanced Situational Awareness Analysis For Infantry Personnel	MEMBER	2013	981,940.00	Completed
20.	KETTHA: A system for Real-time Wave Energy	MEMBER	2018	250,000.00	In Progress

No.	Title	List of Researchers • Principal • Members	Grant Year	Source Amount	Status • Completed • In Progress
	Detection and Early Warning				
21.	Penyelidikan Tanpa Geran: Measurement and Characterization of Heterogeneous Network Traffic Utilization Using Simulation Modeling	MEMBER	2018	Nil	In Progress
22.	GPJP: UPNM Smart Greenhouse Prototype Accomodate By Internet of Things Technology	MEMBER	2016	Nil	In Progress
23.	RAGS: Theoretical Analysis of Heavy Buoy Wave Energy Converter (WEC)	MEMBER	2013	71,000.00	Completed
24.	GPJP: Establishing Mesh Network Amongst Infantry Personnel During Military Operations	MEMBER	2016	51,500.00	In Progress

## 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/conference, volume and number of pages (Please bold your name)	Type of Journal • ISI • SCOPUS • Peer-Reviewed
1.	Y.Y.Chung, E.Choi, Z.Zhao, <b>M.Shukran</b> , D.Shi, F.Chen, "Application of Vector Quantization for Content Based Music Retrieval System" WSEAS Transactions on Computers, Issue5, Vol 6, May 2007, ISSN 1109-2750, pp793-798.	SCOPUS
2.	Y.Y.Chung, E.Choi, L.Liu, <b>M.Shukran</b> , D.Shi, F.Chen, "An Improved Audio Classification Algorithm using SVM Weight Factor" WSEAS Transactions on Communications, Vol 6, No. 3, March 2007, ISSN 1109-2742, pp408-415.	SCOPUS
3.	Y.Y. Chung, K.Ng, L.Liu, X.Chen, <b>M.Shukran</b> , E.Choi, D.Shi, F.Chen, "Design of a Content Based Multimedia Retrieval System" WSEAS Transactions on Computers, Issue3, Vol 6, March 2007, ISSN 1109-2750, pp413-418.	SCOPUS
4.	Mohammad Adib Khairuddin, <b>Mohd Afizi Mohd Shukran</b> , Kamaruzaman Maskat, Mohd Rizal Mohd Isa, "Consumers Perception on Prepaid Cards: Survey and Analysis", Modern Applied Science, vol. 6. No. 1, Canadian Center of Science and Education.	SCOPUS
5.	Xiaoming Chen, Yuk Ying Chung, Wei-Chang Yeh, Neil Bergmann, Noorhaniza Wahid, <b>Mohd Afizi Mohd Shukran</b> , "Improved Error Correction Techniques for Digital Multimedia Broadcasting (DMB) Service", Modern Applied Science, Canadian Center of Science and Education, vol. 5, no. 6, 2011.	SCOPUS
6.	Kamaruzaman Maskat, <b>Mohd Afizi Mohd Shukran</b> , Mohammad Adib Khairuddin, Mohd Rizal Mohd Isa, "Mobile Agents in Intrusion Detection System: Review and Analysis", Modern Applied Science, Canadian Center of Science and Education, vol. 5, no. 6, 2011.	SCOPUS
7.	Puteri N.E Nohuddin, Mohd Rizal Mohd Isa, <b>Mohd Afizi Mohd Shukran</b> , "Information Technology Knowledge Management in Malaysian Armed Forces", Journal of Convergence Information Technology (JCIT), Vol. 7, No. 6, pp. 178 ~ 184, 2012.	SCOPUS
8.	Muhamad Lazim Talib, Arniyati Ahmad, <b>Mohd Afizi Mohd Shukran</b> , "The New Design of Computer Controlled Braille", International Journal Advancement in Computing Technology (IJACT), Vol. 4, No. 6, pp. 255 ~ 271, 2012.	SCOPUS

9.	Omar Zakaria, Toomaj Zangooui, <b>Mohd Afizi Mohd Shukran</b> , "Graphical Password Authentication: Review and Analysis", Advances in Information Science and Service Sciences (AISS), Vol. 4, No. 15, pp. 25 ~ 32, 2012.	Peer-Reviewed
10.	<b>Mohd Afizi Mohd Shukran</b> , Yuk Ying Chung, Wei-Chang Yeh, Noorhaniza Wahid, Ahmad Mujahid Ahmad, "Artificial bee colony based data mining algorithms for classification tasks", Modern Applied Science, Vol. 5, no. 4, 2011.	SCOPUS
11.	<b>Mohd Afizi Mohd Shukran</b> , Kamaruzaman Maskat, Wan Sharil Sham Shariff, Mohd Sidek Fadhil Bin Mohd Yunus, Mohd Suhaili Ariffin, "Proposed System Model for Android Augmented Reality System in Malaysia Military Operations Unit Positions", Applied Mechanics and Materials, Vol. 548, pp.1493-1497, 2014.	SCOPUS
12.	<b>Mohd Afizi Bin Mohd Shukran</b> , Mohd Sidek Fadhil Bin Mohd Yunus, Kamaruzaman Bin Maskat, Wan Sharil Sham Bin Shariff and Mohd Suhaili Bin Ariffin, "Pixel Value Graphical Password Scheme-Graphical Password Scheme Literature Review", Australian Journal of Basic and Applied Sciences, Vol. 7, No. 4, pp.688-695, 2013	Peer-Reviewed
13.	Zulkifly Mat Radzi, <b>Mohd Afizi Mohd Shukran</b> , "The Psychomotor and Affective Learning in Navigation Science Using Simulation Technology", Australian Journal of Basic and Applied Sciences, Canadian Center of Science and Education, Vol. 7, No. 4, pp. 409-414, 2013	Peer-Reviewed
14.	<b>Mohd Afizi Mohd Shukran</b> , Mohd Sidek Fadhil Mohd Yunus, Kamaruzaman Maskat, "Access Control Based on Pixel Value Extraction", Australian Journal of Basic and Applied Sciences, Canadian Center of Science and Education, Vol. 7, No. 4, pp. 415-418, 2013	Peer-Reviewed
15.	Mohd Hazali Mohamed Halip, <b>Mohd Afizi Mohd Shukran</b> , Omar Zakaria, Syed Nasir Alsagoff Syed Zakaria, "Detection of Steganographic Messages in Email Attachment", Modern Applied Science, Canadian Center of Science and Education, Vol. 6, No. 11, 2012.	SCOPUS
16.	<b>Mohd Afizi Mohd Shukran</b> , Yuk Ying Chung, Wei-Chang Yeh, Noorhaniza Wahid, Ahmad Mujahid Ahmad Zaidi, "Image Classification Technique using Modified Particle Swarm Optimization", Modern Applied Science, Canadian Center of Science and Education, Vol. 7, No. 5, 2011.	SCOPUS
17.	Changseok Bae, Wei-Chang Yeh, <b>Mohd Afizi Mohd Shukran</b> , Yuk Ying Chung, Tsung-Jung Hsieh, "A novel anomaly-network intrusion detection system using ABC algorithm", International Journal of Innovative Computing, Information and Control, Vol. 8, No. 12, 2012.	SCOPUS
18.	Siti Rohaidah Ahmad, Zulkarnain Md Ali, Arniyati Ahmad, Suhaila Ismail, <b>Mohd Afizi Mohd Shukran</b> , "Hybrid Framework Model for Building HoneyNet Laboratory for Computer Security Education in National Defence University Malaysia (NDUM)", Australian Journal of Basic and Applied Sciences, Canadian Center of Science and Education, Vol. 6, No. 8, 2012.	SCOPUS



19.	<b>Mohd Afizi Mohd Shukran</b> , Mohd Suhaili Bin Ariffin, "Kinect-based Gesture Password Recognition", Australian Journal of Basic and Applied Sciences, Canadian Center of Science and Education, Vol. 6, No. 8, pp. 492-499, 2012.	SCOPUS
20.	Suhaila Ismail, Arniyati Ahmad, <b>Mohd Afizi Mohd Shukran</b> , "New Method of Forensic Computing in a Small Organization", Australian Journal of Basic and Applied Sciences, Canadian Center of Science and Education, Vol. 5, No. 9, pp. 2019-2025, 2012.	SCOPUS
21.	Nor Wahidah Binte Zailan, SN Alsagoff, Nor Fatimah Awang, <b>Mohd Afizi Mohd Shukran</b> , "Method of Search and Rescue in Dipterocarp Forest Using GPS Technology", Advanced Materials Research, Vol. 626, pp.195-199, 2013.	Peer-Reviewed
22.	<b>Mohd Afizi Mohd Shukran</b> , Wan Sharil Sham Shariff, "Android Augmented Reality System In Malaysia Military Operations-Unit Positions", Australian Journal of Basic and Applied Sciences, Canadian Center of Science and Education, Vol. 6, No. 8, 2012.	SCOPUS
23.	Mohd Nazri Ismail, <b>Mohd Afizi Mohd Shukran</b> , Kamaruzaman Maskat, Mohd Hafizh Mohamed, "File Transfer over Dual-Stack IPv6 Tunnelling in Real Network Environment: Router to Router Performance Analysis Using Best Effort Approach", INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY SCIENCES AND ENGINEERING, VOL. 4, NO. 8, 2013	Peer-Reviewed
24.	Mohd Rizal Bin Mohd Isa, <b>Mohd Afizi Mohd Shukran</b> , 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
25.	Lee Fong Yee, <b>Mohd. Afizi bin Mohd. Shukran</b> , Wong Chee Kong, "Responsive Web Design for Mobile Device Screen Optimization", Applied Mechanics and Materials, Vol. 549, pp. 1460-1464, 2014.	Peer-Reviewed
26.	<b>Mohd Afizi bin Mohd Shukran</b> , Mohd Sidek Fadhil bin Mohd Yunus, Wan Sharil Sham Shariff, Mohd Suhaili Ariffin, Kamaruzaman Maskat, "Pixel Value Graphical Password Scheme: Identifying Design Features and Requirements", Applied Mechanics and Materials, Vol. 549, pp. 1561-1565, 2014.	SCOPUS
27.	Chee Kong Wong, <b>Mohd Afizi bin Mohd Shukran</b> , Fong Yee Lee, "Approaches in Pattern Recognition and Classification Based on Coin Images", Applied Mechanics and Materials, Vol. 549, pp. 1148-1151, 2014.	Peer-Reviewed
28.	Mohd Nazri Bin Ismail, <b>Mohd Afizi Bin Mohd Shukran</b> , Kamaruzaman Bin Maskat, "A New Approach in Securing Cloud Network from Malware Attack", Advances in Information Sciences and Service Sciences(AISS), Volume7, Number4, August 2015	Peer-Reviewed
29.	Mohd Nazri Bin Ismail, <b>Mohd Afizi Bin Mohd Shukran</b> , Kamaruzaman Bin Maskat, "Security Model to Control on Social Media using Visualization and Forensic Approach", Advances in Information	Peer-Reviewed

	Sciences and Service Sciences(AISS), Volume7, Number4, August 2015	
30.	<b>Mohd Afizi Mohd Shukran</b> , Muhamad Naim Abdullah, Mohd Nazri Mohd Ismail, Kamaruzaman Maskat, Muhammad Shahfee Ishak, "Development Of Low Cost Mass Suppliable Water Purifier For Flood Disaster", Journal of Scientific Research And Development, Vol. 2, Special Issue 6, 2015.	<b>SCOPUS</b>
31.	<b>Mohd Afizi Mohd Shukran</b> , Muhamad Naim Abdullah, Mohd Nazri Mohd Ismail, Kamaruzaman Maskat, Muhammad Shahfee Ishak, " Accident / Crash Notify With Geographic Coordinator Using Android Application", Journal of Scientific Research And Development, Vol. 2, Special Issue 6, 2015.	<b>SCOPUS</b>
32.	<b>Mohd Afizi Mohd Shukran</b> , Kamaruzaman Maskat, "An Intelligent Network Intrusion Detection Using Data Mining Techniques ", Jurnal Teknologi, Man-Machine Systems, Vol 76, No 12, 2015.	<b>SCOPUS</b>
33.	MOHD NAZRI ISMAIL, <b>MOHD AFIZI MOHD SHUKRAN</b> , KAMARUZAMAN MASKAT, NORHATTA MOHD, "END-TO-END SECURITY WITH IPSEC AND BIOMETRIC TECHNOLOGY IN VOIP OVER IPV6", Journal of Theoretical and Applied Information Technology Vol.79. No.3, 30th September 2015.	<b>SCOPUS</b>
34.	Mohd Nazri Bin Ismail, Kamaruzaman Bin Maskat, <b>Mohd Afizi Bin Mohd Shukran</b> , Abdullah Mohd Zin, "Prediction Tool for Computer Network Planning – Web Service Usage Analysis", Advances in Information Sciences and Service Sciences(AISS) Volume7, Number5, October 2015	<b>Peer-Reviewed</b>
35.	Zulkifly Mat Radzi, <b>Mohd Afizi Mohd Shukran</b> , Muhammad Shahfee Ishak, "Using new learning theory in maritime education", Journal of Scientific Research and Development 2 (11): 57-62, 2015.	<b>Peer-Reviewed</b>
36.	Muhammad Naim Bin Abdullah, <b>Mohd Afizi Mohd Shukran</b> , Mohd Nazri bin Ismail, Kamaruzaman Maskat, Mohd Rizal Mohd Isa, "The study of technological causes of road accident related to the driver, vehicle, roadway, or atmospheric condition", Advances in Information Sciences and Service Sciences(AISS), Volume8, Number3, June 2016.	<b>Peer-Reviewed</b>
37.	<b>Mohd Afizi Mohd Shukran</b> , Nor Suraya Mariam Ahmad, Suzaimah amlı, Farhana Rahmat, "Melanoma cancer diagnosis device using image processing techniques", International Journal of Recent Technology and Engineering (IJRTE), Volume-7, Issue-5S4, February 2019.	<b>SCOPUS</b>
38.	<b>Mohd Afizi Mohd Shukran</b> , Mohd Sidek Fadhil Mohd Yunus, Fatimah Ahmad, Mohd Fahmi Mohd Amran, "Pixel value graphical password scheme: An alternative hash password using hexadecimal Colour codes", International Journal of Recent Technology and Engineering (IJRTE), Volume-7, Issue-5S4, February 2019.	<b>SCOPUS</b>
39.	Mohd Nazri Ismail, <b>Mohd Afizi Mohd Shukran</b> , Mohd Rizal Mohd Isa, Mohd Adib, Omar Zakaria, "Establishing a soldier Wireless Sensor Network (WSN) communication for military operation monitoring",	<b>SCOPUS</b>

	Journal of Engineering and Applied Sciences, Volume: 13, Issue: 16, pp. 6686-6691, 2018.	
40.	Mohd Nazri Ismail, <b>Mohd Afizi Mohd Shukran</b> , Mohd Rizal Mohd Isa, Mohamad Adib Khairuddin, Omar Zakaria, "Development of mobile Ad-Hoc Network (MANET) gateway for future soldier communications using Internet of Things (IoT) technology", Journal of Engineering and Applied Sciences, Vol.13, Issue 11, pp. 4120-4124, 2018.	<b>SCOPUS</b>
41.	<b>Mohd Afizi Mohd Shukran</b> , Hunkyun Pak, Mohd Nazri Mohd Ismail, Kamaruzaman Maskat, Mohammad Abu Ubaidah Amir Abu Zarim, Nur Shazwani Abdul Latif, Mohd Hakimi Ahmad Zainudin, Hafizah Ariff, "A new approach to production of mass suppliable water purifier", International Journal of Engineering &Technology, Vol.7, Issue 4, pp. 6727-6730, 2018.	<b>Peer-Reviewed</b>
42.	Mohd Rizal Mohd Isa, Muhammad Naim Abdullah, Omar Zakaria, Mohd Nazri Ismail, Mohammad Adib Khairuddin, Kamaruzaman Maskat, <b>Mohd Afizi Mohd Shukran</b> , Mohd Fahmi Mohamad Amran, "Securing WSN and MANET communication for military operation based on ECC algorithm", International Journal of Engineering &Technology, Vol.7, Issue 4, pp. 6731-6734, 2018.	<b>Peer-Reviewed</b>
43	<b>Mohd Afizi Mohd Shukran</b> , Muhammad Naim Abdullah, Mohd Rizal Mohd Isa, Mohd Nazri Ismail, Mohammad Adib Khairuddin, Kamaruzaman Maskat, "Developing A Framework for Accident Detecting and Sending Alert Message Using Android Application", International Journal of Engineering &Technology, Vol.7, Issue 4.29, pp. 66-68, 2018.	<b>Peer-Reviewed</b>
44.	<b>Shukran, M. A. M.</b> ; Abdullah, N.; Zaidi, A. M. A.; Isa, M. R. M.; Ismail, M. N., "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, 2017.	<b>ISI</b>
45.	Abdullah, M. N.; <b>Shukran, M. A. M.</b> ; Ismail, M. N.; Maskat, K.; Isa, M. R. M.; Ishak, M. S., "THE STUDY OF TECHNOLOGICAL PREVENTION METHOD OF ROAD ACCIDENT RELATED TO DRIVER AND VEHICLE", JOURNAL OF FUNDAMENTAL AND APPLIED SCIENCES, Vol. 9, 2017.	<b>ISI</b>
46.	Ismail, M. N.; <b>Shukran, M. A.</b> ; Maskat, K.; Tsai, M. R. M.; Ishak, S.; Sameon, S. S., "VOICE OVER IP USING SIP SERVER: WIDE AREA NETWORK PERFORMANCE ANALYSIS", JOURNAL OF FUNDAMENTAL AND APPLIED SCIENCES, Vol. 9, 2017.	<b>ISI</b>
47.	<b>Mohd 'Afizi Bin Mohd Shukran</b> , Mohd Sidek Fadhil Bin Mohd Yunus, "Pixel Value Graphical Password Scheme: Fake Passpix Attempt on Hexadecimal Password Style", International Journal of Information and Communication Sciences, Vol. 3, Issue no 3, 2018.	<b>Peer-Reviewed</b>

### 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/journal/conference, volume and number of pages (Please bold your name)	Level • International • National • University
1.	<b>Mohd Afizi Mohd Shukran</b> , Kamaruzaman Bin Maskat, "Using Wavelet Transformation in Information Retrieval System", Lambert Academic Publishing, 97 pages. ISBN: 978-3-659-37793-8, 2013.	International
2.	Kamaruzaman Bin Maskat, <b>Mohd Afizi Bin Mohd Shukran</b> , "Agent Based Snort In Distributed Environment", Lambert Academic Publishing, 113 pages. ISBN: 978-3-659-36100-5, 2013.	International
3.	Mohd Nazri Bin Ismail, <b>Mohd Afizi Mohd Shukran</b> , Norzaini Ismail, "Analysis On Wi-Fi Signal Booster", Lambert Academic Publishing, 69 pages, ISBN: 978-3-659-49603-5, 2015.	International
4.	Mohd Nazri Ismail, <b>Mohd Afizi Mohd Shukran</b> , Kamaruzaman Maskat, "Smarthome Computing System Using Mobile Devices", Lambert Academic Publishing, 88 pages. ISBN: 978-3-659-50334-4, 2013.	International
5.	<b>MOHD AFIZI, MOHD SHUKRAN</b> , "A NOVEL APPROACH OF AUTHENTICATION USING PIXEL VALUE GRAPHICAL PASSWORD SCHEME", Hamburg, Anchor Academic Publishing, 2015.	International
6.	Mohd Nazri Ismail, <b>Mohd Afizi Mohd Shukran</b> , Kamaruzaman Maskat, "Development of Wireless IP Camera for Internet Using Mobile Robot", Lambert Academic Publishing, 89 pages, ISBN:978-3-659-68840-9, 2015.	International
7.	<b>Mohd Afizi Mohd Shukran</b> , Muhammad Naim Abdullah, Mohd Sidek Fadhil Yunus, Norshahriah Abdul Wahab, "SWARM INTELLIGENCE IN DATA CLASSIFICATION", UPNM PRESS, 185 pages, 2019.	National
8.	Muhammad Naim Abdullah, <b>Mohd Afizi Mohd Shukran</b> , Mohd Sidek Fadhil Yunus, Norshahriah Abdul Wahab, "WIRELESS VEHICULAR NETWORKS FOR CAR COLLISION NOTIFICATION: Basics, Concepts, and Frameworks", UPNM PRESS, 187 pages, 2019.	National
9.	Mohd Sidek Fadhil Yunus, <b>Mohd Afizi Mohd Shukran</b> , Muhammad Naim Abdullah, Norshahriah Abdul Wahab, "PIXEL-BASED GRAPHICAL PASSWORD SCHEME PASSWORD FROM DIGITAL IMAGE FILE", UPNM PRESS, 147 pages, 2019.	National

### 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/journal/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 Afizi Mohd Shukran</b> , Yuk Ying Chung, Xiaoming Chen, "Implementation of a New H.264 Video Watermarking Algorithm With Usability Test", submitted to Proceedings of the Human Computer Interface (HCI) International 2007, Nov, 2006.	International
2.	Yuk Ying Chung, Siqi Li, Xiaoming Chen, <b>Mohd Afizi Mohd Shukran</b> , "A New Optimized Error Resilient Coding For Video Applications", submitted to 2007 Proceedings of the IEEE International Conference on Multimedia & Expo 2007 (ICME'07).	International
3.	Yuk Ying Chung, Ka Yee Ng, Liwei Liu, Xiaoming Chen, <b>Mohd Afizi Mohd Shukran</b> , Eric H.C. Choi, David Yu Shi, Fang Chen, "Design of a Content Based Multimedia Retrieval System", Proceedings of the 2007 World Scientific And Engineering Academy And Society (WSEAS) Transaction on Computers, Issue 3, Volume 3, March 2007.	International
4.	Yuk Ying Chung, Xiang Zhang, Xiaoming Chen, <b>Mohd Afizi Mohd Shukran</b> , Changseok Bae, "The New Hybrid Approach to Protect MPEG-2 Video Header", Proceedings of the 6th World Scientific And Engineering Academy And Society (WSEAS) International Conference on Multimedia Systems and Signal Processing (MUSP'06), Hangzhou, China, April 16-18, 2006 (pp19-24).	International
5.	Yuk Ying Chung, Eric H.C. Choi, Zhen Zhao, <b>Mohd Afizi Mohd Shukran</b> , David Yu Shi, Fang Chen, "An Efficient Tree-Based Quantization for Content Music Retrieval System", Proceedings of the 2007 World Scientific And Engineering Academy And Society (WSEAS) International Conference on Computer Engineering and Applications, Gold Coast, Australia, January 17-19, 2007.	International
6.	Yuk Ying Chung, Eric H.C. Choi, Liwei Liu, <b>Mohd Afizi Mohd Shukran</b> , David Yu Shi, Fang Chen, "A New Hybrid Audio Classification Algorithm Based on SVM Weight Factor and Euclidean Distance", Proceedings of the 2007 World Scientific And Engineering Academy And Society (WSEAS) International Conference on Computer Engineering and Applications, Gold Coast, Australia, January 17-19, 2007.	International
7.	<b>Mohd Afizi Mohd Shukran</b> , Yuk Ying Chung, Eric H.C. Choi, "A New Content-Based Image Classification Method Using SVM-weight and Euclidean	International

	Distance”, 2008 International Conference on Image Processing, Computer Vision & Pattern Recognition, Vol. II, pp. 513-518, 2008.	
8.	Changseok Bae, Yuk Ying Chung, <b>Mohd Afizi Mohd Shukran</b> , Eric Choi, Wei-Chang Yeh, “An Intelligent Classification Algorithm for LifeLog Multimedia Applications”, 2008 IEEE 10th Workshop on Multimedia Signal Processing (MMSP 2008), pp. 558-562, 2008.	International
9.	Mohamad Abu Ubaidah Amir, Rina Mohd Sharip, Wan Baderul Hisan Wan Muda, <b>Mohd Afizi Mohd Shukran</b> , Hardy Azmir Anuar , Omar Zakaria, “Heave Buoy Energy Converters; Simulation of heave buoy response to wave in Malaysian water”, International Conference on Sustainability in Energy and Buildings, 2014.	International
10.	<b>Mohd Afizi Mohd Shukran</b> , Mohammad Adib Khairuddin, Kamaruzaman Maskat, “Recent Trends in Data Classification” International Conference on Industrial and Intelligent Information, Vol. 31, pp.69-72, 2012.	International
11.	Mohammad Adib Khairuddin, <b>Mohd Afizi Mohd Shukran</b> , Kamaruzaman Maskat, “An Analysis on Prepaid Cards in Australia IT Industry”, International Conference on Industrial and Intelligent Information, Vol. 31, pp.78-82, 2012.	International
12.	Kamaruzaman Maskat , <b>Mohd Afizi Mohd Shukran</b> , Mohammad Adib Khairuddin, “Using Agent Based SNORT in Intrusion Detection Systems” International Conference on Industrial and Intelligent Information, Vol. 31, pp.83-88, 2012.	International
13.	<b>Mohd Afizi Mohd Shukran</b> , Amalina Farhi Ahmad Fadzlah, Kamaruzaman Maskat, Muhammad Zuriyat Abdullah, “Motion Based Detection Warning System”, Kolokium Fakulti Sains & Teknologi Pertahanan, 2014.	National
14.	<b>Mohd Afizi Mohd Shukran</b> , Kamaruzaman Maskat, Mursyideen Ahmad Iskandar Shah, “QR Tag Scanner”, Kolokium Fakulti Sains & Teknologi Pertahanan, 2014.	National
15.	Lee Fong Yee, <b>Mohd. Afizi bin Mohd. Shukran</b> , Wong Chee Kong,” Responsive Web Design for Mobile Device Screen Optimization”, 3rd International Conference on Manufacturing Engineering and Process, ICMEP 2014.	International
16.	<b>Mohd Afizi bin Mohd Shukran</b> , Mohd Sidek Fadhil bin Mohd Yunus, Wan Sharil Sham Shariff, Mohd Suhaili Ariffin, Kamaruzaman Maskat, “Pixel Value Graphical Password Scheme: Identifying Design Features and Requirements”, 3rd International Conference on Manufacturing Engineering and Process, ICMEP 2014.	International
17.	Chee Kong Wong, <b>Mohd Afizi bin Mohd Shukran</b> , Fong Yee Lee, “Approaches in Pattern Recognition and Classification Based on Coin Images”, 3rd International Conference on Manufacturing Engineering and Process, ICMEP 2014.	International
18.	<b>Mohd Afizi Mohd Shukran</b> , Kamaruzaman Maskat, Wan Sharil Sham Sharif, Mohd Sidek Fadhil Bin Mohd Yunus, Mohd Suhaili Ariffin, Proposed System Model for Android Augmented Reality System in Malaysia Military Operations–	International

	Unit Positions, 3rd International Conference on Manufacturing Engineering and Process, ICMEP 2014.	
19.	<b>Mohd Afizi Mohd Shukran</b> , Kamaruzaman Maskat, Muhammad NAim Bin Abdullah, AN INTELLIGENT NETWORK INTRUSION DETECTION USING DATA MINING TECHNIQUES, International Conference on Man Machine Systems (ICoMMS 2015), 2015.	International
20.	<b>Mohd Afizi Mohd Shukran</b> , Muhamad Naim Abdullah, Mohd Nazri Mohd Ismail, Kamaruzaman Maskat, Muhammad Shahfee Ishak, "Development Of Low Cost Mass Suppliable Water Purifier For Flood Disaster", International Conference on Automotive, Manufacturing and Mechanical (ICAMM 2015), 7-8 August 2015.	International
21.	<b>Mohd Afizi Mohd Shukran</b> , Muhamad Naim Abdullah, Mohd Nazri Mohd Ismail, Kamaruzaman Maskat, Muhammad Shahfee Ishak, " Accident / Crash Notify With Geographic Coordinator Using Android Application", International Conference on Automotive, Manufacturing and Mechanical (ICAMM 2015), 7-8 August 2015.	International
22.	<b>Mohd Afizi Mohd Shukran</b> , Mohd Nazri Ismail, Kamaruzaman Maskat, Mohd Rizal Mohd Isa, "IDENTIFICATION OF STUDENT'S BAG USING QR TAG SCANNER", ICICTM 2016.	International
23.	Mohamad Abu Ubaidah Amira, Rina Mohd Sharip, Puteri Nor Ellyza Nohuddinc, A. Imran Nordinc, Mohd Najib Abd Ghania, <b>Mohd Afizi Mohd Shukran</b> , Wan Baderul Hisan Wan Muda, "Optimization in Heave Buoy Energy Convertors Using SOM Clustering and Simulation with an Auxiliary Mass", ICICTM 2016	International
24.	<b>Shukran, M. A. M.</b> ; Ishak, M. S.; Abdulah, M. N., "Enhancing Chemical Inventory Management in Laboratory through a Mobile-Based QR Code Tag", INTERNATIONAL RESEARCH AND INNOVATION SUMMIT (IRIS2017), Vol. 226, 2017	International
25.	<b>Shukran, M. A. M.</b> ; Ishak, M. S.; Abdulah, M. N., "Designing Intelligent Secure Android Application for Effective Chemical Inventory", INTERNATIONAL RESEARCH AND INNOVATION SUMMIT (IRIS2017), Vol. 226, 2017	International
26	<b>Shukran, M. A. M.</b> ; Ishak, M. S.; Abdulah, M. N., "Study of Intelligent Secure Chemical Inventory Management System", INTERNATIONAL RESEARCH AND INNOVATION SUMMIT (IRIS2017), Vol. 226, 2017	International

### 2.3 Presentation:

(Please list in chronological order)

No.	Event	Title of Paper Presented	Role (Keynote Speaker / Invited Speaker / Presenter)	Date	Organizer
1.	5th Annual Global Congress of Knowledge Economy-2018 (GCKE-2018)	SWARM INTELLIGENCE IN COMPUTER NETWORK	Keynote Speaker	7 Sept 2018	BIT Congress Inc.
2.	4th International Conference on Electrical Engineering and Industrial Engineering (ICEEIE2018)	SWARM INTELLIGENCE IN ELECTRICAL CIRCUIT	Keynote Speaker	15 Dec 2018	Shanghai Laixi Conference Services Co., Ltd.
3.	4th Cloud Computing and Internet of Things Conference (CCIOTC2019)	Information Retrieval in Internet of Things (IoT)	Keynote Speaker	12 August 2019	Shanghai Laixi Conference Services Co., Ltd.

### 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.	External Examiner for School of IT	2013	National	SEGI UNIVERSITY, Malaysia
2.	Adjunct Associate Professor	2012	National	SEGI UNIVERSITY, Malaysia



3.	General Editor-in-Chief	2012	International	International Journal of Science and Defense Technology (IJSDT) <a href="http://www.aicit.org/ijstdt/home/index.html">http://www.aicit.org/ijstdt/home/index.html</a>
4.	External Master Thesis Examiner	2014	National	Universiti Kuala Lumpur Malaysia
5.	Editorial Board	2012	International	Journal of Convergence Information Technology
6.	Editorial Board	2012	International	International Journal of Digital Content Technology and its Applications (JDCTA)
7.	Editorial Board	2012	International	Modern Applied Science
	Editorial Board	2012	International	International Journal of Advancements in Computing Technology(IJACT)
8.	Editorial Board	2012	International	Journal of Next Generation Information Technology
9.	Editorial Board	2012	International	Computer and Information Science
10.	2 SILVER MEDAL, 2 BRONZE MEDAL	2013	International	International Exposition of Research and Innovation in Education 2013 (Edu-InERI2013)
11.	1 BRONZE MEDAL	2013	International	PECIPTA 2013
12.	1 GOLD MEDAL	2014	International	25th International Invention, Innovation & Technology Exhibition (ITEX 2014)
13.	1 GOLD MEDAL, 1 BRONZE MEDAL	2014	International	Invention, Innovation & Design Exposition (iidex2014)
14.	1 SILVER MEDAL, 1 BRONZE MEDAL	2014	International	International Engineering Invention & Innovation Exhibition (i-ENVEX 2014)
15.	1 BRONZE	2014	International	Malaysia International Technology Expo (MTE)
16.	<b>1 PRODUCT PATEN (GRANTED) Method And System for Authenticating User Using Graphical Password For Access Control</b>	<b>2018</b>	<b>International</b>	<b>MyIPO</b>
17.	EC-COUNCIL Network	2014	International	EC-COUNCIL

	Security Administrator (ENSA)			
18.	Microsoft System Administrator (MCSA)	2007	International	MICROSOFT
19.	Microsoft System Professional (MCP)	2007	International	MICROSOFT
20.	Microsoft System Engineer (MCSE)	2007	International	MICROSOFT
21.	Digital Etiquette Certification (1Citizen)	2011	National	Prestariang
22.	IC CITIZEN Certified Trainer (1Citizen)	2011	National	Prestariang
23.	Sijil Kecermelangan (MTE2014)	2014	National	Vice Chancellor UPNM
24.	Sijil Kecermelangan (ITEX2014)	2014	National	Vice Chancellor UPNM
25.	Sijil Kecermelangan (TAHUN 2013)	2013	National	Vice Chancellor UPNM
26.	Anugerah Perkhidmatan Cemerlang (APC)	2015	National	Vice Chancellor UPNM
27.	2 BRONZE MEDAL	2015	International	26th International Invention, Innovation & Technology Exhibition (ITEX 2015)
28.	JURY	2015	International	4 <sup>TH</sup> ASIA PACIFIC CONFERENCE OF YOUNG SCIENTIST (APCYS)
29.	BRONZE MEDAL	2015	International	PECIPTA 2015
30.	SILVER MEDAL	2016	International	27th International Invention, Innovation & Technology Exhibition (ITEX 2016)
31.	1 GOLD MEDAL, 1 BRONZE MEDAL	2016	International	Invention, Innovation & Design Exposition (iidex2014)

32.	COPYRIGHT: Operating Systems & Networks Teaching Module	2017	National	MyIPO
33.	COPYRIGHT: Geovisualisation of Battlefield	2016	National	MyIPO
34.	COPYRIGHT: Network Topology Design for Wave Energy Information System Via 4G/LTE Technology	2016	National	MyIPO
35.	COPYRIGHT: Intelligent Flood Detection System Using 4G Technology with Low Cost Design	2016	National	MyIPO
36.	COPYRIGHT: Establishing Mesh Network Among Infantry Personnel During Military Operations	2016	National	MyIPO
37.	COPYRIGHT: QR TAG SCANNER	2016	National	MyIPO
38.	COPYRIGHT: Crash Notification With Geographic Coordination Using Android Application	2016	National	MyIPO
39.	International Award: Outstanding Scientist	2019	International	Venus International Foundation
40.	International Award: Young Scientist	2015	International	Venus International Foundation

41.	Anugerah Penerbitan Buku UPNM 2019	2020	Universiti	UPNM
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### 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.	Physical Access Security Systems	2019	Soul Smart Solutions Sdn Bhd	Inkind	1 March 2019 – 29 February 2024
2.	Project Consultant	2020	Compudyn e Sdn Bhd.	RM750.00 per month	1 Jun 2020 – 1 July 2025

### 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	Committee	Duration
1.	HEAD OF DEPARTMENT OF COMPUTER SCIENCE	Faculty of Defense and Science Technology, National Defense University of Malaysia (UPNM)	2 years
2.	PENEYLARAS PROGRAM AKADEMIK BAHARU (PROGRAM IJAZAH SARJANA MUDA SAINS KOMPUTER DATA BESAR DAN VISALISASI)	Faculty of Defense and Science Technology, National Defense University of Malaysia (UPNM)	3 years
3.	PENYELARAS LATIHAN INDUSTRI	Faculty of Defense and Science Technology, National Defense University of Malaysia (UPNM)	2 Years
4.	DEPUTY DEAN (ACADEMIC)	Faculty of Defense and Science Technology, National Defense University of Malaysia (UPNM)	2 Years

5.	Pengerusi Jawatankuasa Program Master of Cybersecurity and Management	Faculty of Defense and Science Technology, National Defense University of Malaysia (UPNM)	2 Years
6.	Pengerusi Program Akademik Baharu - Sarjana Muda Sains Komputer (Kepujian)	Faculty of Defense and Science Technology, National Defense University of Malaysia (UPNM)	2 Years
7.	Pengerusi Jawatankuasa Program Baharu - Master of Cybersecurity	Faculty of Defense and Science Technology, National Defense University of Malaysia (UPNM)	2 Years
8.	Penyelaras MQA ZC20 dan ZC27	Faculty of Defense and Science Technology, National Defense University of Malaysia (UPNM)	2 Years

### 3.4 Service to the community

(Please list in chronological order)

No.	Organization	Role	Start Date	End Date	Level
1.	Malaysian Board of Technology (MBOT)	Member	7 Mac 2019	present	National
2.	IEEE	Professional Membership	July 2019	31 December 2019	International
3.	Association for Computing Machinery	Professional Membership	July 2019	June 2020	International
4.	Kelab Sukan dan Kebajikan Soul Smart Solution Sdn Bhd	AJK Ketua Biro Perhubungan Awam	1 September 2018	31 Disember 2019	National
5.	Adni Bangi School	Committee Member Parents Teachers Group	1 Januari 2019	31 Disember 2020	National

6.	Surau Al-Ridhwan	Ketua Biro Belia dan Rakan Surau	30 Januari 2019	present	National
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