



UNIVERSITI PERTAHANAN NASIONAL MALAYSIA

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Kewajipan, Maruah, Integriti

CURRICULUM VITAE



I. PERSONAL PARTICULARS			
Name	ARNIYATI BINTI AHMAD		
Current Position Faculty / Department	PENSYARAH KANAN FAKULTI SAINS DAN TEKNOLOGI PERTAHANAN/ SAINS KOMPUTER/PUSAT KESELATAM SIBER		
II. ACADEMIC AND PROFESSIONAL QUALIFICATIONS			
(Please list all academic qualifications, from your first degree, in chronological order)			
1990	DIPLOMA IN SCIENCE	SCIENCE	UiTM
1995	BACHELOR IN INFORMATION TECHNOLOGY	INFORMATION TECHNOLOGY	UUM UKM
2005	MASTER IN INFORMATION TECHNOLOGY	INFORMATION TECHNOLOGY	
2016	DOCTOR OF PHILOSOPHY	COMPUTING SCIENCE	UNIVERSITY OF GLASGOW
III. TITLES OF POSTGRADUATE THESES WRITTEN (At MSc/PhD Level)			
No.	TITLES OF POSTGRADUATE THESES		
1	Penjanaan Konsep Hierarki Di Dalam Perlombongan Data Pelajar		
2	A Cyber Exercise Post Assessment Framework: In Malaysia Perspectives		

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

Year	Position	Field of Work	Place of Work
1996-2009	RESEARCH OFFICER	EDUCATION/ DATA MINING/ CYBER SECURITY	MIMOS BHD
2009-current	LECTURER	EDUCATION/ PROGRAMMING/ CYBER SECURITY	UPNM
2017-2020	RESEARCH FELLOW	KNOWLEDGE TECHNOLOGY AND CYBER SECURITY	PUSAT KESELAMATAN SIBER, UPNM

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	Master Dissertation-MSc In Cyber Security and Management-Warwick – supervise and examiner for three students	2019/2020, 2020/2021	2019-2022

1.2 First Degree Courses

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

No	Course Title	Semester	Year
1	INTELLIGENT AGENTS (TSI 2253)	SEM II ,SESI 2009/2010	2009
2	PROGRAMMING LAB (FCS 0233)	SEM II , SESI 2009/2010	2009
3	FUNDAMENTALS OF PROGRAMMING (TSK1133)	SEM I, SESI 2010/2011	2010
4	INDUSTRIAL TRAINING (TSK 310C)	SEM I, SESI 2010/2011	2010
5	FINAL YEAR PROJECT (TSK 3216)	SEM II, SESI 2010/2011	2011
6	WEB PROGRAMMING (TSK1203)	SEM II, SESI 2010/2011	2011
7	FUNDAMENTALS OF PROGRAMMING (TSK1133)	SEM I, SESI 2011/2012	2011
8	INTRODUCTION TO PROGRAMMING (FCS 0723)	SEM III, SESI 2011/2012	2012

9	FINAL YEAR PROJECT (TSK 3216)	SEM II, SESI 2011/2012	2012
10	WEB PROGRAMMING (TSK1203)	SEM I, SESI 2011/2012	2012
12	FUNDAMENTALS OF PROGRAMMING (TSK1133)	SEM I, SESI 2012/2013	2012
13	OBJECT ORIENTED PROGRAMMING (TSK1103)	SEM II SESI 2015/2016	2016
14	FINAL YEAR PROJECT (TSK 3216)	SEM II SESI 2015/2016	2016
15	INDUSTRIAL TRAINING (TSK 310C)	SEM I, SESI 2016/2017	2016
16	WEB PROGRAMMING (TSK1203)	SEM I, SESI 2016/2017	2016
17	OBJECT ORIENTED PROGRAMMING (TSK1103)	SEM II SESI 2016/2017	2017
18	FINAL YEAR PROJECT (TSK 3216)	SEM II SESI 2017/2018	2017
17	OBJECT ORIENTED PROGRAMMING (TSK3243)	SEM II SESI 2017/2018	2018
18	FINAL YEAR PROJECT (TSK 3216)	SEM II SESI 2017/2018	2018
19	WEB PROGRAMMING (TSB3333)	SEM II, SESI 2018/2019	2018
20	INDUSTRIAL TRAINING (TSK 310C)	SEM I, SESI 2018/2019	2018
21	OBJECT ORIENTED PROGRAMMING (TSP3233)	SEM II SESI 2018/2019	2019
22	FINAL YEAR PROJECT (TSK 3216)	SEM II SESI 2018/2019	2019
23	WEB PROGRAMMING (TSP3243)	SEM I SESI 2019/2020	2019
24	DEFENSIVE PROGRAMMING (TSS3733)	SEM I SESI 2019/2020	2019
25	FINAL YEAR PROJECT (TSK 3216)	SEM I SESI 2019/2020	2020
26	OBJECT ORIENTED PROGRAMMING (TSP3233)	SEM II SESI 2019/2020	2020
27	INDUSTRIAL TRAINING (TSK 310C)	SEM II SESI 2019/2020	2020
28	DEFENSIVE PROGRAMMING (TSS3733)	SEM I SESI 2020/2021	2020
29	FINAL YEAR PROJECT (TSK 3216)	SEM I SESI 2020/2021	2020
30	INDUSTRIAL TRAINING (TSK 310C)	SEM II SESI 2020/2021	2021
31	OBJECT ORIENTED PROGRAMMING (TSP3233)	SEM II SESI 2020/2021	2021
32	FINAL YEAR PROJECT (TSK 3216)	SEM I SESI 2021/2022	2021
33	DEFENSIVE PROGRAMMING (TSS3733)	SEM I SESI 2021/2022	2021

34	TEKNOLOGI MAKLUMAT (FCS0634)	SEM I 2021/2022 PAP	2022
35	INDUSTRIAL TRAINING (TSK 310C)	SEM II SESI 2021/2022	2022
36	OBJECT ORIENTED PROGRAMMING (TSP3233)	SEM II SESI 2021/2022	2022
37	TEKNOLOGI MAKLUMAT (FCS0634)	SEM I 2022/2023 PAP	2022
38	FINAL YEAR PROJECT (TSK 3216)	SEM I SESI 2022/2023	2022/ 2023
39	DEFENSIVE PROGRAMMING (TSS3733)	SEM I SESI 2022/2023	2022/ 2023

1.3 Diploma Courses

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

No.	Course Title	Semester	Year

1.4 Pre-Degree Courses

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

No.	Course Title	Semester	Year

1.5 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	SUHAILA ISMAIL	Enhancement of Scada Security Framework For Assessing Scada System In Cyber-Terrorism	18/09/2020	Co-Supervision	In Progress	UPNM

1.6 PhD External/Internal Examination

(Please list in chronological order)

No.	Name of Student	Project Title	External / Internal	Date of Viva	University

1.7 MSc (by Research)

(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	Kapt Muhammad Syakir B. Ismail	An Air Threat Assessment Framework For Unmanned Aerial Vehicle (UAV) Analysis Using Paste and Tack Tree Analysis	6/7/2020	Main Supervision	In progress	UPNM
2	Kapt Muhammad Zakwan Bin Muhmad Rodzi	Sentiment Analysis Of Propaganda Detection And Monitoring Based On Hidden Markov Model	JAN 2020	Co-Supervision	Completed	UPNM
3	Norashikin Bt. Fairuzy	An Intelligent-based Screening For UPNM Recruitment System	2/3/2020	Co-Supervision	In progress	UPNM
4	Nurin Athirah Binti Mohamed Rashid	Analisis Ketepatan Model Skema Beza Terhingga Tidak Piawai Terhadap Persamaan Litar Perintang Aruhan RI	2/3/2020	Co-Supervision	In progress	UPNM
5	Iksan Bin Tamrin	The Impact Of Work From Home (Wfh) On It Support Staffs' In Higher Education Institution (Hei) During Covid-19	20/01/ 2022	Co-Supervision	In progress	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	Fued bin Ali	Development of Dynamic Service Delivery Model In Wavelength Routed Optical Networks Using Gmpls Framework	Internal	11/07/2017	UPNM
2	Venothanee A/P Sundra Mohan	Utilizing Machine Learning Algorithms And Electroencephalogram (Eeg) Signals To Identify Emotions And Performance Level Among University Students	Internal	1/10/2020	UPNM
3	Sze Lin Tan	An Implementation Model of Network Security for The Royal Malaysian Navy Network	External	25/02/2021	University of Warrick
4	Zainudin Mohamad	A Study On Cyber Terrorism Perspective Among Malaysian Armed Forces (MAF)	External	27/09/2022	University of Warrick
5	Mohd Yusof Hasbilah Md Zain	Social Media Application Banned at Workplace: An Investigation Study at Royal Malaysian Airforce (RMAF)	External	08/12/2022	University of Warrick
6	Muhammad Hakiem bin Halim	Model Ramalan Banjir Kilat di Selangor Menggunakan Teknik Perlombongan Data	Internal	07/06/2022	UPNM

1.9

Project)

Supervision (Postgraduate Research Project or Final Year Research

(Please list in chronological order)

FINAL YEAR RESEARCH PROJECT				
No	Name of Student	Project Title	Year	Status <ul style="list-style-type: none"> • Completed • Submitted • In Progress
1	Mohamed Zuhilmy Bin Mohammed Zulkifly	Sistem Penjualan Tiket Bola Sepak Secara Dalam Talian Menerusi Mobile Web	2011	Completed
2	Mohd Haslam Bin Hassan	Sistem Penghantaran Markah Pelajar Menggunakan Aplikasi Kod Pengesahan Transaksi (TAC)	2011	Completed
3	Sharifah Zanariah Bt Mohd Zakaria	Sistem Pengurusan Aduan Secara Atas Talian Bagi Jabatan Pembangunan dan Penyelenggaraan (JPP) di UPNM	2011	Completed
4	Norsyida Bt Ahmad	Sistem Stor Pakaian Bagi Kuartermaster UPNM Menggunakan Pengesahan Cap Jari dan Kad Pintar	2011	Completed
5	Mohammad Sollehhudin Bin Mat Taib	Sistem Penjanaan dan Penandaan Dokumen Menggunakan QR Code	2012	Completed
6	Mohamad Amirul Asraf Bin Atan	Aplikasi Penyembunyian Data Teks Ringkas Di Dalam Fail Audio Berformat WAV (WAVHIDE)	2012	Completed
7	Muhammad Ridzuan Bin Karim	Sistem Pengurusan Dokumen Elektronik bagi Jabatan Sains Kompute UPNM	2012	Completed
8	Luqman Bin Mustapa	Order Management System for Tuah Battalion2012	2012	Completed
9	Eliyas Nusa Bin Mohd Som	Aplikasi Steganografi dan Penyulitan Data untuk Maklumat Peribadi ALK UPNM	2012	Completed
10	See Horng Jiun	Intranet Messenger for UPNM	2016	Completed
11	Muhammad Arman Bin Mohd Junaidi	Aplikasi Permainan Video 5Words bagi Kanak-kanak Disleksia	2016	Completed
12	Aizuddin Bin Ismail	Permainan Video Berteraskan Matematik	2016	Completed
13	Ahmad Nazirul	Permainan Video Pemilihan	2016	Completed

	Muzzammil Bin Abdul Malek	Makanan Seimbang		
14	Mohd Daniel Bin Abdul Samat	Naval E-Note	2016	Completed
15	Mohammad Hafiz B. Mohd Ismail	Sistem Pemantauan Aduan Kerosakan Secara Dalam Talian	2017	Completed
16	Amar B. Mohd Azmurin	Sistem Beban Tugas Akademik (BTA)	2017	Completed
17	Fatin Nuraziera Binti Mohamad Hidir	Sistem Pemuka Kehadiran Pelajar Berasaskan Web	2017	Completed
18	Fatin Atikah Binti Anizam	Sistem Pengeluaran Slip Sakit Pusat Perubatan Angkatan tentera Kem Perdana Sg Besi	2018	Completed
19	Muhammad Luqman Bin Ahmad Razali	Sistem Pengurusan Giliran Imam Bertugas di Pusat Islam, UPNM	2108	Completed
20	Farah Atikah Binti Zamani Tajudin	Sistem Penyimpanan Maklumat Alat Ganti PT-91M Pendekar Berasaskan Android	2109	Completed
21	Norzulfatihah Binti Dzulkifli	Sistem Katalog Alat Ganti PENDEKAR PT-91M	2109	Completed
22	'Atifah Hanim Binti Rosli	Sistem Pemantauan Keputusan Peperiksaan Pelajar	2020	Completed
23	Muhammad Izzuddin Bin Mohamad Yusof	Sistem 3A (<i>Academic, Attribute, Attitude</i>) NADIM	2020	Completed
24	Nursyafitriah Binti Rahmat	Sistem Pengiraan Gred Pelajar UPNM	2020	Completed
25	Dhivyan A/L Ravindranath	Sistem Maklumat Kakitangan Akademik	2020	Completed
26	Nur Aisyah Binti Abdullah	Sistem Notifikasi Tarikh Luput	2021	Completed
27	Abdul Hafiz Bin Abdul Razak	Sistem Kehadiran Berasaskan Lokasi	2021	Completed
28	Ahmad Nurul Hakim Bin Mohamad Noorlizam	Sistem Pengurusan Hilang dan Jumpa	2021	Completed
29	Muhammad Syukur Bin Mohd Fadzil	Pemindahan Data Menggunakan Kaedah Steganografi	2021	Completed
30	Muhammad Yusri Bin Abdul Ghani	Sistem Aplikasi Inventori Buku UPNM <i>Bookshop</i>	2021	Completed
31	Muhammad Aidil Bin Ayub	Sistem Web Keluar Masuk Pelajar Asrama Tuah	2022	Completed
32	Danial Bin Pakruzzaman	Aplikasi Pengesan Suhu Makmal	2022	Completed
33	Muhammad Luqman Hakim Bin Muhamad	Sistem Keselamatan Pintu Berasaskan Arduino	2022	Completed
34	Nazmie Naim Bin Abd Rahim	Sistem E-Vote Pemegang Pangkat Pegawai Kadet Kompeni Hang Jebat	2022	Completed
35	Mohamed Tuah Bin Zulkarnain	Sistem Kehadiran Berasaskan RFID	2022	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	Initial Development of Cyber Range Infrastructure for Organising Scenario Based Cyber Exercise	Member	2015	RM 20,000	Completed
2	Promoting Buiding Energy Saver With Mobile Technology	Principal	2016	RM 20,000	Completed
3	Bengkel Pendedahan dan Latihan Praktikal Mengenai Keselamatan Siber dan Potensi Sebagai Pilihan Kerjaya Kepada Kumpulan Sasaran Sekolah Menengah di Maktab Rendah Sains Mara (MRSM)	Member	2017	RM 68,000	Completed
4	Improvement on Rehabilitation Process For Parkinson Patient Using Exergames (Exercise Game)	Member	2018	RM 20,000	Completed
5	Prototyping Digital Tongue Diagnosis System on Raspberry-Pi For Smart Military Healthcare System	Member	2018	RM 20,000	Completed
6	Development of WEB based JAVA and C++ Compiler with Online Assignment Submission System for Programming Courses in UPNM (CheckMyCODE System)	Member	2019	None	Completed
7	Security Assessment Framework for detecting vulnerability in The Internet of Things based Smart Homes	Member	2019	RM46,443	Completed
8	Industry@University: 4ir Competence Centre	Member	2020	RM 300,000	Completed
9	INvig:Smart Item Locator using NodeMCU	Member	2020	None	Completed
10	A Multi-Swarm Particle Swarm Optimization Algorithm for Feature Selection in Drug Review based on Medical Sentiment Lexicon Analysis (GJP)	Member	2021	RM 20,000	In Progress
11	A Multi-Swarm Particle Swarm Optimization Algorithm for Feature Selection in Drug Review based on Medical Sentiment Lexicon Analysis (FRGS)	Member	2022	RM 64,360.00	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, volume and number of pages (Please bold your name)	Type of Journal • ISI • SCOPUS • Peer-Reviewed
1	Suhaila Ismail, Arniyati Ahmad , Mohd Afizi Mohd Shukran, 2011, New method of forensic computing in a small organization, Australian Journal Of Basic And Applied Sciences, Vol.5,9, pg.2019-2025.	Scopus
2	Siti Rohaidah Ahmad, Zulkarnain Md Ali, Arniyati Ahmad , Suhaila Ismail, Mohd Afizi Mohd Shukran, 2012, Hybrid framework model for building honeynet laboratory for computer security education in National Defence University Malaysia (NDUM), Australian Journal Of Basic And Applied Sciences, Vol.6, 8,Pg. 271-274.	Peer-Reviewed
3	Siti Rohaidah Ahmad, Mohd Afizi Mohd Shukran, Suhaila Ismail, Arniyati Ahmad , 2012. A New Teaching Approach in Object Oriented Programming Subject in Learning Military Environment, International Journal of Digital Content Technology & its Applications, Vol.6, 15.	Scopus
4	Nor Fatimah Awang, Arniyati Ahmad , Siti Rohaidah Ahmad, 2012, Preventing Web Browser From Cyber Attack. GSTF Journal on Computing (JoC), Vol.2, 1, 2012	Peer-Reviewed
5	M.L.Talib, A.Ahmad , M.A.M. Shukran , <i>The New Design of Computer Controlled Braille, IJACT: International Journal of Advancements in Computing Technology ,(ISSN: 2005-8039).</i>	Scopus
6	Arniyati Ahmad , Christopher Johnson, Timothy Storer, 2015, A Cyber Exercise Post Assessment: Adoption of the Kirkpatrick Model, Advances in Information Sciences and Service Sciences, Vol.2, 1, 2014.	Scopus
	He, Y., Johnson, C., Lyu, Y., Ahmad , A. Improving The Exchange of Lessons Learned In Security Incident Reports: Case Studies In The Privacy of Electronic Patient Records, IFIP Advances in Information and Communication Technology, 2014, 430, pp. 109–124	Scopus
7	Arniyati Ahmad , Christopher Johnson, Timothy Storer, 2015, An Investigation on Organisation Cyber Resilience, World Academy of Science, Engineering and Technology, International Journal of Computer, Electrical, Automation, Control and Information Engineering, Vol.9, 7, Pg.1661-1666	Scopus
8	Arniyati Ahmad , Christopher William Johnson, Tim Storer, 2015, Impact Of Scenarior Based Exercise On Organisation Resilience In Critical Infrastructure Organisations, Vol.2, 1, Journal of Technology Management and Business,2015.	Peer-Reviewed

9	Zulkarnain Md Ali, Arniyati Ahmad , Implementation Of Parallel Algorithm For Luc Cryptosystems Based On Addition Chain By A Message Passing Interface, Vol.92 No.1, Journal of Theoretical and Applied Information Technology, 2016, ISSN:1992-8645.	Scopus
10	Awang, M. I., Mohamed, M. A., Mohamed, R. R., Ahmad, A. & Rawi, N. A, A pattern-based password authentication scheme for minimizing shoulder surfing attack, International Journal on Advanced Science, Engineering and Information Technology. 7, 3, p. 1049-1055 7 p.2017	Scopus
11	RR Mohamed, MA Mohamed, Arniyati Ahmad , Wahidah Hashim, Ahmad Faris Harun Iskandar, Internet of Things Based Indoor Cooling System Using Measurement of Human Body Temperature, International Journal Of Future Generation Communication And Networking, 2017	Peer-Reviewed
12	Siti Rohaidah Ahmad, Nurhafizah Moziyana Mohd Yusop, Muslihah Wook, Arniyati Ahmad , Product Feature Ranking and Popularity Model based on Sentiment Comments, International Journal of Advanced Computer Science and Applications (IJACSA), Volume 9 Issue 9, 2018 p.p 152-157..	Scopus
13	Afiqah M. Azhari, , Arniyati Ahmad , Zuraini Zainol, Mohd Hazali Mohamed Halip, Nur Diyana Kamarudin, Cyber Warfare Act of War : A Review Based On Clausewitz Perspective, International Journal of Engineering & Technology. 2018	Peer-Reviewed
14	Nor Azliana Akmal Jamaludin, Arniyati Ahmad , Muhammad Rahimi Abdul Aziz, Nor fatimah Awang, Zuraini Zainol, The Design of Promoting Buiding Energy Saver with Mobile Controller, International Journal of Engineering & Technology. 2018	Peer-Reviewed
15	M. H. Mohamed Halip, A. Ahmad , N. A. Mat Razali, A. M. Azahari, M. S, A Development of A Capture The Flag System: Using Scenario Based Cyber Exercise, Journal of Fundamental and Applied Sciences 10 (3S), 1011-1026. 2018	Peer-Reviewed
16	NF Awang, A Ahmad , SR Ahmad , Preventing Web Browser From Cyber Attack, GSTF Journal on Computing (JoC), 2018	Peer-Reviewed
17	Wook, M., Ismail, S., Yusop, N.M.M., Ahmad, S.R. and Ahmad, A. , 2019. Identifying priority antecedents of educational data mining acceptance using importance-performance matrix analysis. Education and Information Technologies, pp.1-12. 2019	Scopus
18	Nur Diyana Kamarudin, Afiqah Mohammad Azahari, Arniyati Ahmad and Mohd Hazali Mohamed Halip, A study of Implementation of Smart Library using Beacon Bluetooth Low Energy (BLE), ZULFAQAR International Journal of Defence Science, 2019	Peer-Reviewed
19	Afiqah M. Azahari, Arniyati Ahmad , Syarifah Bahiyah Rahayu, CheckMyCode: Designing Assignment Submission System with Web-Based Java Compiler, TEST Engineering and Management, Volume 81, p4774 -4778(2019)	Scopus
20	A Survey on Techniques and Challenges in Sentiment Analysis for Malay Language, Siti Rohaidah Ahmad , Suhaila Ismail , Nurhafizah Moziyana Mohd Yusop , Arniyati Ahmad , Yuhanim Hani Yahaya , Shamsul Bahrin Abd Mutalib, Vol. 63 No. 3 (2020)	Scopus
21	ANDROID DESIGNED MALWARE DETECTION CHALLENGES: A FUTURE RESEARCH DIRECTION AM Azahari, A Ahmad, SB Rahayu, ND Kamarudin, MHM Halip Zulfaqar Journal of Defence Science, Engineering & Technology 4 (1), 2021	Peer-Reviewed

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"> • International • National • University
1	Arniyati Ahmad , Siti Rohaidah Ahmad, Nazatul Naquiah Ahba Abd Hamid, Nor Fatimah Awang, 2010, Implementasi Virtualisasi dalam Pengajaran dan Pembelajaran Kursus Komputer, Presented at Kolokium Fakulti Sains dan Teknologi Pertahanan, 2010, at Pusat Marin, UPM.	National
2	Arniyati Ahmad , Siti Rohaidah Ahmad, Nor Fatimah Awang, Zulkarnain Md Ali, 2011, Web Vulnerability Assessment: Outsource dilemmas, Presented at International Conference on Electrical Engineering and Informatics (ICEEI) 2011, July 17-19, at Institut Teknologi Bandung, Bandung, Indonesia.	International
3	Arniyati Ahmad , Christopher William Johnson, Tim Storer, 2014, Impact Of Scenario Based Exercise On Organisation Resilience In Critical Infrastructure Organisations, Presented at 3rd International Conference on Technology Management, Business and Entrepreneurship, 23-24 June 2014, at Mahkota Hotel, Malacca, Malaysia	International
4	Improving the exchange of lessons learned in security incident reports: Case studies in the privacy of electronic patient records He, Y., Johnson, C., Lyu, Y., Ahmad, A. IFIP Advances in Information and Communication Technology, 2014, 430, pp. 109–124	International
5	Arniyati Ahmad , Christopher Johnson, Timothy Storer, 2015, An Investigation on Organisation Cyber Resilience, Presented at 17th International Conference on Information Systems Security	International
6	Nor Azliana Akmal Jamaludin, Arniyati Ahmad , Muhammad Rahimi Abdul Aziz, Nor fatimah Awang, Zuraini Zainol, The Design of Promoting Buiding Energy Saver with Mobile Controller - International Conference on Information and Communication Technology 2018	International
7	Afiqah M.Azhari, , Arniyati Ahmad , Zuraini Zainol, Mohd Hazali Mohamed Halip, Nur Diyana Kamarudin, Cyber Warfare Act Of War : A Review Based On Clausewitz Perspective - 4th International Conference on Defence & Security Technology 2018 (DSTC)	International
8	Siti Rohaidah Ahmad, Suhaila Ismail, Nurhafizah Moziyana Mohd Yusop, , Arniyati Ahmad , Yuhanim Hani Yahaya, Shamsul Bahrin Abd Mutalib, A Survey on Techniques and Challenges in Sentiment Analysis for Malay Language, 7th International Conference on Applied Science and Technology (ICAST 2020)	International
9	Afiqah M.Azhari, , Arniyati Ahmad , Syarifah Bahiyah Rahayu, Nur Diyana Kamarudin , CheckMyCode: Assignment Submission System with Cloud-Based Java Compiler, 8th International Conference on Information Technology and Multimedia (ICIMU), 2020.	International
10	Syarifah Bahiyah Rahayu , Afiqah M.Azhari, , Arniyati Ahmad , Nur Diyana Kamarudin Issues And Challenges Of Knowledge Sharing In Collaborative E-Commerce, 8th International Conference on Information Technology and Multimedia (ICIMU), 2020.	International

11	Contactless Attendance Method with Face Recognition, Body Temperature Measurement and GPS System Using Blockchain Technology Mohammad Azahari, A., Ahmad, A. , Rahayu, S.B. Lecture Notes in Electrical Engineering, 2021, 741 LNEE, pp. 87–94	International
12	A New Framework of Smart System for Inventory Management, Stock Item Locator and Navigation Kamarudin, N.D., Azahari, A.M., Halip, M.H.M., Rahayu, S.B., Ahmad, A. Proceedings - International Conference on Computer and Information Sciences: Sustaining Tomorrow with Digital Innovation, ICCOINS 2021, 2021, pp. 142–145, 9497209	International
13	A review on Unmanned Aerial Vehicle (UAV) threats assessments MS Ismail, A Ahmad, S Ismail, NMM Yusop AIP Conference Proceedings 2617 (1), 050007, 2022	International
14	Defensive programming: Developing a web application with a secure coding practices SB Rahayu, A Ahmad, SHZ Rashid AIP Conference Proceedings 2617 (1), 050006, 2022	International
15	Implementation model of network security for Royal Malaysian Navy network TS Lin, A Ahmad, NAA Fataf AIP Conference Proceedings 2617 (1), 050004, 2022	International
16	Exploring the information security culture within industrial control systems organisations: Expert reviews S Ismail, MN Ismail, A Ahmad, MA Khairuddin AIP Conference Proceedings 2617 (1), 050005, 2022	International

2.3 Presentation:

(Please list in chronological order)

No.	Event	Title of Paper Presented	Role (Keynote Speaker / Invited Speaker / Presenter)	Date	Organizer
1	Kolokium Fakulti Sains dan Teknologi Pertahanan	Implementasi Virtualisasi dalam Pengajaran dan Pembelajaran Kursus Komputer	Presenter	2010	Fakulti Sains dan Teknologi Pertahanan
2	International Conference on Electrical Engineering and Engineering and Informatics (ICEEI) 2011	Web Vulnerability Assessment: Outsource dilemmas	Presenter	2011	Institut Teknologi Bandung, Bandung, Indonesia.
3	International Conference on Technology Management, Business and Entrepreneurship,	Impact Of Scenario Based Exercise On Organisation	Presenter	2014	UTHM

4	International Conference on Information Systems Security	An Investigation on Organisation Cyber Resilience	Presenter	2015	World Academy of Science, Engineering and Technology (WASET)
5	Pameran Dan Ceramah Kerjaya Sains, Teknologi Dan Matematik (Stem)		Presenter	2019	Sek Keb Desa Putra
6	Pesta Buku Selangor		Presenter	2019	Perbadanan Perpustakaan Awam Selangor

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	Anugerah Khas Kebolehpasaran Graduan UPNM: Geran Penjana KPT CAP (Kursus IoT and Green Technology Buiding Talent)	2022	National	Kementerian Pendidikan Malaysia (KPT)
2	Anugerah Inovasi Teknologi Maklumat Dan Inovasi (Projek Inovasi Siber Sasar)-Naib Johan	2022	Universiti	UPNM
3	National Innovation, Invention, Competition 2022 (NIICe 2022)-Hypertension Pre-Assessment Monitoring System (GOLD AWARD)	2022	National	UTHM
4	Defence, Security And Sustainability Exhibition 2022-Physical Threats Assessment Framework for UAV based on Attack Tree Analysis-(SILVER AWARD)	2022	University	UPNM

5	PECIPTA 2022- A Hybrid Multi-Swarm Optimization Technique on Drug Reviews Using Sentiment Analysis in Social Media (MEDIXACT)-Bronze	2022	National	Kementerian Pendidikan Malaysia (KPT)
6	Sibersasar: Cyber Range System For Cyber Range Battle Exercise – ITEX 2021 GOLD MEDAL	2021	International	Malaysia Invention & Design Society (ITEX 2021)
7	Sibersasar: Cyber Range System For Cyber Range Battle Exercise – ITEX 2021 – BRONZE PRICE	2021	International	Korea Invention Promotion Association
8	CheckMyCode: Assignment Submission System With Cloud based Compiler- AWARD OF MERIT	2021	International	Malaysia Technology Expo (MTE2021)
9	E-Clinic- SILVER AWARD	2021	International	International Innovation, Creativity & Technology (i2CreaTE 2021)
10	PROTRAINER- SILVER AWARD	2021	International	International Innovation, Creativity & Technology (i2CreaTE 2021)
11	An Expiry Date Notification System (END) – BRONZE AWARD	2021	International	Penang International Invention, Innovation and Design (PIID 2021)
12	loc@: Development of Mobile Location based Attendance System Using Android Studio- BRONZE AWARD	2021	International	Penang International Invention, Innovation and Design (PIID 2021)
13	CheckMyCode: Assignment Submission System With Cloud based Compiler- BRONZE AWARD	2021	International	Malaysia Technology Expo (MTE2021)
14	Prestasi Cemerlang 2020	2021	University	UPNM
15	S.Cov.D: Covid-19 Smart Biosensors And Iot Detection System- SILVER AWARD	2020	International	Malaysia Technology Expo Covid-19 International Innovation Awards (MTE 2020)
16	Anugerah Pekerja Cemerlang 2019	2020	University	UPNM
17	iNAVIG: SMART ITEM LOCATOR: Silver Award	2019	International	International Trade Fair, Ideas-Inventions-New Products-NUREMBERG (IENA 2019)

18	Sentiment Analysis For Product Reviews Using Tdr Layer Post: Gold Award (PECIPTA 2019)	2019	International	UTHM
19	Sentiment Analysis For Customer Product Reviews Using A Hybrid Of Typed Dependency Relations Layer And Pos Tagging (Tdr Layer Pos Tags) Algorithm : BRONZE award	2019	National	Unisza
20	BEASmart: Smart Library System Using Beacon: SILVER award	2019	International	MTE 2019
21	BEASmart: Smart Library System Using Beacon: SILVER MEDAL	2019	International	ITEX 2019
22	Sentiment Analysis For Product Reviews Using Tdr Layer Post: THIRD PLACE (Fundamental Research)	2019	University	Defence, Security And Sustainability 2019 (DSS 2019) UPNM
23	BEASmart: Smart Library System Using Beacon: GOLD AWARD	2019	University	Defence, Security And Sustainability 2019 (DSS 2019) UPNM

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	PEMBANGUNAN PELAN STRATEGIK ICT UPNM-MAMPU	2017	UPNM		2017-2020
2	COMPUTER EMERGENCY RESPONSE TEAM (CERT) AGENSI -UPNMCERT	2017	UPNM		2017
3	PELAN PEMBANGUNAN INISIATIF KAMPUS PINTAR UPNM (2020-2025)	2020	UPNM		2020-2025

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	Duration
1	Felo Penyelidik, Cyber Security Centre , UPNM	(2017 -2020) 4 years
2	UPNM CERT (Committee Member).	(2017-2020) 4 years
3	SMART CAMPUS UPNM (Committee Member).	(2019-2020) 2 years
4	PERTANDINGAN SELANGOR XTIV VIDEO CHALLENGE 2020 (AJK & Jury)	NOV2020-JAN 2021
5	Defense, Security & Sustainability Exhibition 2019 - Exhibitor	APRIL 2019
6	PECIPTA 2019 - Exhibitor	SEPT 2019
7	ITEX 2021 - Exhibitor	DEC 2021
8	PENASIHAT AKADEMIK -Tahun 1 sesi 2019/2020	(2019 -2022) 3 years
9	Project Service Learning Malaysia -Universityfor Society (SULAM)- AJK/Mentor	MAC –JUNE 2021
10	Mentor Bagi National Innovation, Invention, Competition 2022 (NIIce 2022)	2022
11	Exhibitor Festival Ideas 2022 KPT	12-14 Dec 2022

12	Penceramah Pra-Latihan Industri 2022 (Penceramah Dalam)	2022
13	Fasilitator Program SULAM Mini Mighty Robots UPNM-SKBTR 1 2022	18-20 Ogos 2022

3.4 Service to the community

(Please list in chronological order)

No.	Organization	Role	Start Date	Level
1	Penilai Persidangan Cyber Resilience CRC 2018 di UKM	Penilai Kertas Persidangan CRC	AUG 2018	Kebangsaan
2	Penilai kertas persidangan ICICTM 2018	Penilai	MAC 2018	Antarabangsa
3	Panel Penilai Geran Jangka Pendek	Penilai Dalaman	NOV 2018	FSTP
4	Penilai Kolokium Siswazah FSTP 2018	Penilai Dalaman	OCT 2018	FSTP
5	Karnival Science, Technology, Engineering and Mathematics (STEM) di Sek. Men, Taman Desa	AJK Pelaksana, AJK Permainan Kahoot, AJK hadiah pertandingan	OCT 2018	Komuniti
6	Panel Penilai Geran Knowledge Transfer	Penilai Dalaman	FEB 2019	UPNM
7	Penilai Pembentangan Poster Pelajar Rahun 1 bagi Kursus TST 3253	Penilai Dalaman	JULY 2019	FSTP
8	MQA Diploma Perisikan Siber dan Pengurusan	AJK	2019	Pusat Keselamatan Siber
9	MQA Master Of Science In Cyber Security And Management	AJK	2018-2020	Pusat Keselamatan Siber
10	Penilai Pembentangan Projek Tahun Akhir Sem I Sesi 2019/2020	Penilai Dalaman	OCT 2019	
11	Projek Tahun Akhir (PSM)	AJK	SEPT 2019	FSTP
12	Penyelia Akademik pelajar Sesi 2019/2020	PA	SEPT 2019	FSTP
13	Penilai Kolokium Siswazah tahun 2019	Penilai Dalaman	OCT 2019	FSTP
14	Program Kesedaran Keselamatan Siber	AJK	JAN 2020	Pusat Keselamatan Siber
15	Penilai Geran Prototype Development Research Grant Scheme (PRGS)	Penilai Dalaman	JAN 2020	Pusat Keselamatan Siber
16	Penilai Geran Penyelidikan Self Fund	Penilai Dalaman	FEB 2020	FSTP
17	Penilai Pelajar Kolokium 1: Laporan Kemajuan Disertasi Program Msc in Cybersecurity and Management (MCSM) Sesi 2019/2020	Penilai Dalaman	AUG 2020	Pusat Keselamatan Siber

18	Penilai Kolokium Siswazah/Proposal Defence FSTP 2021	Penilai Dalaman	Nov 2021	FSTP
19	Penilai Pembentangan Projek Sarjana Muda SEM 1 2021/2022	Penilai Dalaman	Nov 2021	FSTP
20	Penilai Anugerah Akademik Cemerlang (AAC) 2020-Penerbitan Buku dan Makalah Jurnal	Penilai Dalaman	April 2021	UPNM
22	Penilai Anugerah Akademik Cemerlang (AAC) 2021-Penerbitan Buku dan Makalah Jurnal	Penilai Dalaman	11 Mei 2022	UPNM
23	Penilai Kolokium Siswazah/Proposal Defence FSTP 2021	Penilai Dalaman	21 Nov 2022	FSTP
24	Penilai Pembentangan Projek Sarjana Muda SEM 1 2022/2022	Penilai Dalaman	15 Dec 2022	UPNM
25	Penilai Permohonan Harta Intelek FSTP –System Architecture for Flood	Penilai Dalaman	8 Sept 2022	FSTP
26	AJK Panel Penilai Pemindahan Kredit Pelajar bagi Program Ijazah Sarjana Muda Sains Komputer Sem 1 2022/2023- Kursus TSP3243 Web Programming and Development	Penilai Dalaman	25 Nov 2022	FSTP
27	Penyelaras Penyedia Latihan dan Penempatan Kerjaya Peserta bagi Program Dana Penjana KPT CAP UPNM	Penyelaras	28 June 2022	UPNM
28	AJK Penyediaan Dokumen Akreditasi MQA Program Sarjana Muda Sains Komputer (Keselamatan Sistem Komputer)-FSTP	AJK	9 May 2022	FSTP
29	AJK Penyediaan Dokumen Akreditasi MQA Program Sarjana dan Program Doktor Falsafah (Sains Komputer) Mod Penyelidikan-FSTP	AJK	9 May 2022	FSTP
30	AJK Pelaksana Bagi Program Service Learning Malaysia-University For Society (SULAM) & STEM	AJK	2 June 2022	UPNM
31	AJK Upacara dan Perjalanan Majlis Konvokesyen ke -11	AJK	18-20 June 2022	UPNM
32	Penilai Permohonan Harta Intelek FSTP –Multi Unilinguials High Integers	Penilai Dalaman	10 May 2022	UPNM
33	AJK Penyediaan Dokumen Akreditasi MQA Program Sarjana Sains Keselamatan Siber dan Pengurusan Mod Kerja Kursus-FSTP	AJK	11 Jan 2023	FSTP