



# UNIVERSITI PUTRA MALAYSIA

## CURRICULUM VITAE



### A. Biodata

- Name: **ABDULLAH MUHAMMED (Assoc. Prof. Ts Dr)**
- Department: Communication Technology and Networks
- Faculty: Computer Science and Information Technology
- Field of Specialisation: **Computer Network, Distributed System, Scheduling for Cloud Computing/WSN/IoT, Heuristic, Artificial Intelligence and Optimisation**
- Contact:  
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### B. Education and academic qualification

Degree	University Awarded	Year
PhD Computer Science	University of Nottingham, UK	2014
Master of Computer Science	Universiti Malaya	2004
Bachelor of Computer Science	Universiti Putra Malaysia	1998

### C. Administrative duties and other relevant appointment

No	Position	Department/Faculty/Other Institution	Year	Duration (Years)
1	Deputy Dean (Graduate Studies)	Faculty of Computer Science and Information Technology	Jan 2022	1
2	Head	Department of Communication Technology and Networks	20 June 2014 – 19 June 2017	3
3	Member	Jawatankuasa JINM Fakulti – Department Representative	2018-present	4
4	Program Coordinator	Kolej Chermaj Jaya – Collaboration Program (UPM-IPTS)	2004 - 2008	5
5	Coordinator	SKR1200 Course – Basic Computer Network – Collaboration Program (UPM-IPTS)	2006/07	1
6	Coordinator	SKR3200 Course – Communication and	2006/07	1

		Computer Networks – Collaboration Program (UPM-IPTS)		
7	Academic Advisor	Department of Communication Technology and Networks	2004 - 2008, 2012 - present	11
8	Software Engineer	AccTrak21 Sdn Bhd (Before joining UPM)	Jul 1998- Dec 1998	0.6

#### **D. Academic awards and recognition**

No	Award/Recognition	Organisation Awarded	Date
1	University Excellence Service Award (Lecturer)	Registrar, Universiti Putra Malaysia	2020
2	Certificate of Excellence Service	Registrar, Universiti Putra Malaysia	2016, 2017, 2018, 2019,20
3	University Service Excellence Award (Category: Head of Department)	Registrar, Universiti Putra Malaysia	2016
4	Certificate of Excellence Service	Registrar, Universiti Putra Malaysia	2015
5	Certificate of Excellence Service	Registrar, Universiti Putra Malaysia	2014
6	Academic Award - PhD Scholarship	Ministry of Higher Education (MoHE) Malaysia	2008

#### **E. Academic duties/committee members**

No	Title	Level (International/National/ University/Faculty/Department)	Year
1	General Chair for International Conference on Interdisciplinary Computer Science and Engineering	International	2020
2	Track Chair for International Conference on Innovations in Computer Science and Engineering	International	2018, 2019
3	Member of Industry and Community Relation Committee	Faculty	2017-2019
4	Industry and Community Relation Committee Coordinator	Department	2017-2019
5	Member of Management	Faculty	2014-2017
6	Member of Postgraduate Studies Committee	Faculty	2014-2017
7	Member of Undergraduate Curriculum Committee	Faculty	2014-2017
8	Seminar Committee Coordinator	Department	2012, 2013, 2014
9	Industrial Training Coordinator	Department	2005
10	Student Award Coordinator	Department	2005
11	Curriculum Committee member	Department	2013, 2014 - present

12	Exam Moderator	Department	2005, 2014 - present
13	Demonstrator Committee Member	Department	2005
14	Student Advisor Committee Coordinator	Department	2006
15	Master Curriculum Committee Member (Distributed System)	Department	2013, 2014 - present
16	Exams Invigilator	Kolej Chermai Jaya (UPM-IPTS)	2004, 2006

#### F. Teaching activities

No	Courses Code	Courses Name	Credit Hour	Number of Students	Semester/Academic Year
1	CSC3003	Discrete Structure (G4)	3	27	1-2022/2023
2	SKR4404	Cloud Computing	3	31	2-2021/2022
3	SKR3504	Network Analysis and Design (G1)	3	29	1-2021/2022
4	SKR3504	Network Analysis and Design (G2)	3	29	1-2021/2022
5	SKR3200	Communication and Computer Networks (G5)	3	22	2-2020/2021
6	SKR3200	Communication and Computer Networks (G5)	3	21	1-2020/2021
7	SKR3504	Network Analysis and Design (G2)	3	32	1-2020/2021
8	SKR5302	Advanced Distributed Computing	3	15	1-2020/2021
9	SSK3101	Computer Programming II (G7)	3+1	25	2-2019/2020
10	SKR3200	Communication and Computer Networks (G1)	3	19	2-2019/2020
11	SKR3200	Communication and Computer Networks (G3)	3	25	1-2019/2020
12	SKR3504	Network Analysis and Design (G2)	3	22	1-2019/2020
13	SKR5302	Advanced Distributed Computing	3	19	1-2019/2020
14	SKR5800	Selected Topics in Distributed Computing	3	16	2-2018/2019
15	SKR3200	Communication and Computer Networks (G5)	3	25	2-2018/2019
16	SKR3504	Network Analysis and Design (G1)	1	27	1-2018/2019
17	SKR3200	Communication and Computer Networks (G5)	3	25	2-2017/2018
18	SKR3200	Communication and Computer Networks (G7)	3	15	2-2017/2018
19	SKR5402	Advanced Grid Computing	3	26	2-2017/2018
20	SKR3504	Network Analysis and Design	3	16	2-2017/2018
21	SKR4404	Cloud Computing	3	16	1-2017/2018
22	SKR3200	Communication and Computer	3	25	2-2016/2017

		Networks			
23	SKR5402	Advanced Grid Computing	3	13	2-2016/2017
24	SKR3200	Communication and Computer Networks (G2)	3	24	1-2016/2017
25	SKR5302	Advanced Distributed Computing	3	25	1-2016/2017
26	SKR3306	C++ Programming	3	44	2-2015/2016
27	SKR5402	Advanced Grid Computing	3	19	2-2015/2016
28	SKR3200	Communication and Computer Networks (G3)	3	24	1-2015/2016
29	SKR5302	Advanced Distributed Computing	3	17	1-2015/2016
30	SKR3200	Communication and Computer Networks	3	24	2-2014/2015
31	SKR3200	Communication and Computer Networks	3	26	1-2014/2015
32	SKR3200	Communication and Computer Networks	3	14	1-2014/2015
33	SKR3303	Network Programming	3	24	2-2013/2014
34	SKR3200	Communication and Computer Networks	3	15	1-2013/2014
35	SSK3309	Operating System	3	20	1-2013/2014
36	SKR3306	C++ Programming	3	45	2-2012/2013
37	SKR4402	Distributed System	3	20	1-2012/2013
38	SAK3101	Computer Programming II	4	40	1-2007/2008
39	SKR4202	Client-Server Computing	3	4	2-2007/2008
40	SKR3999	Industrial Training (Coordinator)	4	43	2-2007/2008
41	SKR3999	Industrial Training (Coordinator)	4	71	1-2007/2008
42	SAK3117	Data Structure	3	40	1-2007/2008
43	SKR3303	Network Programming	3	1	1-2007/2008
44	SKR3999	Industrial Training (Coordinator)	4	71	2-2006/2007
45	SKR3504	Analysis and Design Network (Group 2)	3	34	2-2006/2007
46	SKR3200	Communication and Computer Networks (Group. 3)	3	32	2-2006/2007
47	SKR3999	Industrial Training (Coordinator)	4	66	1-2006/2007
48	SKR4402	Client-Server Computing	3	72	1-2006/2007
49	SKR3303	Network Programming	3	46	1-2006/2007
50	SAK3309	Operating System (Group 3)	3	38	2-2005/2006
51	SKR3303	Network Programming	3	50	2-2005/2006
52	SKR3999	Industrial Training (Coordinator)	4	107	1-2005/2006
53	SKR3200	Communication and Computer Networks	3	81	1-2005/2006
54	SKR3301	Network Programming	3	51	1-2005/2006
55	SKR3200	Communication and Computer Networks (PKPG)	3	32	2-2004/2005
56	SKR3200	Communication and Computer Networks	3	80	2-2004/2005
57	SAK3109	Operating System	-	-	2-2004/2005
58	SKR3200	Communication and Computer Networks (Group. 1)	3	92	1-2004/2005
59	SAK3100	Computer Programming 1	4	35	1-2004/2005

		(Group. 6)			
60	SAK3100	Computer Programming 1 (for PJJ)	4	2	1-2004/2005
61	SKR3200	Communication and Computer Networks	3	63	2-2003/2004
62	SKR3200	Communication and Computer Networks	3	80	2-2003/2004
63	SKR1200	Computer Networking Basics	3	80	1-2003/2004
64	SKR2200	Computer Security	3	78	2-2002/2003
65	SAK4502	Modeling and Simulation System	3	80	1-2002/2003
66	SAK3100	Computer Programming 1	4	60	1-2002/2003
67	SKR1200	Computer Networking Basics	3	62	1-2001/2002
68	SKR2302	Internet programming	4	4	1-2001/2002
69	SKR3301	Client-Server Computing	3	100	1-2001/2002

### G. Supervision of students

	Supervisor						External Examiner		
	Current Student			Graduated			PhD	Master	Total
	PhD	Master	Total	PhD	Master	Total	PhD	Master	Total
<b>Chairman</b>	9	0	9	3	2	5	0	1	1
<b>Member</b>	12	2	14	4	2	6	5	9	14
<b>Total</b>	21	2	23	7	4	11	5	10	15

Level: PhD				
No.	Name	Title of Thesis	Supervision	Status
1	Alsaaidah Yousef Abdullah Abed Alrabee	Edge-Fog-Cloud Computing	Main	Ongoing (Sept 2022 – present)
2	Suleiman Mohammed Mamman	Software Defined Network (SDN)	Main	Ongoing (Sept 2021 – present)
3	Akpanobong Aloysius Chris	A Heuristic Computation Offloading Scheme For Computation Intensive & Delay Sensitive Applications In Two Level Mobile Edge Cloud.	Main	Ongoing (Feb 2019 – Present)
4	Humam Seleem Khudair Khudair	Clustering Hierarchy Approach For Maximizing Lifetime In Wireless Sensor Networks Based On Machine Learning	Main	Ongoing (Feb 2019 – Present)
5	Mohd Noor Derahman	Scientific Workflow Scheduling In Hybrid-Clouds Computing	Main	Ongoing (Sept 2017 – Present)
6	Ahmed Adnan Hadi	Hyper-Heuristic Approach For Intrusion Detection In Internet	Main	Done Viva – Thesis

		Of Things		Correction (Sept 2017 – 2022)
7	Ali Aldailamy	Brokering Algorithms For Data Cost And Access Optimization Across Cloud-Based Data Stores	Main	Thesis Writing (Sept 2017 – Present)
8	Suleiman Sa'ad	Efficient Task Scheduling Strategies Using Symbiotic Organisms Search Algorithm For Cloud Computing Environment	Main	Completed (2016 – 2022)
9	Raja Hasyifah Raja Bongsu	Heuristic Based Approaches For Efficient Channel Assignment And Routing In Wireless Mesh Network	Main	Thesis Submitted (2016 - 2022)
10	Daniel Jose Da Graca Peceguina Franco	Optimisation Of Network Traffic Privacy On Scada System	Main	Completed (2016 – 2022)
11	Eng Kai Lun	Heuristic Approaches For Efficient Scheduling In Distributed System	Main	Thesis Submitted (2016 – 2022)
12	Adamu Muhammad Noma	Heuristic Approaches For Solving Addition Chain Problem Of Public Key Cryptosystems	Main	Completed (Sept 2014- Oct 2017)
<b>No.</b>	<b>Name</b>	<b>Title of Thesis</b>	<b>Supervision</b>	<b>Status</b>
1	Omid Seifaddini	Scheduling Algorithms In Grid Computing Environment	Co-Supervisor	Completed (2017)
2	Siti Fajar Jalal	Cloud Pricing Model Based On General Equilibrium Theory	Co-Supervisor	Withdraw (2014- 2020)
3	Safwan Mahmood Yahya Ghaleb	Improving The CSPM Ipv6 Architecture To Enhance The IP-WSN Mobility Performance	Co-Supervisor	Completed (2019)
4	Zayd Ashraf Najeeb Shareef	Traffic Scheduling For Cloud Resource Management	Co-Supervisor	Completed (2019)
5	Khaqan Zaheer	Network Coding Based Broadcasting Schemes For Cognitive Radio Network	Co-Supervisor	Withdraw 2015 – 2019
6	Zhangxiaowei	A Privacy – Perserving Architecture For Cloud-Based Health Care System	Co-Supervisor	Thesis Submitted (2015 – present)
7	Maharazu Mamman	Radio Resource Management For Downlink Long Term Evolution Networks	Co-Supervisor	Completed (2019)
8	Azyyati Adiah	Localization In Wireless Sensor	Co-Supervisor	Ongoing

	Binti Zazali	Network		(2016 – present)
9	Susana Boniphace Maziku	A Novel Framework For Identifying Spam In Twitter Data Using Machine Learning Algorithm	Co-Supervisor	Thesis submitted (2015 – present)
10	Al-Dulaimi Osamah Samer Ismael	IEEE 802.11 Resource Management Algorithm	Co-Supervisor	Ongoing (2019 – present)
11	Rozin Badeel Abdal	Framework Access Points Selection In Static Single User Based On Multi Criteria Analysis	Co-Supervisor	Ongoing (2018- present)
12	Chong Mien May	Prediction Algorithm For Resource Allocation In Cloud Computing Environment	Co-Supervisor	Ongoing (2018 – present)
13	Ojo Fisayo Gabriel	Advanced Simulation And Enhancement For Distributed And Energy Efficient Scheduling For Ieee802.11s Wireless Enhanced Distributed Channel Access (Edca) Networks	Co-Supervisor	Ongoing (2018 – present)
14	Muhammad Abdulrahman	A Securing The Operations In SCADA-IOT Platform Based Industrial Control System: Using R-CNN	Co-Supervisor	Ongoing (2019 – present)

Master by Research				
No.	Name	Topic	Supervision	Status
1	Eng Kai Lun	Variable Neighborhood Search for Grid Scheduling Problem	Main	Feb 2016 – Feb 2018 (promote to PhD)
2	Zaid Fawaz Jarallah Al Hadawa	Optimise Network Lifetime With Mobile Sink In Wireless Sensor Network	Main	Completed (2014 – 2017)
3	Jamilu Yahaya Maipan-uku	Heuristic Approaches for Efficient Grid Task Scheduling Problem	Main	Completed (Sept 2014 – June 2016)
4	Dewi Puspa Suhana Binti Ghazali	Propose Indexing Technique To Compute The Data Cube Analysis Over Big Data Environment	Co-supervisor	Withdraw (2014-2018)
5	Syarulakma Abd Azis	Layer 2 Service Profiling Data Optimization For Vdsl Multiservice Access Node Dslam On Copper Physical Network With Impairment To Improve Internet Bandwidth	Co-supervisor	Withdraw (2014-2017)
6	Ammar Yaseen Tuama	Efficient and Secured Compression and Steganography Technique in WSN	Co-supervisor	Completed (2016)
7	Noaman	Efficient Resource Management for	Co-	Completed

	Abduljabbar Ramadhan	Uplink Scheduling in IEEE 802.16e Standard	supervisor	(2016)
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<b>Master Project (Without Thesis)</b>				
<b>No.</b>	<b>Name</b>	<b>Topic</b>	<b>Supervision</b>	<b>Status</b>
1	Al Hashimi Mustafa Ahmed Adnan	Real Time Communication of NB-IOT based on Fog Computing for An Energy Conserved Smart City Lighting	Main	Completed (08-10-2020)
2	Harith Hani Abduljabbar	Improving Privacy-Preserving Cloud Storage utilising Computational Intelligence and A Three Layer Privacy Framework	Main	Completed (12-03-2020)
3	Al-Hafidh Bakr Mohammed Abdulahadi	Optimal channel feedback in FDD massive MIMO systems using An Angle-of-Departure (AoD)	Main	Completed (08-08-2019)
4	Humam Seleem Khudair	Routing protocols in WBAN for healthcare application	Main	Completed (Feb 18 – present)
5	Shamsudin Bin Mat Ali	A Dynamic Service Control for Improving Users Equilibrium Performance in M/M/1 Queuing System	Main	Completed (July 2018)
6	Kuganesh Kumar	User customization approach to optimize cost and resource usage in cloud	Main	Completed (Jan 2017)
7	Pia Dorra Mohamed Kassim	Improving Throughput Of Tcp Flows By Utilizing Tcp-Aware Backpressure Scheduling	Main	Completed (Jan 2017)
8	Ahmed Shain Haleem	Optimal Channel Assignment For Multi-Hop Wimax Mesh Networks	Main	Completed (2016)
9	Afshin Amini	An Optimal Grid Job Scheduling Algorithm in Dynamic Grid Environment	Main	Completed (2015)
10	Ahmad Shubki Saad	A Modified BCMS Algorithm for Efficient Flow Scheduling in Fat Tree Data Center Network	Main	Completed (2015)
11	Ummulakhir Binti Sulaiman	Energy efficiency scheduling mechanism for wireless sensor network	Main	Completed (2014)
12	Fathuddin Mohd Abbas	Heuristic Approaches for Solving Grid Scheduling Problem	Main	Completed (2013)
13	Jazrin Ramli	Modified Weighted Round Robin	Main	Completed



		algorithm for WiMax Network		(2013)
14	Noor Hasnita Abdul Talib	Performance Evaluation of Blue Active Queue Management	Main	Completed (2007)
15	Kyairulniza Md Salleh	Optimum Packet Size of Voice Packet in The FIFO Adversarial Queuing Model	Main	Completed (2007)
16	Hairani Ghazali	Performance Comparison of Architecture Design for AES Algorithm using Systolic Structures	Main	Completed (2007)
17	Ruzaha Abdul Rashid	Performance Analysis of Green Active Queue Management	Main	Completed (2006)
18	Fadzlina Mohammad Azmi	Energy and QoS in Wireless Sensor Networks	Main	Completed (2006)

<b>Bachelor Project</b>				
<b>No.</b>	<b>Name</b>	<b>Topic</b>	<b>Supervision</b>	<b>Status</b>
1	Zhang Jiakang	IoT based Mobile Application Development for Water Pollution Detection	Main	Ongoing (2022)
2	Nur Amirah Zhafira Binti Zulkfli@Zulkifli	Monitoring Oil Palm Fresh Fruit Bunch (FFB) for Effective Harvest	Main	Ongoing (2022-2023)
3	Nur Aqilah Binti Shukiman	Detection of Palm Oil Leaf Disease	Main	Ongoing (2022-2023)
4	Nur Dini Balqis binti Mohd Azam	Real-Time Tour Bus Tracking System With Traffic Congestion Application Using Google API	Main	Ongoing (2022-2023)
5	Nur Azrida Binti Baharun	Student E-Merit Application	Main	Completed (2021-2022)
6	Nur Amirah Binti Ahmad Bustamam	Marketplace For Household Services (E-Services)	Main	Completed (2021-2022)
7	Siti Nur Haziqah Binti Arifin	Hospital Scheduling For Doctor And Nurse Rostering Problem	Main	Completed (2020-2021)
8	Nur Asmida Binti Yusoff	Smart Based Student's Attendance Tracking Management System Using Multi-Factor Authentication and Validation of GPS with integration of Smart Digital Classroom Technology Teaching Assistant	Main	Completed (2020-2021)
9	Ong Shi Li	Heartbeat Detection and Monitoring Mobile Application	Main	Completed (20 Dis 2019)
10	Nor Hidayah Binti Ahmad	Sensor Network For Heart Beat Detection Application	Main	Completed (20 Dis

	Zaini			2019)
11	Nur Farahin Eliah Binti Nasaruddin	University Exam Timetabling Using Graph Colouring Heuristic	Main	Completed (21 Dis 2018)
12	Badrusyahmin Bin Othman	University Examination Scheduling Using Constructive Heuristic	Main	Completed (21 Dis 2018)
13	Siti Fadhilah Binti Rozali	Heuristic Based Task Scheduling In Cloud Computing	Main	Completed (Jan 2018)
14	Fazren Nur Afika Binti Hamran	Max-Min Algorithm Based Batch Mode Heuristic Approach For Efficient Space-Shared Scheduling In Cloud Computing	Main	Completed (Jan 2018)
15	Puteri Nurasmira Raja Ahmad	An Extended Min-Min Algorithm for Efficient Task Scheduling in Grid Computing System	Main	Completed (Jan 2017)
16	Mohamed Arsat Mohamad Ali Renga	An Extended Max-Min Algorithm for Efficient Task Scheduling in Grid Computing System	Main	Completed (Jan 2017)
17	Tengku Syazwani Raja Abllah	LAN based Voice Chat Mobile Application	Main	Completed (2016)
18	Teo Hao Chuan	LAN based Broadcast Voice Chat Mobile Application	Main	Completed (2016)
19	Eng Kai Lun	Network Proactive Maintenance Automation	Main	Completed (July 2015)
20	Chong Jaw Chu	Ants Children Theater Customer Relation System	Main	Completed (July 2015)
21	Nurul Ain Abdul Hisham (FEM)	Meeting Room Booking System	Main	Completed (July 2015)
22	Raeedah Sayed Farook	PUTRA-Summon Android Application	Main	Completed (July 2015)
23	Nur Aziema Husni	Medical Specialist Appointment System for High Risk Patients	Main	Completed (2014)
24	Siti Hajar Md Umar	Library's Mobile Application for University Students	Main	Completed (2014)
25	Yew Keat Yat	Real Time Mobile ATM Locator Application for Android Smartphone User using Location-Based Service	Main	Completed (2014)
26	Muhamad Haziq Badrul Hisham	Personal Scheduling Diary	Main	Completed (2012)
27	Mohd Izami Rosli	Personal Scheduling Application for Android Smartphone User	Main	Completed (2012)
<b>** Having had supervised 53 undergraduate students between year 2002 and 2007</b>				

<b>PhD Thesis Examiner (Internal/External)</b>				
<b>No.</b>	<b>Name</b>	<b>Topic</b>	<b>Examiner</b>	<b>Status</b>
1	P. Thiruvannamalai Sivasankar Sathyabama University, India	Predetermine the Cluster Head in a Secure and Energy Efficient Way to Increase the Lifetime of the Wireless Sensor Network	External (India)	Oct 2017
2	Nadim K M Madi	Downlink Radio Resource Management for Enhancing Qos Of Multimedia Services In Lte Networks	Internal	30 Aug 2018
3	Zulaile Binti Mabni	A Cluster-based Hybrid Replica Control Protocol for High Availability in Data Grid	Internal	4 Feb 2019
4	Maizura Binti Ibrahim	A Ucon and Semantic based Grid Authorisation Framework with the Elimination of Irrelevant Authorisation Rules Set Algorithm	Internal	9 Jul 2019
5	Azmi Shawkat Abdulbaqi Universiti Pendidikan Sultan Idris	Hybrid Method for ECG Signal Compression based DWT and PCA	External (UPSI)	21 Jan 2020
6	Kuan Yik Junn	Cooperative Search Methodology for Complex Combinatorial Optimization Problems	External (UMS)	20 October 2020
7	Al Emran Ahmed Ali Hussein	Hybrid Ear Recognition Framework Based On Passive Human Identification	External (UPSI)	26 Aug 2021
8	Mazen Farid Ebrahim Ramadhan	Scientific Workflow Scheduling Algorithms in Cloud Environment for Satisfying QoS Requirements	Internal	14 July 2022
9	Fazlina Binti Mohd Ali	Enhanced Replication Strategy with Balanced Quorum Technique And Data Center Selection Method In Cloud Environment	Internal	9 March 2022
10	Al-Saih Mohammed Abdurabu Manea	Qos Scheduling for Independent And Scientific Workflows In Cloud Computing	Internal	7 July 2022

11	Nwogbaga Nweso Emmanuel	Optimisation of IoT Network Quality Of Service (QoS) In A 3-Tier Mobile-Fog-Cloud Systems, via Computational Offloading Based On Attributes Reduction Approach	Internal	16 March 2022
12	Abdul Karim Kazi	Enhancing Packet Delivery in Intelligent Transportation System (ITS)	External/Thesis Reviewer NED University Of Engineering & Technology, Pakistan	21 June 2022

<b>Master Thesis Examiner (Internal/External)</b>				
<b>No.</b>	<b>Name</b>	<b>Topic</b>	<b>Examiner</b>	<b>Status</b>
1	Teh Shan Shan	Enhancing The Performance of University's Website for Mobile Devices based on Response Web Design Approach	External UMS	Sept 2016
2	Alaa Omer Najim	Channel Aware Downlink Scheduling Using Delay Weight for Quality of Service in Long Term Evolution Network	Internal	Dis 2017
3	Mansour Hassani Abdalla	Cooperative Search for Solving Curriculum based University Course Timetabling Problem	External UMS	Sept 2018
4	Noorsuziyante Binti Mat Napi	Triage and Prioritization Framework for Remote Chronic Heart Disease Patients Based on Triplex Models	External UPSI	6 August 2019
5	Amirulihsan Bin Mohamad	A New Authentication Technique based on User Experience	External UNISZA	17 Dec 2019
6	Tan Li June	Fuzzy Logic Incorporate With Multi-Agent System for Solving Course Timetabling Problems	External UMS	15 Dec 2019
7	Hamizan Bin Suhaimi	An Immune-Genetic Algorithm with Local Search for Network Intrusion Detection System	External UiTM	12 Nov 2020
8	Siti Nabilah Binti Basarang	Enhancement of K-Nearest Neighbourhood in Optimizing the Selection of Distribution Centre for Disaster Relief Operation	External USIM	20 <sup>th</sup> Oct 2020
9	Fatin Fazain Binti Mohd Affandi	A MANET Mobility Model for Disaster Rescue Teams to	External UNISZA	16 Aug 2022

		Enhance Network Performance in Post-Disaster Area		
10	Saravid A/L Suchaad	Implementation of Blockchain on Home Automation for Privacy	External Malaysia-Japan International Institute of Technology (MJIT)-UTMKL	23 May 2022

Chairman of Viva Voce				
No.	Name	Topic	Level	Status
1	Haqi Khalid Ismail	Jacobian Coordinates for Tate Pairing with Provacy-Protection of Machine-to-Machine Authentication Groups in LTE/LTE-A Networks	Master by Research	5 Sept 2018

## H. Publications

### a. Cited Journals (Scopus and Thompson Reuters)

No	Name of Writer (s)	Year	Title	Name of Journal	Vol. (No.)	Page Number
1	Ahmed, B., Hamdan, H., Muhammed, A., Husin, N.A.	2022	Review on the parameter settings in harmony search algorithm applied to combinatorial optimization problems	Indonesian Journal of Electrical Engineering and Computer Science	27(1)	pp. 431–441
2	Murad, S.S., Badeel, R., Alsandi, N.S.A., ...Muhammed, A., Derahman, M.	2022	Optimized Min-Min Task Scheduling Algorithm for Scientific Workflows in A Cloud Environment	Journal of Theoretical and Applied Information Technology	100(2)	pp. 480–506
3	Badeel, R., Subramaniam, S.K., Hanapi, Z.M., Muhammed, A.	2021	A review on LIFI network research: Open issues, applications and future directions	Applied Sciences (Switzerland)	11(23)	11118
4	Sa'ad, S., Muhammed, A., Abdullahi, M., Abdullah, A., Ayob, F.H.	2021	An enhanced discrete symbiotic organism search algorithm for optimal task scheduling in the	Algorithms	14(7)	200

			cloud			
5	Adnan, A., Muhammed, A., Ghani, A.A.A., Abdullah, A., Hakim, F.	2021	An intrusion detection system for the internet of things based on machine learning: Review and challenges	Symmetry	13(6)	1011
6	Susana B. Mazikua, A. R. Rahiman, <b>Abdullah Muhammed</b> , Mohd Taufik Abdullah	2020	A novel Framework for Identifying Twitter Spam Data Using Machine Learning Algorithms	Journal of Southwest Jiaotong University	Vol 55, No 5	-
7	Ali Y. Aldailamy,JY Maipan-uku, <b>Abdullah Muhammed</b>	2020	Heuristic Task Scheduling Algorithms for Optimal Resource Utilisation In Grid Computing	International Journal of Advanced Research in Engineering and Technology	Volume 11, Issue 12,	pp.1099-1107
8	A Adnan, <b>A Muhammed</b> , AA Abd Ghani, A Abdullah, F Hakim	2020	Hyper-Heuristic Framework for Sequential Semi-Supervised Classification Based on Core Clustering	Symmetry	12 (8),	1292
9	E. Kailun, <b>A. Muhammed</b> , MA Mohamed, S. Hasan	2020	A Hybrid Heuristic of Variable Neighbourhood Descent and Great Deluge Algorithm for Efficient Task Scheduling in Grid Computing	European Journal of Operational Research (Q1 Thompson Reuters)	284(1)	75-86
10	Ghaleb, S.M., Subramaniam, S., Zukarnain, Z.A., <b>Muhammed, A.</b> , Ghaleb, M.	2019	An efficient resource utilization scheme within PMIPv6 protocol for urban vehicular networks.	PLoS ONE	14(3)	e0212490
11	Mamman, M., Hanapi, Z.M., Abdullah, A., <b>Muhammed, A.</b>	2019	Quality of service class identifier (QCI) radio resource allocation algorithm for LTE downlink	PLoS ONE	14(1)	e0210310
12	E. Kailun, <b>A. Muhammed</b> , MA Mohamed, S. Hasan	2019	A Great Deluge Algorithm with Bi-Decay Rate for Efficient Task Scheduling in Grid Computing	Journal of Computer Science	15(3)	313-320
13	Kadir, M.F.A.,	2019	Performance	Lecture Notes	-	211-218

	Mohamed, M.A., Mohamad, R., Mamat, M., <b>Muhammed, A.</b>		comparison of some addition chain methods based on integer family	in Electrical Engineering 514		
14	Ghaleb, S.M., Subramaniam, S., Zukarnain, Z.A., <b>Muhammed, A.</b>	2018	Load balancing mechanism for clustered PMIPv6 protocol	Eurasip Journal on Wireless Communicati ons and Networking	2018 (1)	135
15	Alanzy, M., Latip, R., <b>Muhammed, A.</b>	2018	Range wise busy checking 2-way imbalanced algorithm for cloudlet allocation in cloud environment	Journal of Physics: Conference Series	1018 (1)	012-018
16	Shareef, Z.A., Hussin, M., Abdullah, A., <b>Muhammed, A.</b>	2018	Class-based QoS scheduling of WiMAX networks	Journal of High Speed Networks	24(4)	345-362
17	Konjaang, J.K., Ayob, F.H., <b>Muhammed, A.</b>	2018	Cost effective Expa- Max-Min scientific workflow allocation and load balancing strategy in cloud computing.	Journal of Computer Science	14(5)	623-638
18	A. Y. Tuama, MA Mohamed, <b>A Muhammed</b> , ZM Hanapi	2018	Recent Advances of Data Compression in Wireless Sensor Network	Journal of Engineering and Applied Sciences	13(21)	9002-9015
19	Maharazu, M., Hanapi, Z.M., Abdullah, A., <b>Muhammed, A.</b>	2018	Call admission control for real-time and non- real-time traffic for vehicular LTE downlink networks	Lecture Notes in Electrical Engineering	425	46-53
20	E. Kailun, <b>A. Muhammed</b> , MA Mohamed, S Hasan	2017	Incorporating the Range-Based Method into GridSim for Modeling Task and Resource Heterogeneity	IEEE Access (Q1 Thompson Reuters)		19457- 19462
21	Mamman, M., Hanapi, Z.M., Abdullah, A., <b>Muhammed, A.</b>	2017	An Adaptive Call Admission Control with Bandwidth Reservation for Downlink LTE Networks	IEEE Access (Q1 Thompson Reuters)	5	10986 - 10994
22	Hussin, M., <b>Muhammed, A.</b> , Mahmood, Y.M.R.A.R.	2017	An adaptive energy allocation for high- performance computing systems using a cyber- physical approach	Advanced Science Letters	23(6)	5045-5049
23	E. Kailun, <b>A.</b>	2017	A Great Deluge	Journal of	-	accepted

	<b>Muhammed</b> , MA Mohamed, SHasan		Algorithm with Bi- Decay Rate for Efficient Task Scheduling in Grid Computing	Computer Science		
24	Noma, A.M., <b>Muhammed</b> , A., Mohamed, M.A., Zulkarnain, Z.A.	2017	A review on heuristics for addition chain problem: Towards efficient public key cryptosystems	Journal of Computer Science	13 (8)	275-289
25	J.K. Konjaang, F.H. Ayob, <b>A. Muhammed</b>	2017	An Optimised max- min scheduling algorithm in cloud computing	Journal of Theoretical and Applied Information Technology	95 (9)	1916-1926
26	AM Noma, <b>A Muhammed</b> , ZA Zukarnain, MA Mohamed	2017	Iterative Sliding Window Method for shorter number of operations in modular exponentiation and scalar multiplication	Cogent Engineering	4(1)	1304499
27	A. Y. Tuama, MA Mohamed, <b>A Muhammed</b> , ZM Hanapi	2017	A new Compression Algorithm for Small Data Communication in Wireless Sensor Network	International Journal of Sensor Networks	25(3)	163-175
28	M Hussin, Abdullah, <b>A Muhammed</b> , NA Abdul Hamid	2016	Adaptive Multi- Tenancy Policy for Enhancing Service Level Agreement through Resource Allocation in Cloud Computing	International Journal of Computer Networks & Communicati ons (IJCNC)	8(4)	59-69
29	O Seifaddini, A Abdullah, <b>A Muhammed</b> , M Hussin	2016	Great Deluge and Extended Great Deluge Based Job Scheduling in Grid Computing Using GridSim	Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence/Bi oinformatics	9787	292-302
30	JY Maipan-uku, <b>A Muhammed</b> , A Abdullah, M Hussin	2016	Max-Average: An Extended Max-Min Scheduling Algorithm for Grid Computing Environment	Journal of Telecommuni cation, Electronic and Computer Engineering (JTEC)	8(6)	43-47
31	AM Noma, MA Mohamed, <b>A Muhammed</b> , ZA Zukarnain	2016	An initial solution for addition chain problem	Journal of Engineering and Applied Sciences	11(3)	640-643



32	SM Ghaleb, S Subramaniam, ZA Zukarnain, <b>A. Muhammed</b>	2016	Mobility management for IoT: A survey	EURASIP Journal on Wireless Communications and Networking	2016(1)	1-25
33	M. Maharazu, Z.M. Hanapi, A. Abdullah, <b>A. Muhammed</b>	2016	High data rate scheduling algorithm for downlink LTE network	International Journal on Communications Antenna and Propagation	6(6)	354-361
34	S. F. Jalal, M. Hussin, <b>A. Muhammed</b> , R. Latip.	2015	Cost-Effective Scheduling Analysis Through Discrete Event Simulation for Distributed Systems	Algorithms and Architectures for Parallel Processing of the series Lecture Notes in Computer Science	9531	743-755
35	M. A. Mohamed, M.N. Derahman and <b>A. Muhammed</b>	2015	On the Improved Distance Vector Routing Protocol for UDP Traffic	Contemporary Engineering Sciences	8(13-16)	653-666
36	M.A. Mohamed, <b>A. Muhammed</b> and M.Man	2015	A Secure Chat Application based on Pure Peer-to-Peer Architecture	Journal of Computer Science	11(5)	723-729
37	M.A. Mohamed, <b>A. Muhammed</b> , M.N. Derahman and M.S. Supu	2013	Performance Evaluation of IDSDV over DSDV for Specific Traffic Pattern	World Applied Sciences Journal	26(4)	553-559

#### b. Non-cited Journal

No	Name of Writer (s)	Year	Title	Name of Journal	Vol. (No.)	Page Number
1	AR Rahiman, NA Ramadhan, <b>A. Muhammed</b> , ZA Zulkarnain	2017	Efficient Resource Management for Uplink Scheduling in IEEE 802.16 e Standard	Advances in Science, Technology and Engineering Systems Journal	2(1)	263-268
2	O.K. Akram, D.J. Franco, S. Ismail, <b>A. Muhammed</b> , A. Graca	2016	Promoting Heritage Management in New Smart Cities: Evora City, Portugal as A Case Study	International Journal of Engineering Technology, Management and	4(9)	

				Applied Sciences		
3	M.N. Derahman, M.A. Mohamed, <b>A. Muhammed</b> , A Abdullah, M.N. Basery, S. Baharom and M.K. Abdullah	2014	Home Switch Automation System Based on Ultra Low Power Wireless Solution	International Journal of Information Processing and Management	5(2)	58-69
4	A. Abdullah, N. Ramly, <b>A. Muhammed</b> and M. N. Derahman	2009	A Performance Study Of Routing Protocols For Mobile Grid Environment	Journal of ICT, UUM	8(1)	41-54
5	<b>A. Muhammed</b> , K.M. Saleh and A. Abdullah	2008	Performance Comparison of Voice Packet Sizes in the FIFO Adversarial Queuing and FIFO M/M/1 Model	International Journal of Computer Science and Network Security (IJCSNS)	8(1)	222-227
6	A. Abdullah, N. Ramly, <b>A. Muhammed</b> and M. N. Derahman	2008	Performance Comparison Study of Routing Protocols for Mobile Grid Environment	International Journal of Computer Science and Network Security (IJCSNS)	8(2)	82-88

#### c. Book(s)

No	Name of Author(s)	Year Published	Title	Publisher
1	A. Abdullah, <b>A. Muhammed</b> and S. Hasan	2006	Introduction to Data Communication and Computer Network (ISBN: 983-3655-27-0)	Prentice Hall (Pearson Malaysia)

#### d. Chapter(s) in Book

No	Name of Author(s)	Year Published	Title	Publisher
1	A. Abdullah, <b>A. Muhammed</b> , M. A. Mohamed, M. N. Derahman, Z. M. Hanapi, Z. A. Zukarnain, M. T. Abdullah and R. Abdullah	2014	Chapter 2: May Day, May Day! (In A Case Study for Computer Science Application)	UPM Press
2	Waidah Ismail, <b>Abdullah Muhammed</b> , Nurezayana Zainal, Ismail Ahmeh Al-Qasem Al-Hadi, Radhi Rafiee	2020	Intelligent Rehabilitation Volume 1	USIM

#### e. Proceeding(s)

No	Name of Writer(s)	Year	Title	Name of Seminar/Conference	Page Number
1	A. Aldailamy, <b>A. Muhammed</b> , W. Ismail, A. Radman	2018	Load Management Evaluation of HBase and Cassandra Databases Using YCSB	The International Conference on Innovations in Computer Science and Engineering (iCiCSE2018)	accepted
2	Adamu Noma and <b>Abdullah Muhammed</b>	2018	Stochastic Heuristic Approach to Addition Chain Problem in PKC for Efficiency and Security Effectiveness	The International Conference on Innovations in Computer Science and Engineering (iCiCSE2018)	accepted
3	M. Husin, R.A.R Mahmood and <b>A. Muhammed</b>	2015	On Discrete Event Simulation of Time-variance Defense Mechanism against Low-Rate Denial of Service	The 4th International Conference on Computer Science and Computational Mathematics (ICCSCM 2015)	560-564
4	E. Behraves, O. Seifaddini, A. Abdullah, M. Hussin and <b>A. Muhammed</b>	2014	Security Enhancement of a Distributed Cloud-based Image Processing Service	The 2 <sup>nd</sup> NatGrad Conference, UNITEN	1-4
5	O. Seifaddini, A. Abdullah, <b>A. Muhammed</b> and M. Hussin	2014	Performance Assessment of Mobile Computation Offloading	The 4 <sup>th</sup> World Congress on Information and Communication Technologies, Malacca	129-133
6	<b>A. Muhammed</b> and G. Kendall	2009	A Mathematical Model for Exam Timetabling Problem	The SCOR conference, University of Lancaster, United Kingdom	-
7	<b>A. Muhammed</b> , K. M. Salleh and A. Abdullah	2007	Optimum Packet Size of Voice Packet in The FIFO Adversarial Queuing Model	In Proceedings of the IEEE Asia-Pacific Conference on Applied Electromagnetics (APACE 2007), 4 – 6 Dec 2007, Malacca	1-6
8	<b>A. Muhammed</b> , F. M. Azmi and M. Othman	2007	Energy and QoS in Wireless Sensor Networks	<a href="mailto:CompScience@putra">CompScience@putra</a> , Faculty of Computer Science and Information Technology, University Putra Malaysia, Malaysia	Issue 1 (Jan-Dec 2006)
9	<b>A. Muhammed</b> , M. N. Derahman and T. H. Kin	2006	Performance Evaluation Of Enhanced Blue Active Queue Management	Accepted Abstracts for Regional Postgraduate Conference on Engineering and Science (RPCES), UTM Skudai	-
10	R. A. R Mahmood, M. Othman and <b>A. Muhammed</b>	2004	An Experimental IPv6 Testbed System with Mobile IPv6	Proceedings of Information Technology Colloquium (INTEC), FSKTM UPM	1-7

#### f. Keynote Speech and Seminar Papers Presented

No	Name of Writer(s)	Title	Name of Seminar/ Conference	Organiser	Place	Date
1	<b>A. Muhammed</b>	Optimisation Approaches for Distributed System	<b>Keynote Speaker</b> for RESECS2017	Maltesas	Bandung, Indonesia	28-30 Nov 2017
2	<b>A. Muhammed</b>	The Power of Scheduling in Optimisation Research	<b>Keynote Speaker</b> for 2016 International Symposium of Information and Internet Technology (SYMINTCH2016)	Maltesas	Malacca	26 Jan 2016
3	J. Y. Maipanku, <b>A. Muhammed</b> , M. Hussin and A. Abdullah.	Max-Average: An Extended Max-Min Scheduling Algorithm for Grid Computing Environment.	The 3rd International Conference on Communication and Computer Engineering (ICOCOE) 2016	Maltesas	Bandung, Indonesia	15-17 March 2016
4	O. Seifaddini, A. Abdullah, <b>A. Muhammed</b> and M. Hussin	Performance Assessment of Mobile Computation Offloading	The 4 <sup>th</sup> World Congress on Information and Communication Technologies, Malacca	UTeM/ IEEE	Malacca	8 -11 Dec 2014
5	<b>A. Muhammed</b> , K. M. Salleh and A. Abdullah	Optimum Packet Size of Voice Packet in The FIFO Adversarial Queuing Model	In Proceedings of the IEEE Asia-Pacific Conference on Applied Electromagnetics	UTeM/IEEE	Malacca	4 - 6 Dec 2007

#### g. Other Presentation (Poster/Product/Exhibition/Showcase)

No	Name of Writer(s)	Title	Name of Seminar/Conference/Exhibition	Organiser	Place	Date
1	M. Hussin, <b>A. Muhammed</b> , R. A. R. Mahmood, S. F. Jalal	Cloud Service Charging System Under One Roof Mobile Application	International Intellectual Exposition 2017 (IIEEX 2017)  <b>Won Bronze Medal</b>	Malcourse	Kuala Lumpur	29 April 2017
2	Teo Hao	LAN based	Network week's	FSKTM	UPM	2016

	Chuan and <b>A. Muhammed</b>	Broadcast Voice Chat Mobile Application	FYP poster presentation  <b>Won Grand Prize</b>			
3	S.H. M. Umar and <b>A. Muhammed</b>	Library's Mobile Application for University Students	Exhibition (Poster)	FSKTM	UPM	2014
4	W. Ismail, A. Muhammed, M. Bahri	Intelligence Rehabilitation	International Conference and Exposition on Inventions by Institutions of Higher Learning (PECIPTA)  <b>Won Silver</b>	PECIPTA-19/UTHM	Batu Pahat	22-23 Sept 2019

## I. Research activities

### a. Research Grants

No	Title	Role (Main/Co-researcher)	Sponsor/Grant and Amount (RM)	Period (year)	Status (Completed/Ongoing)
1	Adaptive Dynamic Data Replication and Placement Algorithms for Optimal Data Access and Storage Service Cost in Heterogenous Multi-Cloud Environment	Principal Investigator	111,800.00 (FRGS)	3	Ongoing (2021-2024)
2	A Great Deluge Algorithm with Novel Bi-Decay Rate for Efficient Job Scheduling in Grid Computing Environment	Principal Investigator	71,000.00 (FRGS)	3	Completed (2014-2017)
3	Intellirehab – Intelligent Medical System with Customised Exercises for Personalised Home Telerehabilitation	UPM Principal Investigator	1,181,334.00 (International Grant- Newton Ungku Omar Fund)	2 years and 10 months	Completed (1 Nov 2016 – 1 Sept 2019)
4	"IoSRocks" - A Field Hockey Performance Analysis Tool in Off The Field Practices	Co-researcher	60,000.00 (PRGS)	2	Completed (2017-2018)
5	Optimal Addition Chain for Efficient Scalar	Co-researcher	83,200.00 (FRGS)	3	Completed (2015-2018)

	Multiplication Algorithm in Elliptic Curve Cryptosystem				
6	Generic cost scheme for Cloud services based on General Equilibrium Theory towards effective resource sharing in multi-tenant environment	Co-researcher	81,000.00 (FRGS)	2	Completed (2013-2015)
7	A secure resource provisioning mechanism for high reliability using trust and recovery methods in intercloud environment	Co-researcher	90,000.00 (FRGS)	4	Completed (2014-2018)
8	Achieving Optimal Addition Chain for Integers $2^{m+1}-1$ to Increase Efficiency of Elliptic Curve Cryptosystem	Co-researcher (registered in UNISZA, local PI)	118,000.00 (FRGS)	3	Ongoing (2019-2020)
9	Adaptive Dynamic Data Replication and Placement Algorithms for Optimal Data Access and Storage Service Cost in Heterogenous Multi-Cloud Environment	Principal Investigator	111800.00 (FRGS)	3	Ongoing (2021-2024)
10	MPOB-UKM Endowment – Aplikasi Baja Sawit	UPM Principal Investigator	20,000.00 (MPOB)	1	Ongoing (2021-2022)
11	Erasmus Project with University of Pardubice	Principal Investigator	-	3	Ongoing (2021-2024)

## J. Consultation activities

### Consultation Project(s)

No	Name of Consultant	Name of Project/Program	Sponsor	Amount (RM)	Year	Status (Completed/ Ongoing)
1	A. Muhammed	German Malaysia Institute (GMI) <b>External Verifier</b>	GMI	2,500.00	10-14 Dec 2007	Completed
2	A. Muhammed	<b>Industrial Advisor Panel</b> for the Diploma Programme, Diploma in Business Information System, Department of Polytechnic Education, MoHE	MoHE	-	April 2017	Completed
3	A. Muhammed	<b>Program Advisor:</b> Diploma in Information	CICT	-	2014-2017	Ongoing

		Technology and Diploma in Cyber Forensic, Cybernetics International College of Technology				
4	A. Muhammed	<b>Interviewer Panel</b> For MoHE Scholarships (Malaysia International Scholarship)	MOHE	-	23-24 May 2016	Completed

#### K. Extension and other public services

No	Name of Activity/Project/ Program	Organiser	Place	Date
1	Journal Review	IEEE Transactions on Cybernetics	-	2020-2021
2	Journal Review	Advances in Science, Technology and Engineering Systems Journal (ASTESJ)	-	2020, 2021
3	Journal Review	Natural Hazards	-	2020
4	Journal Review	IEEE Access	-	2019-2020
5	Journal Review	Computer Network - Elsevier	-	2020
6	Journal Reviewer	Discrete Mathematics - Elsevier	-	Dec 2018- Jun 2019
7	Journal Reviewer	Journal of King Saud University – Computer and Information Sciences	Saudi Arabia	May 2018
8.	Journal Reviewer	International Journal of Software Engineering & Computer Systems (IJSECS)	Universiti Malaysia Pahang (UMP)	Jan/Jun 2017
9.	Journal Reviewer	Journal of Computer Science	Science Publications Adelaide, Australia	May 2017
10	Expert Reference for High Performance Computing Course (SKR4202)	Department	UPM	2013
11	International Conference Committee	The International Conference on Electrical and Electronics Engineering, Clean Energy and Green Computing (EEECEGC 2013)	Dubai, United Arab Emirates	2013
12	International Conference Committee	The International Conference on Digital Information Processing, E-Business and Cloud Computing (DIPECC 2013)	Dubai, United Arab Emirates	2013
13	Expert Reference – Industrial training	Faculty	UPM	2013, 2014 – 2017

14	Track Chair: Communication Network and Distributed Systems	The International Conference on Innovations in Computer Science and Engineering (iCiCSE2018)	Kuching, Sarawak	30 - 31 July 2018
15	Track Chair: Communication Network and Distributed Systems	The International Conference on Innovations in Computer Science and Engineering (iCiCSE2019)	Bintulu	TBA
16	General Chair	The 33rd International Conference on Information Networking (ICOIN2019)	Kuala Lumpur	9-11 Jan 2019
17	Assessor/Evaluator	Penilaian Permohonan Geran Putra IPS	UPM	7 Dis 2018

#### **L. Involvement in professional association/organisation/body**

No	Name of Association/Organization/Body	Role (President/Secretary/Committee Member/Ordinary Member)
1	IEEE Internet of Things	Member
2	International Association of Computer Science and Information Technology (IACSIT)	Member
3	International Association of Engineers (IAENG)	Member
4	International Desktop Grid Federation	Member
5	The Society of Digital Information and Wireless Communications	Member
6	Universal Association of Computer and Electronics Engineers	Associate Member
7	Malaysian Board of Technologists (MBOT)	Member

#### **M. Involvement in student development**

No	Name of Program	Organiser	Role (Facilitator/Speaker/Others)	Date
1	Academic and Social Activities	Network Club	Head of The Department (Often officiate the ceremony)	2014 - 2017
2	Student Debate	Network Club	Judger	2014
3	Network Club Annual GM	Network Club	Speaker	2014, 2015, 2016
4	Student Academic Advisor	Department	Advisor	2004 - present
5	Network Week 2017	Department	Chairman	2017
6	Network Week 2018	Department	Deputy Chairman	4 Dec 2018

#### **N. Industry and Communities**

No	Name of Program	Description/Program	Role (Facilitator/Speaker/Others)	Date
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1	Collaboration with University of Pardubice, Czech Republic	Erasmus+ Fund, SDN training between University Secured Erasmus+ Grant in 2020	Head of Project	2019 - present
2	Collaboration with MIRA Ltd United Kingdom, ProvenPac, HUSM and USIM	Intellirehab System (Responsible for Data Access Optimisation)	Head of Project (UPM)	2016 - 2019
3	Huawei Training	Certification programme for Undergraduate Student	Head of Project	2017
4	Network Week 2017	Series of Industrial Talks, Mini Exhibition/Competition	Head of Project	2017
5	Malaysian Palm Oil Board (MPOB)	Develop "Aplikasi Mudah Alih Baja Sawit"	Collab with UKM Head of Project (UPM)	Sept 2021 – Aug 2022
6	Program Khidmat Komuniti Taman Tropika Bangi (Remaja)	Mobile Application Development Course	Head of Project	2020-2021
7	International Conference of Interdisciplinary Computer Science and Engineering (ICICSE2020)	Collab with industries organizing the conference	Head of Project Conference Chair	2020
8	Sek Men Tuanku Jaafar	Mobile Application Development Course	Member	2021
9	Global Problem Based Learning (GPBL)	Training – Shibaura University	Member	2017
10	Workshop on IoT for Elderly 2019	Training	Member	2019
11	Perjanjian NDA Program Kerjasama Penyelidikan bersama Industri MIMOS	Collab	Member	2017-2019