



CURRICULUM VITAE



I. PERSONAL PARTICULARS	
Name	Zuraini Binti Zainol (Assoc. Prof. Dr.)
Current Position Faculty / Department	<p>Associate Professor (DS54) Department of Computer Science Faculty of Defence Science & Technology, UPNM</p> <p>Head of Department (1 Feb 2018 – 31 December 2019) Department of Knowledge Technology and Security, Cyber Security Centre, UPNM</p> <p>Head of Department (4 Feb 2016 – 31 Januari 2018) Department of Knowledge Technology and Security, Cyber Security Centre, UPNM</p> <p>Research Fellow (4 Feb 2016 -31 Jan 2018) Department of Knowledge Technology and Security, Cyber Security Centre, UPNM</p> <p>Research Fellow (1 Feb 2018 -31 Dec 2020) Department of Knowledge Technology and Security, Cyber Security Centre, UPNM</p> <p>Research Fellow (1 Jan 2021 -31 Dec 2022) Department of Knowledge Technology and Security, Cyber Security and Digital Industry Revolution Centre, UPNM</p> <p>Programme Coordinator (Sept 2022- now) Master of Science and Cyber Security and Management</p>

II. ACADEMIC AND PROFESSIONAL QUALIFICATIONS

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

Year	Degree	Discipline	University
1998	Bachelor of Science	Computer Science	Universiti Sains Malaysia
2002	Master of Science	Computer Science	Universiti Putra Malaysia
2013	Doctor of Philosophy	Informatics	University of Reading, Reading, UK.
2014	EC-Council Network Security Administrator (ENSA)	Network Security	EC-Council Academy
2017	Certified RapidMiner Analyst	Big Data Analytics	RapidMiner
2017	ENCASE	Digital Forensics	

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

No.	TITLES OF POSTGRADUATE THESES
1	Context-based Activity Design for Analysis and Specifications (PhD)
2	E Support System (Master)
3	The Enhancement of Teleacademic - Intelligent Online Registration System Through Telephone (IORS) (Degree)

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

Year	Position	Organisation	Start and End Date
1998	Lecturer	Academic	Cybernetics International College Of Technology (CICT), Kuala Lumpur
2003	Lecturer	Academic	Akademi Tentera Malaysia (ATMA), Kuala Lumpur
2006	Lecturer	Academic	Universiti Pertahanan Nasional Malaysia (UPNM)
2014	Lecturer	Academic	Universiti Pertahanan Nasional Malaysia (UPNM)

1.0 TEACHING AND SUPERVISION

1.1 First Degree Courses

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

No	Course Title	Semester	Year
1	System Analysis and Design	2	2001
2	Java Programming	1	2002
3	Data Structure using C++	1	2003
4	Discrete Mathematics	2	2003
5	Internet Programming Decision Support System	1	2004
6	Object-oriented Programmin	2	2005
7	Discrete Mathematics Decision Support System	1	2006
8	Discrete Mathematics	1	2007
9	Object Oriented Programming (OOP)	2	2007
10	Introduction to Programming (OOP) Discrete Mathematics		2008
11	Discrete Mathematics Introduction to IT	1	2013
12	Object-oriented Programming (OOP) Introduction to IT	2	2013
13	Discrete Mathematics Introduction to IT	1	2014
14	Object-oriented Programming (OOP)	2	2014
15	Discrete Mathematics	1	2015
16	Data Structure	2	2015
17	Fundamental of Programming	1	Feb 2016
18	Data Mining	2	Sept 2016
19	Data Mining	2	Feb 2017
20	Data Structure	1	Sept 2017
21	Data Mining	2	Feb 2018
22	Data Structures	1	Sept 2018
23	Database Systems	2	Feb 2019
24	Data Structures	1	Sept 2019
25	Introduction to Data Analytics	2	Mac 2020
26	Data Structures	1	Sept 2020
27	Introduction to Data Analytics	2	Mac 2021
28	Data Structures Fundamental of Programming	1	Sept 2022
29	Introduction to Data Analytics	2	Mac 2023

1.2 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	Wan Su Emi Bt Wan Yusof	Establishing of Knowledge based framework with situational awareness	2014	Co- SV	Completed	UPNM
2	Nor Hidayah Daud	Decision support system for Malaysian UN military observer for peacekeeping roles using clustering techniques.	2017	Co- SV	Withdrawn	UPNM
3.	Mohd Shahrizan Abd Rahman	Value Creation Model in Big Data of Oil and Gas Upstream Project Planning Decision Making Based on Ambidextrous Strategy	2021	Co- SV	On-going	UPNM
4	Alisa Rafiqah Binti Adenan	Characterization of Attacks and Vulnerabilities Towards the Development of a Secure IoT-Based Smart Home Network Framework.	2022	Co- SV	On-going	UITM
5	Nur Fahimah Mohd Nasir	Data Leak Risk Level Prediction by Insider Threat in Malaysia's Critical National Information Infrastructure (CNII)	2023	Co- SV	On-going	UPNM
6	Nur Amira Sariaty binti Ruslan	Prediction of Tennis Sports Data in Grand Slam Tournament using Copulas Approach	2023	Co- SV	On-going	UPNM

1.3 PhD External/Internal Examination

(Please list in chronological order)

No.	Name of Student	Project Title	External / Internal	Date of Viva	University
1.	Zaid Amin (P90515)	A Tuning Attention Model (TAM) for Information Sharing Behavior	External Proposal Defense	Jan 2020	IVI, UKM
2.	Mohammad Hafizi Bin Jainal	Teknik Penyahkaburan Makna Perkataan Untuk Semantik Teks Pertanyaan Berasaskan Ontologi	External Proposal Defense	Jan 2020	IVI, UKM
3.	Anis Nur Assila Binti Rozmi (P85670)	Teknik Elisitasi Keperluan Menggunakan Kaedah Campuran Bagi Pembangunan Kerangka Model Sistem Pemilihan Kursus Keusahawanan PKS	External Examiner	Mac 2022	IVI, UKM
4.	Tan Tee Hean	POLYAQG Framework: An Automated Question Generation Framework	External Examiner	Feb 2023	Sunway University

1.4 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	Fuead bin Ali - UPNM	Development Dynamic Services Delivery Model in Wavelength Routed Optical Networks Using GMPLS Frameworks	2016	Co- SV	Completed	UPNM
2	Rabiatul Adawiyah binti Ab. Rashid – UKM	Climate Variability Analysis Using Data Mining	2017	Co- SV	Completed	UKM
3	Wan Muhamad Umarullah Bin Noormanshah	Document Categorization using Decision Tree	2018	Co- SV	Completed	UKM
4.	Nicholas Chan Khin Wai	Using Data Mining for Profiling Customers: A Case Study of Customer Segmentation and Profiling	2018	Co- SV	Completed	Sunway University
5	Siti Saleha Che Hashim	Cluster Analysis Technique For Military Tacit Knowledge	2014	Co- SV	Withdrawn	UPNM
6	Mohd Asraf Albaqry Bin Mohd Azmi	Keyword Pattern Based Clustering Tacit Knowledge in Military Environment	2015	Main Supervision	Withdrawn	UPNM
7	Sharifah Fateen Syuhada bt Syed Lokman (UKM)	A Visualization Technique for Illustrating Temporal Text Analytics	2016	Co- SV	Withdrawn	UKM
8	Megat Muazzam Abdul Mutalib	Mitigation and Eradication Strategy Addressing Malware Threats At Small And Medium Enterprises (SME) Organisation In Malaysia	2020	Main SV	Completed	UPNM/ Warwick University
9	Lt Kdr Norazmi bin Abdul Rahman (TLDM)	Cyber Security Awareness and Practices Towards Fake News in social media: Among Royal Malaysian Navy (RMN) Personnel	2020	Main SV	Completed	UPNM/ Warwick University
10	Vicknesh a/l Gunasingam	Mitigating cyber threats over IoT devices for smart Home: A case study of secured smart lock system	2020	Main SV	Completed	UPNM/ Warwick University
11	Choo Pei Sze	Exploring the Effect of Pandemic to the Retail Sector using Text Analytics Approach	2021	Co- SV	Completed	USM
12	Nishanthinee Velloo	Recommendation System of Consumers' Preferable Choice	2022	Co- SV	Completed	USM

13	Tiffany Toh Qing Wei	Exploring Mental Health Issue Pre and Post Covid on Social Media	2023	Co- SV	Completed	USM
14	Nurul Dyana Razuki	Measuring the effectiveness of Tail Dependence on Return Periods of Multivariate Extreme Rainfall Events in Peninsular Malaysia using Copulas'	2023	Co- SV	On-going	UPNM
15	Kuan Fook Chow	Malware detection using data mining technique.	2023	Main SV	Completed	UPNM

1.5 MSc External/Internal Examination

(Please list in chronological order)

No.	Name of Student	Project Title	External / Internal	Date of Viva	University
1.	Lt Kol Hamdan bin Abdul Rahman	A Study on Risks of Adoption Internet of Things in Malaysian Army Strategic Environment	Internal (Proposal Defense)	2020	UPNM/ Warwick University
2.	Maj Gawreason s/o Vengadalsan	Network Forensic in Network Function Virtualization	Internal (Proposal Defense)	2020	UPNM/ Warwick University
3.	Noor Azwa Azreen Dato' Abd Aziz	Developing Cyber Resilience Strategy for The Critical National Information Infrastructure Sectors In Malaysia	Internal (Proposal Defense)	2020	UPNM/ Warwick University
4	Mej Zainuddin	A study on cyber terrorism perspective among Malaysian Armed Forces	Internal Examiner for Msc In Cyber Security And Management (Mcsm), Upnm – Warwick University, Uk 2019/2020	2021	UPNM/ Warwick University
5.	Muhammad Muhtadi bin Mohamad Khazani	Semantic-Based Knowledge Representation of Al-Quran for Question Answering System	Internal Examiner	September 2022	UPNM

1.6 Supervision (Postgraduate Research Project or Final Year Research Project)

(Please list in chronological order)

No	Name of Student	Project Title	Date of Registration	Role (Main / Co-Supervision)	Status ● Completed ● Submitted ● In Progress
1.	Nadziah Bt Nazar	Sistem Perpustakaan dan buku elektronik di ATMA	2005	Main Supervision	Completed
2.	Nor Azdaleela Binti Azmy	Sistem peminjaman buku di ATMA	2005	Main Supervision	Completed
3.	Janaziah Hassan	Sistem e-pembelajaran Taekwondo Secara Multimedia	2005	Main Supervision	Completed
4.	Hirzan Aris Bin Osman	Sistem Tempahan Makmal	2007	Main Supervision	Completed

		Menggunakan Pengenalan Cap Jari			
5	Ahmad Safuan Bin Jaafar	Sistem Pengurusan Aduan, Penyiasatan dan Keputusan bagi Kor Polis Tentera Diraja	2007	Main Supervision	Completed
6	Sakeenah Bt Ali Badri	Sistem Pengendalian Tugas Harian Pegawai Kadet Menggunakan Teknik Biometrik (Cap Jari)	2007	Main Supervision	Completed
7	Muhammad Hj Abd Latiff	Enjin Carian Projek Sarjana Muda (PSM) berasaskan Web	2007	Main Supervision	Completed
8	Ahmad Feisal Hashram Bin Ahmad Rosdi	Sistem Pengurusan Cawangan Jasmani dan Sukan ATMA Berasaskan Web	2007	Main Supervision	Completed
9	Mohd Hafizul Bin Harun	Steganography Using Image and Audio	2008	Main Supervision	Completed
10	Nor Shahida Bt Mohammed Resli	Sistem Pengurusan Rumah Sakit Angkatan Tentera (RSAT) UPNM Berasaskan Web	2008	Main Supervision	Completed
11	Sirichai Manichorte A/L Sulong	Sistem Pengendalian Tindakan Tatatertib di Kalangan Pegawai Kadet UPNM Secara Intranet	2008	Main Supervision	Completed
12	Abdul Samad Bin Daud	Sistem Penghantaran Fail Sulit ATM	2014	Main Supervision	Completed
13	Muhammad Aimaan Bin Mastahir	Aplikasi Loceng Pintu Berasaskan Teknologi Telefon Pintar	2014	Main Supervision	Completed
14	Muhammad Faiz Nur Bin Rosli	Sistem Tempahan Katering Di Mess Pegawai UPNM Dalam Talian	2014	Main Supervision	Completed
15	Wan Muhammad Aswad Bin Zulkifli	Sistem Pengesahan Kehadiran Peperiksaan UPNM Menggunakan Kod QR	2014	Main Supervision	Completed
16	Muhammad Arif Fikry Bin Mhd Isa	Sistem Pengumpulan Pengetahuan dan Kepakaran bagi Pegawai Tentera	2014	Main Supervision	Completed
17	Group Project (Sanggeetha A/P Joseph Rajah Mohamad Hijan Johari Mohammad Saufi Abdul Rahim Fatin Nabila Nor Azman Muhammad Kharizmi Abdul Shukor	Sistem Parking Berasaskan Web Menggunakan Kod QR	2014	Main Supervision	Completed

18	Mohd Hafizul Bin Makhtar	Sistem Permohonan Kursus Dan Tuntutan	2015	Main Supervision	Completed
19.	Ravivarman A/L Anabalakan	Portal Web Pusat Pengajian Siswazah	2015	Main Supervision	Completed
20.	Noridah binti Abdul Majid	Sentiment mining on online product reviews	2015	Main Supervision	Completed
21.	Nur Hafiza Farhana Binti Aris	Analysis Email for detecting threats	2015	Main Supervision	Completed
22.	Nurul Afiqah Binti Mohd Yusof	Sistem Pengauditan Pengijazahan FSTP	2015	Main Supervision	Completed
23.	Bazli Hijan Norman Kamil	Data Mining Techniques Multiplexer Tool	2016	Main Supervision	Completed
24.	Mohd Tarhamizwan Bin Abdul Hamid Jaymes	VisuaUrText: Text Mining Tools	2016	Main Supervision	Completed
25.	Mohammad Khairul Hazwan Bin Sarihan	Sistem Kesalahan Merit UPNM	2016	Main Supervision	Completed
26.	Nur Shahfiqah Anira Binti Mohd Abd Rahim	E-Palapes UPNM Online	2016	Main Supervision	Completed
27.	Mohammed Hasif Jazlan Bin Mohammed Salleh	Aplikasi Permohonan dan Pinjaman barang di Pusat Sukan UPNM menggunakan Platform Android System	2016	Main Supervision	Completed
28.	Wan Muhamad Umarullah Bin Noormanshah	Sistem Pemantauan Kehadiran Pelajar FSTP	2016	Main Supervision	Completed
29.	Muhammad Munir Izzuddin Bin Shafee	Portal Pengumpulan Pengetahuan dan Kepakaran bagi Pegawai Kadet UPNM	2016	Main Supervision	Completed
30.	Kuan Fook Chao	<i>Document Clustering based on Keywords using SOM technique</i>	2016	Main Supervision	Completed
31.	Mohamad 'Izzat bin Abdullah	<i>Pre-processing Tool for data mining</i>	2016	Main Supervision	Completed
32	Group Project Muhammad Amin Bin Mohd Akhbar Bazli Hijan Bin Norman Kamil Noormas Aiman Bin Noor Rizan	Sistem audit pengijazahan pelajar JSK UPNM	2015	Main Supervision	Completed
33.	Group Project Syarifah Binti Bahraini Muhammad Aslam Fariheen bin Aripin	Sistem Pengurusan Pusat Pengajian Siswazah (PPS) UPNM	2016	Main Supervision	Completed
34	Muhammad Fahim Irsyad	<i>Visualization of Association Rules with FP Growth Algorithm</i>	2016	Main Supervision	Completed

35	Muhammad Al Qawiem Bin Abdul Rani	Pengesahan Data Buatan Menggunakan Teknik Pengelompokan	2017	Main Supervision	Completed
36	Syarifah Binti Bahraini	Perlombongan Pola Buli siber Di Laman Media Sosial Menggunakan Teknik FP-Growth	2017	Main Supervision	Completed
37	Nursafia Binti Azmi	Pengelompokan Data Wabak Denggi di Selangor Menggunakan Teknik K-Means	2017	Main Supervision	Completed
38	Norsyahirah Kamal	Sistem Pemantauan Aset penyelidikan pensyarah Upnm	2017	Main Supervision	Completed
39	Nur Syuhada Binti Bakri	System Kehadiran Pensyarah Menggunakan RFID	2017	Main Supervision	Completed
40	Group Project Noorain Binti Mohd TajudiN Nursyuhadah Binti Zulfakur Pkdt Muhammad Nur Aiman Bin Adam	Sistem Pengurusan Gaji PALAPES UPNM	2017	Main Supervision	Completed
41	Muhammad Ikhwan Alif Bin Mohd Zulkefli	Sistem Penyelenggaraan Perumahan bagi kakitangan Mindef	2018	Main Supervision	Completed
42	Siti Adibah Zainal	Sistem Pemilihan Pelajar (Bakal Pegawai Kadet) ke Program Asasi UPNM	2018	Main Supervision	Completed
43	Husain bin Ali	Sistem Maklumat lokasi semua Cawangan Kem Tentera Darat Malaysia (TDM) menggunakan peta Google	2018	Main Supervision	Completed
44	Nurul Hazwani Binti Awaluddin	Sistem Inventori Makmal Forensik di Pusat Keselamatan Siber	2019	Main Supervision	Completed
45	Lu How Yee	Monitoring of Political Candidates Popularity On Social Media	2019	Main Supervision	Completed
46	Nadhirah Bt Hamdan	Sistem Permohonan Kenaikan Pangkat Staf Akademik (FSTP)	2019	Main Supervision	Completed
47	Pkdt Muhammad Ammar bin Mat Beyi	Sistem Pengagihan Kelas Di Pusat Asasi UPNM	2020	Main Supervision	Completed
48	Pkdt Muhammad Izzuddin Bin Razali	Asset Tracking System	2020	Main Supervision	Completed

49	Pkdt Raja Ahmad Fahim Fahada Bin Raja Mohd Aris	Sistem Pengiraan Kehadiran Palapes	2021	Main Supervision	Completed
50	Khairiyah Binti Abd Rahim	Sistem Pengesanan Kehadiran Peperiksaan Menggunakan QR Kod	2021	Main Supervision	Completed
51	Amir Afifuddin Bin Ab Zayin	Peramalan Risiko Diabetes Menggunakan Teknik Logistic Regression	2022	Main Supervision	Completed
52	Nurul Dayana Razuki	Sistem E-Covid Helper	2022	Main Supervision	Completed
53	Siti Nurzakirah Binti Mohamad	Sistem Pengurusan Asrama Upnm	2022	Main Supervision	Completed
54	Muhammad Nur Irsyad Bin Azman	Sistem Aplikasi Kecergasan Untuk Pesakit Diabetes (FIT4DM)	2022	Main Supervision	Completed
55	Aizad Shazwan Bin Azhari	Sistem Undian Melalui Aplikasi Telefon Pintar di Universiti	2022	Main Supervision	Completed
56	Muhammad Yazid Bin Abdul Mutalib	Analisis Ramalan Prestasi Akademik Pelajar Menggunakan Algoritma Multiple Linear Regression	2023	Main Supervision	Completed
57	Azlarul Akmal Hakim bin Mohd Puad	Analisis Siri Masa dan Ramalan Kerpasan Hujan menggunakan Model SARIMA	2023	Main Supervision	Completed
58	Ikwan Darwish bin A	Pengesanan Pemalsuan Imej menggunakan Teknik Convolutional Neural Network	2023	Main Supervision	Completed
59	Muhammad Khairul Azami Mohd Shukri	Sistem Rekomendasi Restoren Malaysia Menggunakan Teknik Collaborative Filtering	2023	Main Supervision	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.	Development of Knowledge Based Software with Enhanced Situational Awareness Analysis for Infantry Personnel	Principal: PM Dr Omar Zakaria Member: Dr Zuraini Zainol Dr. Mohd Afizi bin Mohd Shukran Dr Puteri Nor Ellyza Bt Nohuddin Dr Syahaneim Marzukhi PM Dr Nazri Ismail	NRGS/2013	KPT/ RM 981,940	Completed
2	A Temporal Pattern Mining and Analysis Technique for Big Data Analytics - UKM	Principal: Dr Puteri Nor Ellyza Bt Nohuddin Member: Dr Zuraini Zainol	GGPM UKM	UKM	Completed
3	Visualizing Clustering Technique for Illustrating Keyword patterns in Military Knowledge	Principal: Dr Zuraini Zainol Members: Dr Puteri Nor Ellyza Bt Nohuddin Prof Dr Omar Zakaria Dr. Syahaniem Marzukhi	Geran Dalam-an	UPNM/40K	Completed
4	Intelligent Flood Detection System Using MMS Technology	Principal: Dr Syahaneim Marzukhi Member: Dr Zuraini Zainol Dr. Mohd Afizi bin Mohd Shukran PM Dr Omar Zakaria PM Dr Nazri Ismail	RAGS/2015	KPT/ 35K	Completed
5	Context-based Keyword Pattern Cluster Analysis Technique on Tacit Knowledge of Military Tactics Centre of Expertise (CoE)	Principal: Dr Zuraini Zainol Member: PM. Dr. Abdullah Bin Gani Dr Puteri Nor Ellyza Bt Nohuddin PM Dr Omar Zakaria Dr. Mohd Afizi bin Mohd Shukran	RACE/2013	KPT/50K	Completed

7	Promoting Building Energy Saver with Mobile Technology	Principal: Dr Arniyati Ahmad Member: Dr Zuraini Zainol Dr Nor Azliana	Geran Dalam-an	UPNM/20K	Completed
8.	Kajian Prograsi Pembelajaran Sepanjang Penubuhan UPNM	Principal: Prof Dato Dr Ahamad Mujahid bin Ahamd Zaidi Member: Dr Zuraini Zainol Dr Nur Diyana Dr Syarifah Bahiyah Rahayu	2017	UPNM/ RM 5,000	Completed
9.	Semantic-based Malay Grammar for Social Network Threat Analysis	Principal: Dr Hassan Mohamed Members: Prof Dr Omar Zakaria Dr Zuraini Zainol	2016	UPNM/ RM 45,000	Completed
10.	A New Search Method using Semantic Feature Technique for Semantic Web	Principal: Dr Syarifah Bahiyah Rahayu Member: Dr Zuraini Zainol • Dr Nur Diyana • Dr Hassan	2018	Self-funded Grant SF0049- UPNM/2018/S F/ICT/02	Completed
11	Prototyping Digital Tongue Diagnosis System on Raspberry-Pi For Smart Military Healthcare System	Principal: Dr Nur Diyana Member: Dr Syarifah Bahiyah Rahayu Dr Zuraini Zainol Dr Hassan Mohamed	2018	UPNM/2018/ GPJP/2/TK/1/ 20K	Completed
12	Development of Web-based JAVA and C++ Compiler with Online Assignment Submission System for Programming Courses in UPNM (checkMyCODE)	Principal: Afiqah binti Mohammad Azahari Members: • PM Mohd Hazali • Dr Zuraini Zainol • Dr Nur Diyana • Dr Arniyati Ahmad • Dr Syarifah Bahiyah Rahayu	2018	Self-funded grant	Completed
13	LOGSEMCOG: An automated system for knowledge base construction	• Prinsipal: Prof. Emeritus Dato' Dr. Tengku Mohd bin Tengku Sembok • Members: • PM Mohd Hazali • Dr Zuraini Zainol	2018	UPNM/ RM53,000	Completed

		<ul style="list-style-type: none"> ● Dr Syahaneim ● Dr Sharyar Wani 			
14.	Sistem Pemilihan Pelajar ke Program Asasi UPM	<ul style="list-style-type: none"> ● Prinsipal: Dr Zuraini Zainol ● Dr Syahaneim ● Dr Hassan Mohamad 	2019	Self funded	Completed
15	Security Assesment Framework for Detecting vulnerability in the Internet of things based on Smart Homes	<ul style="list-style-type: none"> ● Prinsipal: Dr Nor Fatimah Awang ● Prof. Emeritus Dato' Dr. Tengku Mohd bin Tengku Sembok ● Dr Zuraini Zainol ● Dr Syahaneim Marzuki 	2019	RM 46,443	Completed
16	A Tripartite Fake News Detection Framework	<ul style="list-style-type: none"> ● Prinsipal: Dr Sharyar Wani ● Prof. Emeritus Dato' Dr. Tengku Mohd bin Tengku Sembok ● Dr Zuraini Zainol ● Prof Mohamed Ridza Wahiddin ● Dr Mohammad Tahir 	2019	RM 69,800	Completed
17.	Makers@University	<ul style="list-style-type: none"> ● Prinsipal: Dr Hassan ● Dr Zuraini Zainol ● Dr Syahaneim ● Dr Nur Aisyah 	2019	RM65,000	Completed
18	Monitoring Political Candidates Popularity on Social Media using Machine Learning Technique	<ul style="list-style-type: none"> ● Prinsipal: Dr Zuraini Zainol ● Dr Nur Diyana Kamarudin ● Dr Puteri Nor Ellyza Nohuddin ● Lu How Yee 	2020	-	Completed
19	Formulating Dynamic Brand-Customer Behavioral Interactions using a combined Topic Modelling and Collaborative-filtering Approach	<ul style="list-style-type: none"> ● Dr Noor Farizah(Prinsipal (USM) ● Dr Zuraini Zainol ● Dr. Fauziah Binti Md Taib ● Dr. Azleena Binti Mohd Kassim 	2020	RM 69,344	Completed
11	Coordinated Malware Eradication Remediation Platform (CMERP) 2.0	<ul style="list-style-type: none"> ● PM Hazali ● Dr Zuraini Zainol ● Dr Syarifah Bahiyah Rahayu 	2021	Rm100,000	In Progress
12	Measuring the Effectiveness of Tail Dependence on Return Periods of Multivariate Extreme Rainfall Events in Penisular Malaysia using Copulas	<ul style="list-style-type: none"> ● PM Dr. Ummul Fahri binti Abdul Rauf ● PM Dr Zuraini Zainol 	2022	RM 20,000	In Progress
13	Ramalan Prestasi Akademik Pelajar Menggunakan Teknik Regresi	<ul style="list-style-type: none"> ● PM Dr Zuraini Zainol (Ketua) 	2023	-	In progress

	()	<ul style="list-style-type: none"> • PM Dr. Ummul Fahri binti Abdul Rauf • Dr Hassan Mohamed • Dr Nor Azliana Akmal Jamaludin 			
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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 <ul style="list-style-type: none"> • ISI • SCOPUS • Peer-Reviewed
1	Nohuddin, P. N. E., Zainol, Z. , Lee, A. S. H., Nordin, A. I., & Yusoff, Z. (2018). A case study in knowledge acquisition for logistic cargo distribution data mining framework. International Journal of Advanced and Applied Sciences, 5(1), pp. 8-14. DOI: 10.21833/jjaas.2018.01.002	Peer-Reviewed (Thomson Reuters Web of Science)
2	Nohuddin, P. N. E., Zainol, Z. , & Amir, M. A. U. (2018). Trend Cluster Analysis of Wave Data for Renewable Energy. Advanced Science Letters, Vol. 24(2), pp. 951-955. DOI: 10.1166/asl.2018.10665	Peer-Reviewed
3	Alkhred, F., Nohuddin, P. N. E., & Zainol, Z. (2018). Sharing Explicit Knowledge: Designing a Peacekeeping Operation Databank. Advanced Science Letters (ASL), Vol. 24(2), pp. 956-960. DOI: 10.1166/asl.2018.10666	Peer-Reviewed
4.	Zainol, Z. , A. M. Azahari, Marzukhi, S., Sudin, M.N., Nohuddin P.N.E. and Zakaria, O. (2018). Development of Web Portal for Sharing and Capturing Knowledge: A Study in Military Tacit Knowledge for Officer Cadets at Universiti Pertahanan Nasional Malaysia (UPNM) . International Journal of Fundamental and Applied Sciences (JFAS), Vol. 10(6S): pp: 2402-2416. doi: http://dx.doi.org/10.4314/jfas.v10i6s.183	Peer-Reviewed (Thomson Reuters Web of Science)
5.	Yusof., W.S.E., Zakaria, O., and Zainol, Z. (2018), Investigating Tacit Knowledge On Military Observers Throughout Situational Awareness In Peacekeeping Operations: A Methodological Issue . International Journal of Fundamental and Applied Sciences (JFAS), Vol. 10(3S): pp: 998-1010. http://dx.doi.org/10.4314/jfas.v10i3s.85	Peer-Reviewed (Thomson Reuters Web of Science)
6.	Zainol, Z. , Nohuddin, P. N. E., Noormaanshah, W. M. U., & Marzukhi, S. (2018). Association Analysis of cyberbullying on social Media using Apriori Algorithm . 2nd International Conference on Information and Communication Technology 2018 (ICICTM'18). International Journal of Engineering and Technology (IJET) Vol. 7 (4.29), pp. 72-75	SCOPUS
7	Yusof., W.S.E., Zakaria, O., and Zainol, Z. (2018), Developing User Requirement's Handbook for Malaysian Military Observers Using Phenomenology Approach . 2nd International Conference on Information and Communication Technology 2018 (ICICTM'18). International Journal of Engineering and Technology (IJET) Vol. 7 (4.29), pp. 224-227	SCOPUS

8.	Jamaludin, NAA., Ahmad, A., and Zainol, Z. (2018). The Design of Promoting Building Energy Saver with Mobile Controller. <i>International Journal of Engineering & Technology (IJET)</i> , Vol. 7 (4.29), pp. 213-215	SCOPUS
9	Zainol, Z. , Nohuddin, P.N.E., Tarhamizwan, M.. (2018). " VisualUrText: A Text Analytics Tool for Unstructured Textual Data ", Journal of Physics Conference Series 1018(1):012011. DOI: 10.1088/1742-6596/1018/1/012011	SCOPUS
10	Zainol, Z. , Nohuddin P.N.E., Wan M.U.N and Hijazi, M.A.H. (2018) " Visualization of Context-based Keyword Pattern Cluster Analysis on Tacit Knowledge among Officer Cadets at Universiti Pertahanan Nasional Malaysia (UPNM) ". <i>Advanced Science Letters (ASL)</i> , 24(3): pp 1550-1554. DOI: https://doi.org/10.1166/asl.2018.11106	Google Index
11	Rasid, N., Nohuddin, P.N.E., Zainol, Z. , Hamzah, I.H., Alias, H., and Nordin, A. (2018). " Experience Mining through Ethnography Study amongst Pediatric Cancer Patients ". <i>Advanced Science Letters (ASL)</i> , 24(3): pp 1562-1566. DOI: 10.1166/asl.2018.11109	Google Index
12.	S.B. Rahayu, N.D. Kamaruddin and Zainol, Z. (2018) " Case Study of Student Performance Classification ", <i>International Journal of Engineering & Technology (IJET)</i> , 7 (4.31), pp. 285-289	SCOPUS
13	Yusof., W.S.E., Zakaria, O., and Zainol, Z. (2018)., " DIKW Application on Knowledge based Framework with Situational Awareness . <i>International Journal of Academic Research in Business and Social Sciences</i> , 8(6), pp. 1110–1120. DOI: 10.6007/IJARBSS/v8-i6/4305	ERA Journal
14	Zainol, Z. , Azahari, A, Wani, S., Marzukhi, S., Nohuddin, P.N.E., and Zakaria, O. (2018). " Visualizing Military Explicit Knowledge using Document Clustering Techniques ". <i>International Journal of Academic Research in Business and Social Sciences</i> , 8(6), pp. 1127–1143. DOI: 10.6007/IJARBSS/v8-i6/4307	ERA Journal
15	N.D. Kamaruddin, S.B. Rahayu, Zainol, Z. , Rusli, S, and K. A. Ghani. (2018) " Performance Comparison of Machine Learning Classifiers on Aircraft Databases ". <i>Defence S & T Technical Bulletin (1985-6571)</i> , Vol. 11 (2), pp.154-169	SCOPUS
16	Nohuddin P.N.E. and Zainol, Z. ,(2018) Monitoring Students Performance using Self Organizing Map Trend Clustering . <i>ZULFAQAR International Journal of Defence Science, Engineering & Technology</i> , Vol 1(1), pp. 50-56	Zulfaqar
17	Angela S.H Lee, Yusoff Z, Zainol Z and Pillai V. (2018). Know your hotels well. An Online Review Analysis using Text Analytics . <i>International Journal of Engineering & Technology</i> 7 (4.31), pp. 341-347	SCOPUS
18	Nohuddin, P.N.E., & Zainol, Z. (2020). Discovering explicit knowledge using text mining techniques for peacekeeping documents. <i>International Journal of Business Information Systems</i> , 35(2), 152-166.	SCOPUS
19	Marzukhi, S., Daud, N. H. M., Zainol, Z. , & Zakaria, O. (2018, March). Framework of Knowledge-Based System for United Nations Peacekeeping Operations Using Data Mining Technique . In 2018 Fourth International Conference on Information Retrieval and Knowledge Management (CAMP) (pp. 1-6). IEEE.	SCOPUS
20	Kamarudin, N. D., Rusli, M. S., Yee, O. C., Mansoor, S. B. R. S., Azahari, A. M., Zainol, Z. , & Makhtar, S. N. (2018). Performance Comparison of Colour Correction and Colour Grading Algorithm for Medical Imaging Applications. <i>International Journal of Engineering & Technology</i> , 7(4.33), 353-356.	SCOPUS

21	Z. Zainol , P. N. E. Nohuddin, N. Rasid, H. Alias, and A. I. Nordin, (2019) " Relationship Analysis on the Experience of Hospitalised Paediatric Cancer Patient in Malaysia using Text Analytics Approach ," International Journal of Advanced Computer Science and Applications (IJACSA), vol. 10, no. 8, pp. 72-79, 2019/9/1 2019.	SCOPUS/ISI
22	Z. Zainol , P. N. E. Nohuddin, N. D. Kamarudin, A. S. H. Lee, and S. Wani, (2019) " Relationship Analysis of Formal And Experiential Learning in Military Survival Skills Using Text Mining ," Defence S & T Technical Bulletin (1985-6571), vol. 12, no. 2, 2019.	SCOPUS
23	Chan, K. W., Lee, A. S. H., & Zainol, Z. (2020). Profiling patterns in healthcare system: A preliminary study . <i>International Journal of Advanced Computer Science and Application</i> , 11(4), 661-668.	SCOPUS
24	Rashid, R. A., Nohuddin, P. N., & Zainol, Z. (2018). Analyzing Climate Variability in Malaysia Using Association Rule Mining . <i>International Journal of Engineering & Technology</i> , 7(4.34), 394-397.	Google Index
25	Noormanshah, W. M., Nohuddin, P. N., & Zainol, Z. (2018). Document categorization using decision tree: Preliminary study . <i>International Journal of Engineering & Technology</i> , 7(4.34), 437-440.	Google Index
26	Yusof, W. S. E. Y. W., Zakaria, O., Zainol, Z. , Subramaniam, A., & Suhaili, S. (2018). Establishment of Military Observer's Culture through Malaysian Military Observers . <i>INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS AND SOCIAL SCIENCES</i> , 8(10).	ERA
27	Yusof, W. S. E. Y. W., Zakaria, O., & Zainol, Z. (2018). Establishment of user requirements handbook based on the situational awareness knowledge for Malaysian military observers . <i>Int. J. Eng. Tech</i> , 7, 35-38.	SCOPUS
28	Nohuddin, P. N., Noormanshah, W. M., & Zainol, Z. (2020). Content analytics based on random forest classification technique: An empirical evaluation using online news dataset.	SCOPUS
29	Chan, K. W., Lee, A. S. H., & Zainol, Z. (2020). Profiling patterns in healthcare system: A preliminary study. <i>International Journal of Advanced Computer Science and Application</i> , 11(4), 661-668.	SCOPUS
30	Nohuddin, P. N., & Zainol, Z. (2020). Discovering explicit knowledge using text mining techniques for peacekeeping documents. <i>International Journal of Business Information Systems</i> , 35(2), 152-166.	SCOPUS
31	Nohuddin, P.N.E., Zainol, Z. & Hijazi, M.H.A (2021). Study of B40 Schoolchildren Lifestyles and Academic Performance using Association Rule Mining. <i>Annals of Emerging Technologies in Computing (AETiC)</i> , 5(5).	SCOPUS
32	Chan NKW, Lee ASH, and Zainol Z (2021). A framework for predicting employee health risks using ensemble model. <i>International Journal of Advanced and Applied Sciences</i> , 8(9): 29-38	WOS
33	Mame Abdo, A. , Ahmad Rasid, N. M. , Mohd Badli, N. A. H., Sulaiman, S. N. A., Wani, S., & Zainol, Z. (2021). Student's Performance Based on E-Learning Platform Behaviour using Clustering Techniques. <i>International Journal on Perceptive and Cognitive Computing</i> , 7(1), 72–78. Retrieved from https://journals.iium.edu.my/kict/index.php/IJPCC/article/view/223	MyCite
34	Tan, C. B., Hijazi, M. H. A., Khamis, N., Zainol, Z. , Coenen, F., & Gani, A. (2021). A survey on presentation attack detection for automatic speaker verification systems: State-of-the-art, taxonomy, issues and future direction. <i>Multimedia Tools and Applications</i> , 1-38.	WOS
35	Z. Zainol , P. N. E. Nohuddin, A. S. H. Lee, N. F. Ibrahim, L. H. Yee, and K. A. Majid, "Analysing political candidates' popularity on social media using POPularity MONitoring (POPMON)," <i>SEARCH Journal of Media and Communication Research</i> , no. Special Issue: GRACE 2020 Conference, pp. 39-55, 2021. [Online]. Available: https://fslmjournals.taylors.edu.my/wp-content/uploads/SEARCH/SEARCH-2021-Special-Issue-GRACE2020/SEARCH-2021-Special-Issue-GRACE2020.pdf .	WOS
36	Z Zainol , SH Lee, A., NE Nohuddin, P., Ibrahim, N. F., & Ahmad Hijazi, M. H. (2022). Examining the Relationship of Keyword Analysis using Online Traveller Hotel Reviews. <i>International Journal on Perceptive and Cognitive Computing</i> , 8(1), 47–52. Retrieved from https://journals.iium.edu.my/kict/index.php/IJPCC/article/view/284	Mycite
39	Nohuddin, P. N., Noormanshah, W. M., & Zainol, Z. (2021). Content analytics based on random forest classification technique: an empirical evaluation using online news dataset. <i>Int. J. Adv. Appl. Sci</i> , 8(2), 77-84.	WOS
40	Lee, Y. F., Lee, A. S. H., & Zainol, Z. (2022). A COMPARISON STUDY ON TEXT MINING AND SENTIMENT ANALYSIS FEATURES AND FUNCTIONS USING SAS ENTERPRISE MINER, PYTHON AND R. <i>Zulfaqar Journal of Defence Science, Engineering & Technology</i> , 5(2).	Zulfaqar

41	Ab Zayin, A. A., Zainol, Z. , Nohuddin, P. N. E., & Mohamad, H. (2023). PERAMALAN RISIKO DIABETES MENGGUNAKAN APLIKASI MyDIABETICRISK. <i>Zulfaqar Journal of Defence Science, Engineering & Technology</i> , 6(2).	Zulfaqar
42	Abd Rahman, M. S., Jamaludin, N. A. A., Zainol, Z. , & Sembok, T. M. T. (2023) The Application of Decision Tree Classification Algorithm on Decision-Making for Upstream Business, 14(8),	SCOPUS
43	MYA Mutalib,, Zainol, Z. , UFA Rauf, Nohuddin, P. N. E.. (2023). ANALISIS RAMALAN PRESTASI AKADEMIK PELAJAR MENGGUNAKAN APLIKASI MyCGPA,. <i>Journal of Information System and Technology Management</i> , 8(31), pp 80-94.	MyCITE

2.2.2 Book/Chapter in Book:

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

No	Authors, year, title, publisher, volume and number of pages (Please bold your name)	Level <ul style="list-style-type: none"> ● International ● National ● University
1.	Zainol, Z. , Marzukhi, S., Nohuddin, P. N. E., Noormaanshah, W. M. U., & Zakaria, O. (2017b). Document Clustering in Military Explicit Knowledge: A Study on Peacekeeping Documents . In H. Badioze Zaman, P. Robinson, A. F. Smeaton, T. K. Shih, S. Velastin, T. Terutoshi, A. Jaafar, & N. Mohamad Ali (Eds.), <i>Advances in Visual Informatics: 5th International Visual Informatics Conference, IVIC 2017, Bangi, Malaysia, November 28–30, 2017, Proceedings</i> (pp. 175-184). Cham: Springer International Publishing. DOI: 10.1007/978-3-319-70010-6_17	International
2.	A. Rashid, R.A., P.N.E. Nohuddin, and Z. Zainol . (2017). Association Rule Mining Using Time Series Data for Malaysia Climate Variability Prediction, in Advances in Visual Informatics: 5th International Visual Informatics Conference, IVIC 2017, Bangi, Malaysia, November 28–30, 2017, Proceedings , H. Badioze Zaman, et al., Editors. 2017, Springer International Publishing: Cham. p. 120-130. https://doi.org/10.1007/978-3-319-70010-6_12	International
3.	Zainol, Z. , & Nakata, K. (2012, September). Context-based interaction design for smart homes . In <i>Pacific Rim International Conference on Artificial Intelligence</i> (pp. 844-849). Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-642-32695-0_83	International
4.	R. A. A. Rashid, P. N. E. Nohuddin, and Z. Zainol , "Sustainable Smart Analytics Framework on Climate Variability for Societal Well Being using Association Rules Mining," in <i>Sustainable Smart Technologies in Visual Informatics in the Fourth Industrial Revolution for Societal Well Bein</i> , H. B. Zaman, Ed. UKM, 2019, pp. 234-251 Book Chapter	Publisher: UKM
5.	Lee, A. S. H., Claudia, N., Zainol, Z. , & Chan, K. W. (2019, August). Decision Tree: Customer Churn Analysis for a Loyalty Program Using Data Mining Algorithm. In <i>International Conference on Soft Computing in Data Science</i> (pp. 14-27). Springer, Singapore.	International
6	Noormanshah, W. M., Nohuddin, P. N., & Zainol, Z. (2020). Document Content Analysis Based on Random Forest Algorithm. In <i>Intelligent Computing and Innovation on Data Science</i> (pp. 485-494). Springer, Singapore.	International
7	Nohuddin, P. N. E., Bahrin, H., & Zainol, Z. (2021). Health Data and Knowledge Discovery. In <i>Smart Healthcare In Big Data Revolution</i> . Penerbit Universiti Kebangsaan Malaysia	UKM

8	Zainol, Z. & Nohuddin, P. N., (2021). Visualizing Experience of Hospitalized Pediatric Cancer Patient In Malaysia Using Text Analytics. In Smart Healthcare In Big Data Revolution. Penerbit Universiti Kebangsaan Malaysia	UKM
9.	Nohuddin, P. N., Zainol, Z. , Omar, M. A., Al Hijazi, H., & Noordin, N. A. (2022). Understanding Malaysian B40 Schoolchildren's Lifestyle and Educational Patterns Using Data Analytics. In <i>Sustainable Development Through Data Analytics and Innovation: Techniques, Processes, Models, Tools, and Practices</i> (pp. 171-189). Cham: Springer International Publishing.	International

2.2.3 Proceeding Articles :

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

No	Authors, year, title, publisher/journal/conference, volume and number of pages (Please bold your name)	Level <ul style="list-style-type: none"> ● International ● National ● University
1	Zainol, Z. , and Nakata, K. (2010). Generic Context Ontology Modelling: A Review and Framework, In Proceedings of the 2nd International Conference on Computer Technology and Development (ICCTD 2010), Cairo, Egypt, pp. 126-130. DOI: 10.1109/ICCTD.2010.5646137	International
2	Zainol, Z. , and Nakata, K. (2011). Information Fields in Context-based Activity Design. Paper presented at the 13th International Conference on Informatics and Semiotics in Organisations: Problems and Possibilities of Computational Humanities (ICISO 2011), Leeuwarden, The Netherlands, pp. 103-110.	International
3	Zainol, Z. , and Nakata, K. (2012a). Context-based Interaction Design for Smart Homes. Paper presented at the 12th Pacific Rim International Conference on Artificial Intelligence (PRICAI 2012), Kuching, Sarawak, pp. 844-849. DOI: 10.1007/978-3-642-32695-0_83	International
4	Zainol, Z. , and Nakata, K. (2012b). Conflict Resolution in Overlapping Information Fields for Context-based Activity Design. Paper presented at the 4th International Joint Conference on Knowledge Engineering and Ontology Development (KEOD 2012), Barcelona, Spain, pp. 190-195	International
5	Nohuddin, P.N.E and Zainol, Z. (2014). Context-based Keyword Pattern Cluster Analysis Technique on Tacit Knowledge of Military Tactics Centre of Expertise (COE): A Preliminary Study. International Conference on Computation Science and Technology 2014 (ICCST'14). DOI: 10.1109/ICCST.2014.7045173	International
6	Muhammad Aimaan, Zuraini Zainol , Puteri Nor Ellyza, Mohd Tarhamizwan, Doorbell Application Based on Android, KLTEC 2014 Location: UniKL, Malaysia	National
7	Mohd Nasir Mat Amin, Puteri N. E. Nohuddin, Zuraini Zainol , Siti Hajar Zainal Rashid, Trend Cluster Analysis using Self Organizing Maps, KLTECH 2014	National
8.	Mohd Nasir Mat Amin, Puteri NE Nohuddin, Zuraini Zainol . Trend Cluster Analysis using Self Organizing Maps (SOM). International Conference on Information and Communication Technologies (WICT), 2014 Fourth World Congress. Pp. 80-84.	International

	DOI: 10.1109/WICT.2014.7077306	
9.	Nohuddin, P.N.E, Zainol, Z. , Kuan F.C., Nordin, Aliimran, Marzukhi, Syahaneim and James, M. Tarhamizwan. Keyword based Clustering Technique for Collections of Hadith Chapters. 3rd International Conference on Islamic Applications in Computer Science and Technologies (IMAN 2015). Oct 2015	International
10.	Marzukhi, S., Zainol, Z. , Nohuddin, P.N.E. Automatic Artificial Data Generator: Framework and Implementation”, International Conference on Information and Communication Technology 2016 (ICICTM’16). DOI: 10.1109/ICICTM.2016.7890777	International
11	Zainol, Z. , Nohuddin, P.N.E., M. Tarhamizwan, Marzukhi, S., Discovering “Interesting” Frequent Patterns in Hadith Text Documents”, International Conference on Information and Communication Technology 2016 (ICICTM’16) DOI: 10.1109/ICICTM.2016.7890785	International
12	Marzukhi, S., Zainol, Z. , Nasir, H., Dalina., W.N.F. Wind Speed Detection System: Framework and Implementation, International Conference on Information and Communication Technology 2016 (ICICTM’16) DOI: 10.1109/ICICTM.2016.7890778	International
13	Yusof., W.S.E., Zakaria, O., and Zainol, Z. , “Establishing of Knowledge Based Framework for Situational Awareness Using Nonaka's And Endsley's Models”, International Conference on Information and Communication Technology 2016 (ICICTM’16) DOI: 10.1109/ICICTM.2016.7890775	International
14	Mohamed, H., Omar, N., Zainol, Z. , and Marzukhi, S., “Penalizing Words Emissions in HMM Post Tagger Based on Malay Affix Morphemes”, 3rd International Conference on Defence & Security Technology (DSTC 2016)	International
18.	Yusof., W.S.E., Zakaria, O., and Zainol, Z. , “Exploring Tacit Knowledge on Malaysian Peacekeeping Operations through Strategising In-depth Interviews”, International Conferences on Business and Strategy (ICIBS 2016)	International
19.	Nohuddin, P.N.E., Zainol, Z. , and Zakaria, O., “Knowledge Discovery on Explicit Knowledge Using Data Mining Techniques in Peace Keeping Documents”, International Conferences on Business and Strategy (ICIBS 2016)	International
20.	Zainol, Z. , Nohuddin P.N.E., Tengku A.T. Mohd, & Zakaria, O. (2017). Text analytics of unstructured textual data: A study on military peacekeeping document using R text mining package in Zulikha, J. & N. H. Zakaria (Eds.), Proceedings of the 6th International Conference on Computing & Informatics (pp 1-7). Sintok: School of Computing.	International
21	Rashid, R., Nohuddin P.N.E. and Zainol, Z. , “Dengue Epidemic Detection Using Data Mining Techniques For Healthcare Monitoring Initiative”. International Conference On Management In Emerging Markets (ICMEM) and International Conference On Innovation In Business And Strategy (ICIBS) 2017	International
24	Zainol, Z. , Marzukhi, S., Nohuddin, P. N. E., Noormaanshah, W. M. U., & Zakaria, O. (2017b). Document Clustering in Military Explicit Knowledge: A Study on Peacekeeping Documents. Proceeding of the 5th International Visual Informatics Conference, IVIC 2017, Bangi, Malaysia, November 28–30, 2017, Proceedings (pp. 175-184). Cham: Springer International Publishing. DOI: 10.1007/978-3-319-70010-6_17	International
25	Yusof., W.S.E., Zakaria, O., and Zainol, Z. , Establishing Of User Requirement Handbook Based On The Situational Awareness Knowledge For Malaysian Military Observer. International Conference On Recent Advancements In Science And Technology 2017 (ICoRAST2017) International Journal of Engineering & Technology 7 (4.15), 35-38	International

26.	A. Rashid, R.A., P.N.E. Nohuddin, and Z. Zainol . (2018). Association Rule Mining Using Time Series Data for Malaysia Climate Variability Prediction, in Advances in Visual Informatics: 5th International Visual Informatics Conference, IVIC 2017, Bangi, Malaysia, November 28–30, 2017, Proceedings, 2017, Springer International Publishing: Cham. p. 120-130. DOI: 10.1007/978-3-319-70010-6_12	International
28.	Mohamad, H., Marzukhi, S., Zainol, Z., and Tengku Sembuk, TM. (2018). Semantic-based Social Medias Threats Detection. 12th International Conference on Ubiquitous Information Management and Communication. ACM IMCOM 2018. DOI: 10.1145/3164541.3164620	International
29.	Ali, F., Ismail, MN and Zainol, Z. (2018). Performance of Wavelength Routed Optical Networks Employing GMPLS-based Control Plane. 12th International Conference on Ubiquitous Information Management and Communication. ACM IMCOM 2018. DOI: 10.1145/3164541.3164550	International
30.	Marzukhi, S., Zainol, Z. , Ismail, MN. (2018). Flood Detection and Warning System (FLoWS). 12th International Conference on Ubiquitous Information Management and Communication. ACM IMCOM 2018. Pp. 1-6 DOI: 10.1145/3164541.3164623	International
31.	Zainol, Z. , Nohuddin, P. N. E., Noormaanshah, W. M. U., & Marzukhi, S. (2018). Association Analysis of cyberbullying on social Media using Apriori Algorithm. 2nd International Conference on Information and Communication Technology 2018 (ICICTM'18). Presented at ICICTM on 3rd May 2018	International
32.	Yusof., W.S.E., Zakaria, O., and Zainol, Z. , Developing User Requirement's Handbook for Malaysian Military Observers Using Phenomenology Approach. 2nd International Conference on Information and Communication Technology 2018 (ICICTM'18). Presented at ICICTM on 3rd May 2018	International
33.	Jamaludin, NAA., Ahmad, A., and Zainol, Z. , The Design of Promoting Building Energy Saver with Mobile Controller. 2nd International Conference on Information and Communication Technology 2018 (ICICTM'18). Presented at ICICTM on 3rd May 2018	International
34.	Marzukhi, S., Zainol, Z. , Daud, NH. (2018). Framework of Knowledge-Based System for Peacekeeping Operations using Data Mining Technique. 4th International Conference on Information Retrieval and Knowledge Management (CAMP 18). DOI: 10.1109/INFRKM.2018.8464802	International Proceeding
35.	Marzukhi, S., Zainol, Z. , Muhamed, H., Awang, N. F., bin Tengku Sembok, T. M., & Juhary, J. B. (2019, September). Framework Of Malay Intelligent Autonomous Helper (Min@ H): Text, Speech And Knowledge Dimension Towards Artificial Wisdom For Future Military Training System. In 2019 1st International Conference on Artificial Intelligence and Data Sciences (AiDAS) (pp. 83-87). IEEE.	International Proceeding
36.	Lee, A. S. H., Claudia, N., Zainol, Z. , & Chan, K. W. (2019, August). Decision tree: Customer churn analysis for a loyalty program using data mining algorithm. In International Conference on Soft Computing in Data Science (pp. 14-27). Springer, Singapore.	International Proceeding
37.	Abd Rahman, M. S., Jamaludin, N. A. A., Zainol, Z., & Sembok, T. M. T. (2021, July). Machine Learning Algorithm Model for Improving Business Decisions Making in Upstream Oil & Gas. In 2021 International Congress of Advanced Technology and Engineering (ICOTEN) (pp. 1-5). IEEE.	International Proceeding
38.	Fadilah, K. I. M., Zainol, Z. , Ebrahim, M., & Lee, A. S. H. (2021, December). Covid-19 Effect On Undergraduate Computing Students' Performance At Higher Education: Pilot Study. In 2021 6th IEEE International Conference on Recent Advances and Innovations in Engineering (ICRAIE) (Vol. 6, pp. 1-6). IEEE.	International Proceeding
39.	Mutalib, M. M. A., Zainol, Z. , & Halip, M. H. M. (2021, December). Mitigating Malware Threats at Small Medium Enterprise (SME) Organisation: A Review and Framework. In 2021 6th IEEE	International Proceeding

	International Conference on Recent Advances and Innovations in Engineering (ICRAIE) (Vol. 6, pp. 1-6). IEEE.	
40	Chan, N. K. W., Lee, A. S. H., & Zainol, Z. (2021, June). Predicting Employee Health Risks using Classification Ensemble Model. In 2021 Fifth International Conference on Information Retrieval and Knowledge Management (CAMP) (pp. 52-58). IEEE.	International Proceeding
41	Velloo, N., Ibrahim, N. F., & Zainol, Z. (2023, January). Building a Recommendation System of Consumers' Preferable Choice Using a Collaborative-Filtering. In 2023 17th International Conference on Ubiquitous Information Management and Communication (IMCOM) (pp. 1-5). IEEE. DOI: 10.1109/IMCOM56909.2023.10035543	International Proceeding
42	Husin, H. S., Wahid, M. S. A., Zuhairi, M. F., & Zainol, Z. (2023, January). Process mining to discover online learning behaviour. In 2023 17th International Conference on Ubiquitous Information Management and Communication (IMCOM) (pp. 1-7). IEEE. DOI: 10.1109/IMCOM56909.2023.10035624	International Proceeding
43	Nohuddin, P. N. E., & Zainol, Z. , THE IMPACT OF COVID-19 PANDEMIC ON HOUSEHOLD FOOD EXPENDITURE IN MALAYSIA: A SOCIAL BEHAVIOR ANALYTICS (RETREAT 2022)	Waiting to be published