

ASSOC. PROF. TS. DR. SABRINA AHMAD

Faculty of Information and Communication Technology (FTMK), UTeM, 76100 Hang Tuah Jaya,
Durian Tunggal, Melaka.

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EDUCATION

2012	<i>The University of Western Australia</i> Doctor of Philosophy in Computer Science	<i>Perth, Australia</i>
2002	<i>Centre for Advanced Software Engineering, Universiti Teknologi Malaysia</i> MSc (Computer Science - Real-Time Software Engineering)	<i>Kuala Lumpur</i>
2000	<i>Universiti Utara Malaysia</i> Bachelor of Information Technology (Hons) Second Class Upper.	<i>Sintok, Kedah</i>

PROFESSIONAL CERTIFICATION

2017	Certified Professional Tester (CTFL) by ISTQB
2013	Certified Information Technology Architect (CITA-F) by IASA
2013	Certificate in Fundamental Knowledge of IT Architecture by IASA
2011	Certified Professional Requirements Engineering (CPRE -FL) by IREB

CURRENT POSITION

Associate Professor
Faculty of Information and Communication Technology (FTMK),
Universiti Teknikal Malaysia Melaka (UTeM)

EXPERIENCE

<i>June 2019 – June 2022</i>	<i>Deputy Dean (Research & Postgraduate Studies)</i>	<i>Universiti Teknikal Malaysia Melaka</i>
<i>June 2018 – to date</i>	<i>Associate Professor</i>	<i>Universiti Teknikal Malaysia Melaka</i>
<i>March 2018 – June 2019</i>	<i>Coordinator, Centre of Excellence</i>	<i>Universiti Teknikal Malaysia Melaka</i>

<i>May 2012 – June 2018</i>	<i>Senior Lecturer</i>	<i>Universiti Teknikal Malaysia Melaka</i>
<i>September 2002 – May 2012</i>	<i>Lecturer</i>	<i>Universiti Teknikal Malaysia Melaka</i>
<i>May 2004- May 2006</i>	<i>Head of Department</i>	<i>Universiti Teknikal Malaysia Melaka</i>
<i>August 2000 – April 2001</i>	<i>IT Executive</i>	<i>KFC Holdings (M) Bhd.</i>

TEACHING

- Requirements Engineering (Master)
 - Sem 2 2021/2022
 - Sem 2 2020/2021
 - Sem 2 2019/2020
 - Sem 1 2018/2019
 - Sem 1 2018/2019 (Off-shore)
 - Sem 1 2017/2018
 - Sem 1 2016/2017 (Off-shore)
- Advanced Software Engineering (Master)
 - Sem 1 2020/2021
 - Sem 2 2016/2017 (Off-shore)
- Software Quality (Master)
 - Sem 1 2019/2020
- Requirements Elicitation (Master)
 - Sem 2 Session 2014/2015
 - Sem 2 Session 2014/2015
 - Sem 1 Session 2014/2015 (Off-Shore)
 - Sem 2 Session 2013/2014
 - Sem 1 Session 2012/2013
 - Sem 2 Session 2011/2012
 - Sem 1 Session 2011/2012
 - Sem 2 Session 2010/2011
- Software Engineering
 - Sem 2 2021/2022
 - Sem 1 2021/2022
 - Sem 1 2019/2020
 - Sem 2 2018/2019
 - Sem 1 2018/2019
 - Sem 2 Session 2012/2013
 - Sem 1 Session 2012/2013

- Sem 1 Session 2011/2012
- Sem 1 Session 2010/2011
- Sem 1 Session 2004/2005
- Sem 2 Session 2003/2004
- Sem 1 Session 2002/2003
- Special Topic in Software Engineering
 - Sem 2 Session 2017/2018
 - Sem 2 Session 2016/2017
 - Sem 2 Session 2015/2016
 - Sem 2 Session 2014/2015
- Software Architecture and Design
 - Sem 1 Session 2013/2014
 - Sem 2 Session 2012/2013
 - Sem 2 Session 2011/2012
 - Sem 1 Session 2011/2012
 - Sem 2 Session 2010/2011
- Software Requirements Engineering
 - Sem 2 Session 2013/2014
- Software Project Management
 - Sem 1 Session 2005/2006
- Data Structure and Algorithm
 - Summer Sem 2006
- System Development
 - Sem 1 Session 2002/2003
 - Summer Sem 2003
- Software Requirement and Design
 - Sem 2 Session 2020/2021
 - Sem 2 Session 2014/2015
 - Sem 2 Session 2005/2006
 - Sem 2 Session 2002/2003
- Database (Mc Access and Mc SQL Server)
 - Sem 2 Session 2002/2003
- Software Verification and Validation (Diploma)
 - Sem 1 2016/2017
 - Sem 1 2017/2018

SUPERVISION

Doctor of Philosophy

- Yudi Mulyanto (2021 – current)
- Rosmiza Wahidah Abdullah (2020 – current)

- Ani Rahmani (2019 - current)
- Benyamin Langgu Sinaga (2018 – current)
- Mochammad Zuliansyah (2017 - 2022)
“Metamodel Development Framework for Upstream Petroleum Enterprise Architecture”
- Romi Satria Wahono (2013 - 2015)
“Metaheuristic Optimization Based Software Defect Prediction Framework”

Master by Research

- Umairah Anuar (2015 – 2018)
“Reducing Software Requirements Defects by providing Boilerplates for Software Requirements Specification”
- Nurul Atikah Rosmadi (2014 – 2017)
“An Improved Defect Management Approach for Better Quality Software Requirements”

Final Year Project (Master)

- Riftika Riza (2021)
“An Enhanced MoSCoW Method in Software Requirements Prioritization”
- Zariza Hashim (2018)
“Re-use based Requirements Engineering by Utilizing Knowledge Pattern”
- Fazilah Binti Ismail (2017)
“Essential Requirements in Smart Home Application”
- Rafidah Binti Ab. Rahman (2017)
“Measuring Students’ Engagement in Learning Database Subject through Gamification: A Polytechnic Muadzam Shah Case Study”
- Maisatul Akmal Binti Mat Tahir (2017)
“Learning through Playing: Developing Programming Skills with RoboRobo”
- Zariza Bin Hashim (2017)
“Re-use Based Requirements Engineering by Utilizing Knowledge Pattern”
- Gbafa Maureen Peremoboere (2016)
“Development of a Multi-Software Agents Decision Support System for Hospital Appointment Management”
- Lau Hong Sheng (2015)
“Tool-Assisted Model for Software Requirements Negotiation”
- Danang Wahyu Utomo (2014)
“Collaborative Software Engineering Education”

Final Year Project (Bachelor)

2020/2021

- Mohd Asyraf bin Mohd Hanif (Digital Real Estate Agent Management System)
- Koh Kok Sheng (FTMK Navigator)
- Muhammad Mustaqim bin Samsudin (Insightful Portfolio Management System)

2019/2020

- Muhammad Adib bin Noor Hazuki (Vending Machine Stock Management Application)
- Muhammad Hasif bin Khairul Nizam (One Time Job Mobile Application)
- Nur Aqilah binti Rosli (Leave Management System)

2018/2019

- Nur Najihah Binti Mohd Rasul (Shopping Budget Application)
- Lee Zhi Xin (Caregiver Seeking System)
- Kamarul Baharin bin Yusof (Malacca University Research Assistant Finder)
- Gan Jun Xian (Run for Boons)

2017/2018

- Siti Sarah Binti Zaid (Product Identification for Partially Visual Impaired People using Mobile Application)
- Kong Li Ning (Farmers' Helper Application)
- Khor Rui Chin (Food Scanning Application)
- Koay Wen Hui (Smart Parking System)
- Siti Shahira binti Salim (Plant Defect Detection and Solution Classification System)

2016/2017

- Khairunnisha binti Ismail (Disaster Donation Management System)

2015/2016

- Shafiq Akmal Mansor (Cloud Storage Image Security)
- Eddy Fazzirullah Azmi (Remote Reminder)
- Mohamad Hamizan Husni Bin Mohd Maksid (Home Monitoring System)

2013/2014

- Lim ShiowEe (Road Accident Assistant Mobile Application)
- Ng Shi Xian (Malaysia Vacations Planner (MVP))
- NoraimanBinti Mohamed Sabtu (Lil'me Mobile Application)
- Siti Aida AdawiyahBinti Abu Hassan (Calorie Station Mobile Application)
- Tan Jin Su (Effective Food Ordering System)
- Tee Chia Shen (Trip Planner Manager)

2012/2013

- Muhammad Suffian Bin Sikandar Ghani (Smart Post Box System with RF Technology and GSM Modem)
- ShazreenBintiMohdAsrap Khan (Know your Course Application)
- Ng Sing Liang (Cartoon Avenger Mobile Application)
- Muhammad Bin Mohamed Sidek (M-Zakat Application)
- Muhammad Hariz Bin Khalil (H-Care Application)

2011/2012

- Siti Aishah Miskon(A Prototype of Mobile Application on Islamic Food Therapy)
- Soh Choi Yoke (Weight Management Go Mobile)
- Tong Siew Foong (Personal Dietitian)

2010/2011

- Melanie Ten LiYen (Car Loan Approval Decision Support System User)
- Hakimah Yusof (Diagnostic Imaging Management Department System)
- Nur Aishah Roslan (Norly Cookies e-Management)
- Nurul Hidayah Mohamad (DVD House System)
- Emir Afiq Ridzuan (Online Symphony Music Studio System)

2005/2006

- Noor Azlan Alias
- Fauzul Hakim Ab. Muis
- Mohamad Zaki Ali
- Mohd Zaki Zamani Shirat
- Zamzuri Husnan

2004/2005

- Wong Ming Hai
- Ranjanni a/p Rachenamoty
- NorulMubarakah Ibrahim
- Noor Azilah Pakri

2002/2003

- Suhaida Mohd
- Saadah Abdul Raub
- Syuraiha Md. Isa
- Norshafini Md. Saidan
- Nurhanan Mohd Ghazali

Diploma Project

- 2019/2020 – Muhammad Izwan Fahmi bin Irman Sofian (Blood Bank Management System)
- 2019/2020 – Joel Tan Kuo Xhong (Event Management System)
- 2017/2018 – Zafirah Binti Zamri
- 2016/2017 - Nur Syazila Binti Hamzah
- 2014/2015 – Noor Zifah Binti Nazaran (Automated Teller Machine System)
- 2011/2012 - NursalfarinaBinti Muhammad
- 2010/2011 – Muhammad Fahmi Azri Bin Mustafa
- 2004/2005 – Mohd Fadzil Bin Md Arap

Workshop II

2020/2021

- Fatin Najiha binti Mohd Tarmidi
- Muhammad Akmal bin Mohd Sabri
- Muhammad Imran bin Ismail
- Muaadh Anwar Salem Medshel

2019/2020

- Muhammad Hasif bin Khairul Nizam
- Sopana A/P Murugan
- Mujeeb Ali Najm Al-Qarah
- Ameer Uzair bin Azam

2018/2019

- Ahmad Firdaus Bin Ahmad Husni
- Lee Li Qing
- Sithi Fathimah Binti Ahmad Mahdum

- Darshini A/P Loganathan

2017/2018

- Siti Sarah Binti Zaid
- Kamilea Arisya Binti Kamal Ariffin
- Mohd Nazmi Syarifuddin Bin Mohd Yakob

2016/2017

- Ardhi Surya Ibrahim
- Lee Li Teng
- Muhammad Nuruddin Bin Adam
- Nur Hamizah Binti Shahroni

2014/2015

- Woon Pei Wen
- Eisy Humaira Binti Abdul Aziz
- Nurul Fatimah inti Abdul Samad
- Muhammad Zaid Bin Ali
- Noor Azreeani Binti Azman

2013/2014

- Muhammad Amir Azwan Bin Mohamad Aminordin
- Muhammad Aqsal Bin Mohd Ridzuan
- Nur Fakhira binti Ismail
- Muhammad Fadhil Hafiz Bin Shahir

2012/2013

- Eda Aliah Athirah Binti Abdul Aziz
- Muhamad Hariz Bin Khalil
- Muhamad Bin Mohamed Sidek
- Kasiman Bin Wasiman
- Lim Wei Jun
- Ee Soon Shen
- Tan Lek Wei
- Ng Sing Liang

2010/2011

- Chip Wai Yein
- Tong Siew Foong
- Radar Sandi Augustha
- Norhidayu Noordin
- Soh Chooi Yoke
- Wan Nurul Ain Micor Abdul Jamil
- Nur Athirah Omar
- Siti Aishah Miskon

2006/2007

- Maizatul Asni Ayub
- Wan Najihah Mohamad
- Badariah Mohamad

- Catherine Foo Wei Li
- Mohd Faisal Imran Ismail
- Mohd Shahnizar Marzuki
- Mohd Azmin Abu Bakar
- Muhamad Azlan Muhamad Sape'ei

2005/2006

- Aminah Bibi Bawamohiddin
- Norelmiah Samian
- Roslah Abdul Rahim
- Siti Nor Rauzah Mohd Saim
- Ikhwan zaini Awang Mat Saaid
- Mohd Zaki Zamani Shirat
- Zamzuri Husnan
- Rusliza Abdullah

Workshop 1

2020/2021

- Zuraida binti Mohd Zeidy
- Alisya Ezzati binti Hizamudin
- Zaki Armindo

2017/2018

- Shaik Mohd Farhan bin S M Salmi
- Zulfadhli bin Mohd Jais
- Wan Nabilah Huda binti Wan Mohd Burhanuddin
- Nurul Syaheerah Anuar

2016/2017

- Fairuza Nur Amalina Binti Azizan
- Koay Wen Hui
- Kong Ii Ning

2014/2015

- Shafiq Akmal Bin Mansor
- Che Nurhidayu Binti Che Roslan
- Ana Syahirah Binti Azmi

2013/2014

- Siti Amirah Binti Muhamad Termidi
- Nor Hadhirah Binti Mohd Sheriff
- Loke Kien Bin
- Lim Chi Hong
- Jegadeswari A/P Mani

2012/2013

- Muhamad Amir Hamdi Bin Kassim
- Nur Hanis marini Binti Ab. Rahim
- Adeline Chua Jia Min

- Potriyen Selva A/L Subbuodayar

2011/2012

- Nur E'zzati Md. Faisol
- Nursyahmi Abdul Sukor
- Nuraini Rusdi
- Nurfatin Ismail

2010/2011

- Hafidz Nurul Yaqin Abdullah
- Muhammad Rachmadhana
- Farah Aris
- Siti Nur 'Aini Abd. Khalil
- Muhammad Redzuan Ishak
- Muhammad Adib M.Salin

Diploma Workshop

2002/2003

- Mohan Raj a/l Subramaniam
- Norzahirah Zainuddin

RESEARCH & DEVELOPMENT

Editorial

1. Editor, Journal of Advanced Computing Technology (JACTA)
2. Editorial Review Board, IEEE Access
3. Editorial Review Board, International Journal of Information Technologies and Systems Approach (IJITSA)
4. Editorial Review Board, Journal of Software: Evolution and Process (JSME)
5. Editorial Review Board, International Journal of Decision Support Systems (IJDSS)
6. Editorial Review Board, Journal of Human Capital Development (JHCD)

Research Grants

1. Project Leader, Requirements-based Test Case Prioritization Technique to improve Testing Efficiency for Digital Documents Repository System Readiness (PJP/2020/FTMK/PP/S01774)
2. Project Leader, Improving the Quality of Software Requirements Specification (SRS) through a Boilerplate Technique (PJP/2017/FTMK-CACT/S01573)
3. Member, Improving Agriculture Management Service through Farmer Experience using Smart Farmer Mobile Application (2015: International Grant - CLMV)
4. Member, An Enhanced Named Entity Recognition based on Fuzzy Semi-supervised Clustering for Unstructured Crime Textual Data Analysis (2015:FRGS)
5. Project Leader, A New Software Requirements Defect Management Approach using Formal Negotiation Method to Produce Sustainable Quality Software (2013: FRGS)

6. Member, Developing a hybrid model by integrating informative parameters in information security risk analysis (2013:FRGS)
7. Member, Enhance Cepstrum-based (MFCC) Extraction Technique with Wavelet Coefficient Method for Improving Identification Accuracy (2013: FRGS)
8. Project Leader, An Improved Defects Classification Taxonomy for Rapid Anomaly Detection to Aid Crime Investigation (2013: PJP, UTeM)
9. Member, Enhancing Predictive Crime Mapping Model Using Association Rule Mining For Criminal Geographical And Demographic Structure Modeling (2013: PJP, UTeM)
10. Project Leader, A Framework for Empirical Investigation to Attain Cost Effective Software Requirements through Negotiation (2011: PJP, UTeM)
11. Member, An Enhance Programming Approach in Teaching and Learning for Introductory Programming Learner (2011: PJP, UTeM)
12. Member, Investigation on Music Feature Representation for Data Retrieval (2011: PJP, UTeM)
13. Member, Virtual Reality: KUTKM Campus Virtual Tour (2002: PJP, KUTKM)
14. Member, ASISS E-Learning System: Kajian Keberkesanan Pelaksanaan E-Learning di FTMK. (2003: PJP, KUTKM).

Consultancy Projects

1. Melaka Smart Heritage Building System – Consultant (2022)
2. Forestry Information System, Negeri Sembilan – Professional Tester (2017)
3. Enterprise Architecture for National Geospatial (NGMP) – Consultant (2017)
4. Master Degree Off-Shore Program (Kuching) – Project Leader (2018 - 2020)
5. Master Degree Off-Shore Program (Muadzam Shah) – Academic and Program Coordinator (2016 - 2018)
6. Master Degree Off-Shore Program (Sabak Bernam) – Program Coordinator (2017 - 2019)
7. MyUni Curriculum Development (Foundation and Undergraduate) – Consultant (2012)
8. Malaysia Online Services Portal – Project Manager (2012)
9. i-Hutan Jabatan Perhutanan Negeri Terengganu – Quality Assurance Team Leader (2011)

Publications

1. Journal, “Missing Data Imputation Via Stacked Denoising Autoencoder Combined with Dropout Regularization Based Small Dataset in Software Effort Estimation” International Journal of Intelligent Engineering and Systems, 15 (3) pages 253–267 (2022)
2. Journal, “Conditional Variational Autoencoder with Inverse Normalization Transformation on Synthetic Data Augmentation in Software Effort Estimation” International Journal of Intelligent Engineering and Systems 15 (3) pages 366–381 (2022)
3. Journal, “A recommendation system of training data selection method for cross-project defect prediction” Indonesian Journal of Electrical Engineering and Computer Science, 27 (2) pages 990-1006 (2022)
4. Journal, “Efficacy of the Image Augmentation Method using CNN Transfer Learning in Identification of Timber Defect” International Journal of Advanced Computer Science and Applications, 13 (5) pages 107-114 (2022)
5. Journal, “Bayesian hyperparameter optimization and Ensemble Learning for Machine Learning Models on software effort estimation” International Journal of Advanced Computer Science and Applications, 13 (3) pages 419-429 (2022)

6. Proceedings, "Performance Comparison of Equal Width and Equal Frequency Discretization Methods for Author's Handwriting Recognition" Proceedings of the 8th International Conference on Computational Science and Technology, Springer, Singapore, p. 535-546 (2022)
7. Journal, "Research Efforts and Challenges in Crowd-based Requirements Engineering: A Review" International Journal of Advanced Computer Science and Applications, 12 (9) pages 395-402 (2021)
8. Journal, "A Systematic Literature Review on Regression Test Case Prioritization" International Journal of Advanced Computer Science and Applications, 12 (9) pages 253-267 (2021)
9. Proceedings, "Sentiment Analysis Dashboard using Twitter Data in power BI" International Conference on Intelligent and Interactive Computing 2021, Melaka, Malaysia, p. 61-67 (2021)
10. Journal, "Identification of wood defect using pattern recognition technique" International Journal of Advances in Intelligent Informatics, 7 (2) pages 163-176 (2021)
11. Journal, "Features Ranking Method to Determine Significant Features for Handwriting Images- Systematic Literature Review" Int. J. Advance Soft Compu. Appl 12 (2) (2020)
12. Journal, "A REVIEW OF TRAINING DATA SELECTION IN SOFTWARE DEFECT PREDICTION" Journal of Theoretical and Applied Information Technology 98 (12), pp. 2092-2108 (2020)
13. Journal, "Prioritizing Business Architecture Entities with Best-Worst Method" International Journal on Emerging Technologies 11 (3), pp. 995-1004 (2020)
14. Journal, "Method for Estimating the Performance of Enterprise Architecture Implementation in an Upstream Petroleum Industry" International Journal of Recent Technology and Engineering 8 (6), pp. 1868-1874 (2020)
15. Journal, "Comparison of global and local features for author's identification by using geometrical and zoning methods" 1502 (1) (2020)
16. Journal, "A Study on Reuse-based Requirements Engineering by Utilizing Knowledge Pattern" International Journal on Advanced Science, Engineering and Information Technology. 10 (1), pp. 41-46 (2020)
17. Journal "Analysis of texture features for wood defect classification" Bulletin of Electrical Engineering and Informatics 9 (1), pp. 121-128 (2020)
18. Journal, "IoT based temperature and humidity monitoring framework" Bulletin of Electrical Engineering and Informatics 9 (1), 229-237 (2020)
19. Journal, "Selecting General entities for TOGAF's Core Content Metamodel using Best Worst Method" International Journal of Innovative Technology and Exploring Engineering, 9 (1), pp. 3857-3863 (2019).
20. Journal, "An Exploration to Determine Essential Requirements for Smart Home Application" International Journal of Innovative Technology and Exploring Engineering, 8 (12), pp. 1760-1764 (2019).
21. Journal, "An Intelligent Crisis-Mapping Framework for Flood Prediction" International Journal of Recent Technology and Engineering, 8 (2 Special Issue 8), pp. 1304-1310 (2019).
22. Proceedings, "A Study on Gamification for Higher Education Students' Engagement towards Education 4.0" Lecture Notes in Networks and Systems, 67, pp. 491-502 (2019).
23. Journal, "Shopping Assistant App for people with Visual Impairment: An Acceptance Evaluation" International Journal of Computing, 18 (3), pp. 285-292 (2019).
24. Journal, "Logical Approach: Consistency Rules between Activity Diagram and Class Diagram" International Journal on Advanced Science, Engineering and Information Technology, 9 (2). pp. 552-559 (2019).
25. Journal, "A Systematic Literature Review on Enterprise Architecture Development in Various Industry Domains" Journal of Theoretical and Applied Information Technology, 97 (3). pp. 897-917 (2019).
26. Journal, "A Review on Requirement Elicitation Effort in Software Development Process" Journal of Software Engineering & Intelligent Systems, 4 (2) (2019).

27. Journal, "An Enhanced Malay Named Entity Recognition using Combination Approach for Crime Textual Data Analysis" *International Journal of Advanced Computer Science and Applications*, 9 (9). pp. 474-483 (2018)
28. Journal, "Named Entity Recognition using Fuzzy C-Means Clustering Method for Malay Textual Data Analysis" *Journal of Telecommunication, Electronic and Computer Engineering*, 10 (2-7). pp. 121-126 (2018).
29. Journal, "The Effectiveness of Gamification Technique for Higher Education Students Engagement in Polytechnic Muadzam Shah Pahang, Malaysia" *International Journal of Educational Technology in Higher Education*, 15 (41). pp. 1-16 (2018).
30. Journal, "An Empirical Investigation on a Tool-based Boilerplate technique to Improve Software Requirement Specification" *International Journal of Advanced Computer Science and Applications*, 9 (12). pp. 397-401 (2018).
31. Journal, "Crowdsourcing for Requirements Engineering: A Simplified Review" *International Journal of Computer Information Systems and Industrial Management Applications*, 10 pp.134-142 (2018).
32. Journal, "A Tool-based Boilerplate Technique to Improve SRS Quality: An Evaluation" *Journal of Telecommunication, Electronic and Computer Engineering*, 10 (2-7) pp. 111-114 (2018).
33. Book, "Requirements Engineering for Internet of Things: 4th Asia-Pacific Symposium, APRES 2017, Melaka, Malaysia, November 9–10, 2017" Springer, Editor (2018).
34. Journal, "Requirements Elicitation with Defect Prevention Approach" *Journal of Next Generation of Information Technology*, 8(1). pp. 1-10 (2017).
35. Proceedings, "A Malay named entity recognition using conditional random fields" 5th International Conference on Information and Communication Technology (ICoICT), IEEE, 17 May 2017, p.1-6.
36. Journal, "An Enhancement of Software Requirements Negotiation with Rule-based Reasoning: A Conceptual Model" *Journal of Telecommunication, Electronic and Computer Engineering*, 8(10). pp. 193-198 (2016).
37. Journal, "A Survey to Determine the Significance of Software Requirements Defects from Practitioners' Perspectives in Malaysia" *International Journal of Computers*, 10. pp. 18-24 (2016).
38. Journal, "Measuring Software Requirements Quality Following Negotiation through Empirical Study" *International Journal of Applied Engineering Research*, 11(6). pp. 4190-4196 (2016).
39. Journal, "The Automated Named Entity Recognition for Textual Requirements Analysis Social Media" *International Journal of Applied Engineering Research* (2016).
40. Proceedings, "A Conceptual Model to Empower Software Requirements Conflict Detection and Resolution with Rule-based Reasoning" International Soft Science Conference, Langkawi Malaysia (11-13 April 2016)
41. Book, "Software Requirements Negotiation: A Stitch in Time Saves Nine", Penerbit Universiti, UTeM (2015).
42. Book Chapter, "The Relevance of Software Requirement Defect Management to Improve Requirements and Product Quality: A Systematic Literature Review," *Pattern Analysis, Intelligent Security and the Internet of Things, Advances in Intelligent Systems and Computing* A. Abraham, A. K. Muda and Y.-H. Choo, eds., pp. 95-106: Springer International Publishing, 2015.
43. Journal, "An Adaptation of Requirements Engineering Defects Management Effort: A Survey on Defects in Police Report Statements", Special Issue, *Science International Lahore*, 26(4). pp. 1483-1485 (2015).
44. Proceedings, "A Simplified Systematic Literature Review: Improving Software Requirements Specification Quality with Boilerplates" 9th Malaysian Software Engineering Conference, Kuala Lumpur (16-17 December 2015).
45. Proceedings, "A Survey on User's Perceptions of Electric Vehicles for Mobility in a Malaysian University" Malaysia Statistics Conference, Kuala Lumpur (17 November 2015).

46. Proceedings, “Software Requirements Defect Management: Moulding A Research Agenda” Postgraduate Research Workshop-Requirements Engineering in conjunction with Software Testing Conference Asia, Kuala Lumpur (7 September 2015).
47. Proceedings, “A Significant Study of Determining Software Requirements Defects: A Survey”. 14th International Conference of Applied Computer and Applied Computational Science, Kuala Lumpur (23-25 April 2015).
48. Journal, “Predictive Crime Mapping Model Using Association Rule Mining for Crime Analysis” Special Issue, Science International Lahore, 26(5). pp. 1703-1706 (2014).
49. Book Chapter, “When the Wisdom of Communication is Vital during the Requirements Engineering Process: Lessons Learnt through Industry Experience” in Handbook of Research on Emerging Advancements and Technologies in Software Engineering, ISBNB 978-1-4666-6026-7. (2014).
50. Journal, “Metaheuristic Optimization based Feature Selection for Software Defect Prediction”. Journal of Software, 9 (5). pp. 1324-1333 (2014).
51. Journal, “Neural Network Parameter Optimization Based on Genetic Algorithm for Software Defect Prediction”, Advanced Science Letters, 20 (6).(2014).
52. Journal, “A Comparison Framework of Classification Models for Software Defect Prediction”, Advanced Science Letters, 20 (6).(2014).
53. Proceedings, “Learning through Playing: Development of Software Architect Skills with Building Blocks”. INTED 2014 – 8th International Technology, Education and Development Conference, Valencia, Spain (10-12 March 2014)
54. Modul, “A Student’s Guide: UML for Software Engineering”, Penerbit Universiti, Universiti Teknikal Malaysia Melaka (2013).
55. Journal, “Requirements Negotiation: Does Consensus Reduce Software Development Cost?” JDCTA: International Journal of Digital Content Technology and its Applications, 6 (22). pp. 46-55. ISSN 2233-9310 (Online) (2012).
56. Journal (co-author), “Optimizing Feature Extraction using PSO-LDA for Face Recognition,” Journal of Information Assurance and Security, ISSN 1554-1010 Volume 6 (2012).
57. Proceedings, “Learning Through Practice via Role-Playing: Lessons Learnt”, EDULEARN 2012 – 4th Annual International Conference On Education And New Learning Technologies, Spain, (2-4 July, 2012)
58. Proceedings (co-author), “A Comparative Study of Feature Extraction Using PCA and LDA for Face Recognition”, Seventh International Conference on Information Assurance and Security (IAS 2011), Melaka, Malaysia. (5 -8 December 2011)
59. Journal, “Requirements Negotiation: Making System Stakeholders’ Multiple-Views One,” Journal of Communication and Computer (2011), Vol 8, pp 290-299.
60. Proceedings, “The Effectiveness of Simulation Education for Undergraduate Students in Software Engineering Area”, EDULEARN 2011 - 3rd Annual International Conference On Education And New Learning Technologies, Spain, (4-6 July, 2011)
61. Proceedings, “An Experimental Design to Exercise Negotiation in Requirements Engineering”, International Conference on Software Engineering and Computer Systems, Springer, Pahang. (27-29 June, 2011)
62. Proceedings (co-author), “Recognizing Patterns of Music Signals to Songs Classification using Modified AIS-based Classifier”, International Conference on Software Engineering and Computer Systems, Springer, Pahang. (27-29 June, 2011)
63. Proceedings, “Sitting around Talking Gets the Job Done Better”, 17th University of Western Australia School of Computer Science and Software Engineering Research Conference, Yanchep WA. (9-10 September 2009)

64. Proceedings, “Measuring the Stakeholders’ Agreement Level in Negotiation through Experiment”, IAENG International Conference on Software Engineering, Hong Kong (18-20 March 2009).
65. Proceedings, “Requirements Negotiation: Towards Moulding a Research Agenda”, The 4th Malaysian Software Engineering Conference, Kuala Terengganu, Malaysia (16-17 December 2008)
66. Proceedings, “Sorting out Requirements through Negotiation in Engineering Projects”, The 9th Postgraduate Electrical Engineering & Computing Symposium, Perth, Australia (4 November 2008)
67. Proceedings, “Negotiation in the Requirements Elicitation and Analysis Process”, 19th Australian Software Engineering Conference, Perth, Australia (26-28 March 2008)
68. Proceedings, “Understanding Requirements Engineering”, International Conference on Engineering and ICT, Melaka, (27-28 November 2007).
69. Proceedings, “Virtual Campus Tour: Interactive Advertisement for Kolej Universiti Teknikal Kebangsaan Malaysia”, Seminar Kebangsaan ICT Dalam Pendidikan 2005, Prince Hotel, Kuala Lumpur, (17-19 November 2005).
70. Proceedings, “Kolej Universiti Teknikal Kebangsaan Malaysia Virtual Campus Tour”, Seminar Pencapaian Penyelidikan Peringkat Universiti, Kuantan Pahang, (2005)
71. Proceedings, “Developing Knowledge Based Application System by Applying DOD-STD-2167A”, International Conference on Informatics 2004, PWTC, Kuala Lumpur, (28 – 30, July 2004).

AWARD

Research Exhibition

- Silver Medal “Virtual Intelligent Dynamic Data Cloud Center” in ITEX 2018
- Silver Medal, “MyGAP: Mobile Application for Good Agriculture Practice” in ITEX 2018
- Gold Medal, “MyGap: Mobile Application for Good Agriculture Practice” in UTeMEX 2017
- Gold Medal, “Writer Identification System” in UTeMEX 2012
- Bronze Medal, “Investigati on on Music Features Representations for Data Retrieval” in UTeMEX 2012

Award

- Excellent Service Award, (2003, 2011, 2016)
- University Academic Award, Book Category (2016)

ACADEMIC APPOINTMENT

1. Advisory Panel - Undergraduate Program Majoring in Information System Design - Universitas Internasional Batam
2. Technical Advisor – Diploma Computer Technology (System) - Pusat Latihan Teknologi Tinggi (ADTEC) Melaka
3. Board of Study – Bachelor of Computer Science (System Development) – Universiti Teknikal Malaysia Melaka

ADMINISTRATION

1. Chair, Faculty Industrial Engagement Committee (2022 – current)
2. Member, University's Task Force MyRA (2021- current)
3. Member, University Journal Committee (2019-2021)
4. Member, University Conference Committee (2019 - current)
5. Chair, Faculty Research Committee (2021 – 2022)
6. Member, Faculty Postgraduate Studies Committee (2019 – 2022)
7. Member, Faculty Academic Committee (2019 - 2022)
8. Editor, RICE (2018 - current)
9. Chair, Colloquium Committee (2016- 2017)
10. Chair, Mobility Committee (2014 - 2015)
11. Chair, Consultation Committee (2013 - 2014)
12. Chair, Seminar SE 2011 Committee (2011)
13. Chair, Promotion Committee (2011-2013)
14. Secretary, Publication Committee (2012)
15. Technical Committee, Development of UTeM's Knowledge Management Framework (2016)
16. Member, Majlis ICT Universiti (2012-2014)
17. Member, Committee of The Code (Programming Contest) (2010-2011)
18. Member, Committee of Doctor of IT (2010-2011)
19. Member, Committee of Master by Course Final Year Project (2010)
20. Member, Committee of Undergraduate Final Year Project (2010)
21. Member, Faculty Executive Committee (2004-2006) (2019 – current)
22. Member, Faculty Academic Committee (2004-2006) (2019 – current)
23. Member, Faculty Research and Postgraduate Program Committee (2004-2006) (2018 – current)
24. Member, FTMK Permanent Campus Development Committee (2004-2006)
25. Member, Committee of Majlis Bicara Tokoh Minggu Haluan Siswa 2004. (2004)
26. Member, Committee of Majlis Malam Penutup Minggu Haluan Siswa 2004. (2004)
27. Member, FTMK Committee of Workshop 2, KUTKM. (2003 – 2004, 2011).
28. Member, FTMK Committee of Industrial Training Students, KUTKM. (2003 -2004).
29. Member, Committee of Istiadat Pemasyhran Canselor & Majlis Konvokesyen Komemoratif KUTKM (2003)
30. Member, Committee of Majlis Makan Malam Konvokesyen Komemoratif KUTKM (2003)
31. Member, Committee of Majlis Makan Malam Kejohanan Golf antara IPTA (2003)
32. Member, Committee of Seminar Profesionalisme Wanita Di Era Globalisasi (2003)
33. Member, Committee of Majlis Sambutan Hari Q KUTKM 2003 dan Pelancaran Sistem ISO 9000 (2003)
34. Member, Committee of Majlis Pelancaran Prosiding Konvensyen Melaka Sebagai Pusat Kecemerlangan (2003)

OTHERS

Short Courses Conducted

- Program Chair, 4th International Conference on Science in Information Technology (ICSITech 2018), Melaka Malaysia.
- Program Chair, 4th Asia Pacific Requirements Engineering Symposium (APRES 2017), Melaka Malaysia.
- Track Chair and PC Member, 4th World Congress on Information and Communication Technology (WICT 2014), Melaka, Malaysia.
- Program Committee Member, International Symposium on Research in Innovation and Sustainability (ISoRIS 2014), Melaka, Malaysia.
- Program Committee Member, Research Survival Workshop (RSW 2014), Melaka, Malaysia.
- Program Committee Member, 6th International Conference on Computational Aspects of Social Networks (CASoN 2014), Porto, Portugal.
- Program Committee Member, 14th International Conference on Hybrid Intelligent System (HIS 2014), Gulf University of Science and Technology, Kuwait.
- Program Committee Member, 14th International Conference on Intelligent Systems Design and Applications (ISDA 2014), Okinawa, Japan.
- Program Committee Member, 6th World Congress on Nature and Biologically Inspired Computing (NaBIC 2014), Porto, Portugal.
- Committee, Software Engineering Postgraduate Workshop (SEPoW 2013), UTeM, Melaka.
- Program Committee Member, Fifth World Congress on Nature and Biologically Inspired Computing (NaBIC 2013), Fargo, North Dakota, USA
- Program Committee Member, 13th International Conference on Hybrid Intelligent System (HIS 2013), Yasmine Hammamet, Tunisia
- Program Committee Member, 13th International Conference on Intelligent Systems Design and Applications (ISDA 2013), UPM, Malaysia
- Program Committee Member, Fourth International Conference on Computational Aspects of Social Networks (CASoN 2012), Sao Carlos, Brazil.
- Program Committee Member, Fourth International Conference of Soft Computing and Pattern Recognition (SoCPaR 2012), Brunei
- Program Committee Member, 12th International Conference on Intelligent Systems Design and Applications (ISDA 2012), Kochi, India
- Program Committee Member, 12th International Conference on Hybrid Intelligent System (HIS 2012), Pune, India
- Conference Committee, 7th International Conference on Information Assurance and Security (IAS 2011), UTeM, Melaka.
- Conference Committee, 11th International Conference on Hybrid Intelligent Systems (HIS2011), UTeM, Melaka.
- Exhibitor for Science, Technology and Innovation Expo 2004
PWTC, Kuala Lumpur.
27 – 29 August, 2004.
- Exhibitor for Exhibition of IPTA Research and Development 2003.

- PWTC, Kuala Lumpur.
9 – 12 October, 2003.
- Konvensyen Kebangsaan Pertama Pendidikan Kejuruteraan.
Putrajaya Marriott, Putra Jaya.
7 – 9 July 2003.
 - Seminar Perkongsian Pengalaman Industri ICT Siri 1
Dewan Sri Negeri, Melaka.
25 January 2003.

Short Courses Attended

- Course Certified Tester Foundation Level
Organizer: MSTB
(2-6 October 2017)
- Course TOGAF 9.1 Foundation & Certified Combined Level 1+2
Organizer: ATD Solution
(11-14 June 2013)
- Colloquium Active Learning
Organizer: UTeM
(8 May 2013)
- Course and Certification: IT Architecture Core,
Organizer: ATD Solution
(15-19 April 2013)
- Book Writing Workshop with Dewan Bahasa dan Pustaka
Organizer: UTeM
(3 April 2013)
- Course and Certification: IT Architecture Bootcamp
Organizer: ATD Solution
(29-31 January 2013)
- Workshop: Pengukuhan Kaedah Pembelajaran Berpusatkan Pelajar Zon Selatan
Puteri Pacific, Johor Bharu
Organizer: KPT
(13 May 2011)
- Course PINTAR FTMK
Port Dickson
Organizer: UTeM
(22 – 24 April, 2011)
- Industrial Talk from Infineon
FTMK, UTeM
Organizer: UTeM
(13 April 2011)
- Course: OBE Approach
PPS, UTeM
Organizer: UTeM
(30 March 2011)
- Executive Talk: Innovation in Teaching
Chancellery, UTeM
Organizer: UTeM

- (23 March 2011)
- Workshop in Research Module Writing Strategy
PPS, UTeM
Organizer: UTeM
(21 March 2011)
- KPT Research Grant and a Way to Excel
Chancellery, UTeM
Organizer: UTeM
(15 March 2011)
- Module to Book Writing Workshop
City Campus, UteM
Organizer: UTeM
(9 March 2011)
- How to Write An Award Winning Research Proposal Course
Eastin Hotel, Petaling Jaya
Organizer: AKEPT
(29 – 30 September 2010)
- Programming with C# Course
Wisma Wirama, Kuala Lumpur
Organizer: MCSB Systems (M) Berhad
(7 – 11 Jun 2004)
- Introduction to C# Course
Wisma Wirama, Kuala Lumpur
Organizer: MCSB Systems (M) Berhad
(10 –14 May 2004)
- Programming with ADO.Net Course
Wisma Wirama, Kuala Lumpur
Organizer: MCSB Systems (M) Berhad
(10 –14 May 2004)
- German Language Short Course
KUTKM, Melaka
Organizer: KUTKM
(3 February – 29 April 2004)
- Short Conference on Technology Transfer Services & Intellectual Property.
Hotel Renaissance, Melaka.
Organizer : UNIC, KUTKM
(13 December, 2003)
- Course; Pengurusan Pengacaraan Majlis dan Protokol.
Tang Dynasty Hotel, Kota Kinabalu Sabah.
Organizer : Yayasan Amanah Latihan Berkanun
(22 –24 September 2003)
- Conducting Research and Writing Technical Journal / Conference Papers of International
Standard Workshop. Hotel Renaissance, Melaka.
Organizer : Pusat Universiti –Industri (UNIC), KUTKM.
(14 April, 2003)
- Course; Protocol Skill and Social Etiquette
The Golden Legacy Hotel, Melaka.
Organizer : KUTKM.
(18 – 19 March, 2003)

- Course; Induksi Umum dan Khusus Kumpulan Pengurusan & Profesional Bil 1/2003
Ayer Keroh Country Resort, Melaka.
Organizer : KUTKM
(27 – 29 March 2003 & 8 – 26 April 2003)
- Dynamic Use of English for Lecturers The Series.
Ilham Resort and Training Centre Port Dickson, Negeri Sembilan.
(11 – 13 May, 2003)
- Course, Basic Teaching Methodology for Lecturer
Club House, Palm Resort Sofitel Senai Johor.
Organizer : Universiti Teknologi Malaysia
(25 – 27 Januari, 2003)
- Object-Oriented Analysis & Design Using UML Version 2000
Organizer : Rational University
(18 – 22 November, 2002)
- Linux Network Administration
Organizer : Open Source Systems Sdn Bhd
(22 – 24 October 2002)
- Workshop; FTMK Curriculum
Port Dickson,
Organizer : FTMK, KUTKM.
(13 – 15 Oktober, 2002).
- Linux System Administration
Organizer : Open Source Systems Sdn Bhd
(11 – 12 October 2002)

Community Services

- Facilitator – Program Motivasi Sekolah Menengah Tun Mutahir
Organizer: FTMK, UTeM
(2011)
- Assistant Instructor – Kursus Literasi IT Modul Microsoft Excel
Organizer: HR, KUTKM
(28 & 29 April 2004)

Extra Activities

- Advisor/Adjudicator, Debat Teknikal Inter-Fakulti KUTKM 2004
Organizer: KUTKM
- Adjudicator, Debat Diraja Antara IPTA Malaysia 2003
Organizer: Universiti Pendidikan Sultan Idris
- Adjudicator, Debat Inter-Varsiti Sains dan Teknologi 2003
Organizer: Universiti Teknologi Malaysia
- Coach for KUTKM Debate Team (2003-2006)