

CURRICULUM VITAE DR. FARKHANA BINTI MUCHTAR



Faculty of Computing, Universiti Teknologi Malaysia, 81310 Skudai, Johor, Malaysia

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CAREER OBJECTIVES

To be a high quality academician in UTM with the following criteria:

- very well skilled with theory and hands on knowledge.
- capable of producing world-class research
- responsible to the Creator and society

ACADEMIC QUALIFICATION

1. Doctor of Philosophy in Computer Science (By Research) Universiti Teknologi Malaysia (UTM)

Graduated with excellent thesis under project titled "Congestion Control Solution to Improve Energy Efficiency of NDN Based MANET".

2. Master of Computer Science (By Research) **Universiti Utara Malaysia (UUM)**

Graduated with excellent thesis under project titled "Query Performance of CORBA Trading Object Service Using LDAP as Backend Storage".

- 3. Bachelor of Computer Science Universiti Teknologi Malaysia (UTM) Graduated with excellent thesis under project titled "Sistem Pesanan Dan Kawalan Stok (SPDKS)".
- 4. Diploma of Computer Science Universiti Teknologi Malaysia (UTM)

AWARDS & RECOGNITION

- 1. Best Paper Awards Mobile Ad hoc Network Testbed Using Mobile Robot Technology. International Conference on Green and Sustainable Computing (ICoGeS 2017)
- 2. MOSTI Scholarships for Master of Philopsophy Programme
- 3. MARA Scholarships for Bachelor Degree Programme
- 4. MARA Scholarships for Diploma Programme
- 5. Dean's List Awards, Faculty of Computer Science and Information System, UTM (1996 - 1999)

ORCiD: 0000-0002-5636-5741

- Google Scholar: Farkhana Muchtar
- h-index = 6
- i-10 index = 4
- No of Citations = 142

AREA OF EXPERTISE

- Computer Science (CS)
- Named Data Networking (NDN)
- Mobile Ad hoc NETwork (MANET)
- Artificial Intelligence (TinyML)
- Internet of Things (IoT)

NO OF PUBLICATIONS = 62

Q1 ISI WoS Journals 6 **Scopus Journals** 14 Conference Proceedings **13** & Chapter in Books 18 **Conferences & Seminars** Thesis, Report 6

Article To Be Published

5

& Teaching Modules

PUBLICATIONS

WEB OF SCIENCE JOURNALS (TOTAL NUMBER OF ARTICLE = 6)

- Farkhana Muchtar and Hanan Abdullah (2023). Congestion Control Scheme for energy efficiency of named data networking based mobile ad hoc network. *Journal of Network and Computer Applications*. <u>Under Progress</u> [Q1 Journal, IF: 8.7]
- Farkhana Muchtar, Abdul Hanan Abdullah, Mosleh Hamoud Al-Adhaileh and Kamal Zuhairi Zamli (2020). Congestion control solution to improve energy efficiency of NDN based MANET: A review. Journal of Network and Computer Applications, 152, 102511. https://doi.org/10.1016/j.jnca.2019.102511 [Q1 Journal, IF: 8.7]
- 3. Farkhana Muchtar, Abdul Hanan Abdullah, Suhaidi Hassan, Ahamad Tajuddin Khader and Kamal Zuhairi Zamli (2019). Energy conservation of content routing through wireless broadcast control in NDN based MANET: A review. Journal of Network and Computer Application, 131, 109-132. https://doi.org/10.1016/j.jnca.2019.01.004 [Q1 Journal, IF: 8.7]
- Farhan Masud, Abdul Hanan Abdulllah, Ayman Akameem, Gaddafi Abdul-Salaam and Farkhana Muchtar (2019). Traffic Class Prioritization-Based Slotted-CSMA/CA for MAC in Intra-WBANS. Sensor, 19, 466. https://doi.org/10.3390/s19030466
 [Q1 Journal, IF: 3.576]
- Farkhana Muchtar, Abdul Hanan Abdullah, Suhaidi Hassan and, Farhan Masud (2018). Energy conservation strategies in Host Centric MANET: A review. Journal of Network and Computer Applications, 111, 77-98.
 https://doi.org/10.1016/j.jnca.2018.03.020 [Q1 Journal, IF: 8.7]
- Farkhana Muchtar and Abdul Hanan Abdullah. Mobility in mobile ad-hoc network testbed using robot: Technical and critical review (2018). Robotics and Autonomous Systems, 108, 153-178. https://doi.org/10.1016/j.robot.2018.07.007 [Q1 Journal, IF: 4.3]

SCOPUS JOURNALS (TOTAL NUMBER OF ARTICLE = 14)

- 7. Siti Nor Zawani Ahmmad, Ibrahim Ahmad Ihsan Bin Ahmad Zambri, **Farkhana Muchtar**, Mosleh H. Al-Adhaileh, Raaid Alubady, Pradeep Kumar Singh, Radzi Ambar and Deris Stiawan (2023). Health Monitoring System Using IoT. *International Journal of Advanced Trends in Computer Science and Engineering*. [Accepted, waiting to be published]
- 8. Siti Nor Zawani Ahmmad, Nur Afifah Binti Mohamad, Farkhana Binti Muchtar(2023). Intelligent Box Trainer for Surgical Using IoT. International Journal of Advanced Trends in Computer Science and Engineering. [Accepted, waiting to be published]
- Siti Nor Zawani Ahmmad, Muhamad Mubin Jaafar, Farkhana Muchtar and Mohd Ismail Yusof (2020). Automated Gardening Portable Plant Using IoT. International Journal of Advanced Trends in Computer Science and Engineering, 9(1), 205-211. http://www.warse.org/IJATCSE/static/pdf/file/ijatcse36911sl2
 020.pdf
- Siti Nor Zawani Ahmmad and Farkhana Muchtar (2020). A
 Review on Applications of Optimization Using Bat Algorithm.
 International Journal of Advanced Trends in Computer Science
 and Engineering, 9(1), 212-219.
 http://www.warse.org/IJATCSE/static/pdf/file/ijatcse37911sl2020.pdf
- 11. Farkhana Muchtar, Ajibade Lukuman Saheed, Mohd Helmy Abd Wahab and Syed Zulkarnain Syed Idrus (2020). A Study of Named Data Networking as Communication Protocol for Multi-hop Wireless Ad Hoc Network, IOP Journal of Physics: Conference Series. https://iopscience.iop.org/article/10.1088/1757-899X/917/1/012051
- 12. Farkhana Muchtar, Ajibade Lukuman Saheed, Mohd Helmy Abd Wahab and Syed Zulkarnain Syed Idrus (2020). Query Operation in Trader Service: LDAP Directory Versus Database, IOP Conference Series Materials Science and Engineering, 917(1):012052 https://iopscience.iop.org/article/10.1088/1757-899X/917/1/012051/pdf
- 13. Siti Nor Zawani Ahmmad, Abdul Zharfan Osman, Noor Huda Ja'afar, Ernie Mazuin Mohd Yusof, Mohd Ismail Yusof and Farkhana Muchtar (2019). Smart Bed Health Monitoring Based on ECG and Body Temperature Using Labview and IoT. International Journal of Innovative Technology and Exploring Engineering, 9(1), 4631-4637

 http://www.ijitee.org/wpcontent/uploads/papers/v9i2/B9047129219.pdf

- 14. Deris Stiawan, Dimas Wahyudi, Ahmad Heryanto, Samsuyadi Samsuyadi, Farkhana Muchtar, Mohd Yazid Idris, Mohammed Abdullah Alzahrani and Rahmat Budiarto (2019). TCP FIN Flood Attack Pattern Recognition on Internet of Things (IoT) with Rule Based Signature Analysis. International Journal of Online and Biomedical Engineering (iJOE), 15(07), 124–139. https://doi.org/10.3991/ijoe.v15i07.9848
- 15. Deris Stiawan, Diky Aryandi, Ahmad Heryanto, Tri Wanda Septian, Farkhana Muchtar and Rahmat Budiarto (2019). Behavior Pattern Recognition of Game Dragon Nest Using Bloom Filter Method. International Journal of Communication Networks and Information Security (IJCNIS), 11(1) 128-133. https://www.ijcnis.org/index.php/ijcnis/article/view/3789/349
- 16. Ili Najaa Aimi Mohd Nordin, Najla Aiman Nazari, Muhammad Rusydi Muhammad Razif, Nurulaqilla Khamis, Noraishikin Zulkarnain, Farkhana Muchtar and Nor Aira Zambri (2019). Optimization of RF signal detection and alert system for restricted area. Indonesian Journal of Electrical Engineering and Computer Science, 16(1), 325-332. http://ijeecs.iaescore.com/index.php/IJEECS/article/view/19873/12937
- 17. Farkhana Muchtar, Abdul Hanan Abdullah, Muhammad Shafie Abd Latiff, Suhaidi Hassan, Mohd Helmy Abd Wahab and Gaddafi Abdul-Salaam (2018). A Technical Review of MANET Testbed Using Mobile Robot Technology. IOP Journal of Physics: Conference Series.

 http://iopscience.iop.org/article/10.1088/1742-6596/1049/1/012001/pdf
- 18. Farkhana Muchtar, Abdul Hanan Abdullah, Marina Md Arshad, Mohd Helmy Abd Wahab, Siti Nor Zawani Ahmmad and Gaddafi Abdul-Salaam (2018). A Critical Review of MANET Testbed Using Mobile Robot Technology. IOP Journal of Physics: Conference Series. http://iopscience.iop.org/article/10.1088/1742-6596/1019/1/012046/pdf
- 19. Farkhana Muchtar, Abdul Hanan Abdullah, Mohd Helmy Abd Wahab, Radzi Ambar, Hafizul Fahri Hanafi and Siti Nor Zawani Ahmmad (2018). Mobile Ad hoc Network Testbed Using Mobile Robot Technology. IOP Journal of Physics: Conference Series. http://iopscience.iop.org/article/10.1088/1742-6596/1049/1/012001/pdf
- 20. Farkhana Muchtar, Abdul Hanan Abdullah, Mohd Helmy Abd Wahab, Nan Mad Sahar, Radzi Ambar and Hafizul Fahri Hanafi (2018). The Potential Use of Service-Oriented Infrastructure Framework to Enable Transparent Vertical Scalability of Cloud Computing Infrastructure. IOP Journal of Physics: Conference Series. http://iopscience.iop.org/article/10.1088/1742-6596/1019/1/012047/pdf

REVIEWER

- Fourth International Conference on Computing, Communications, and Cyber Security (4th IC4S- 2022).
- International Conference on Futuristic Trends in Networks and Computing Technologies (3RD FTNCT- 2020).
- Second International Conference on Futuristic Trends in Networks and Computing Technologies (2ND FTNCT- 2019).
- Second Joint International Conference on Emerging Computing Technology and Sports 2019 (2ND JICETS 2019)
- First International Conference on Futuristic Trends in Networks and Computing Technologies (1ST FTNCT- 2018)
- International Conference on Parallel Distributed and Grid Computing (PDGC-2018).

CONFERENCE PROCEEDINGS AND CHAPTER IN BOOKS (TOTAL NUMBER OF ARTICLE = 13)

- 21. Farkhana Muchtar, Mohd Helmy Abd Wahab, Radzi Ambar and Ili Najaa Aimi Mohd Nordin (2022). Comparison Result of NDN Based MANET and HCN Based MANET. AIP Conference Proceedings. [Accepted, waiting to be published]
- **22. Farkhana Muchtar**, Mohd Helmy Abd Wahab and Radzi Ambar (2022). The Use of LDAP for Query Operation in Trader Service. *AIP Conference Proceedings.* [Accepted, waiting to be published]
- 23. Siti Nor Zawani Ahmmad, Amirul Hanif Azman and Farkhana Muchtar. Development of a Low Cost Automated Coffee Maker Using IoT. AIP Conference Proceedings. [Accepted, waiting to be published].
- 24. Farkhana Muchtar, Pradeep Kumar Singh, Raaid Alubady, Ili Najaa Aimi Mohd Nordin, Radzi Ambar, Mohd Najwadi Yusoff, Deris Stiawan and Mosleh Hamoud Al-Adhaileh (2020). Using NDN in Improving Energy Efficiency of MANET. In: Singh, P., Kar, A., Singh, Y., Kolekar, M., Tanwar, S. (eds), Recent Innovations in Computing: Proceeding of the Second International Conference of ICRIC-2019. Lectures Notes in Electrical Engineering, Vol 597. Springer, Cham.

https://www.springer.com/gp/book/9783030294069

- 25. Mosleh H. Al-Adhaileh, Farkhana Muchtar, Abdul Hanan Abdullah and Pradeep Kumar Singh (2020). The Significance of Using NDN in MANET. In: Singh, P., Kar, A., Singh, Y., Kolekar, M., Tanwar, S. (eds), Recent Innovations in Computing: Proceeding of the Second International Conference of ICRIC-2019. Lectures Notes in Electrical Engineering, Vol 597. Springer, Cham. https://www.springer.com/gp/book/9783030294069
- 26. Farkhana Muchtar, Mosleh H. Al-Adhaileh, Ili Najaa Aimi Mohd Nordin, Asyikin Sasha Mohd Hanif, Pradeep Kumar Singh, Ajoze Abdul Raheem Zubair and Ajibade Lukuman Saheed (2020). Testbed on MANET (ToM): Private Testbed Facility for MANET Experiment. In: Singh P., Paprzycki M., Bhargava B., Chhabra J., Kaushal N., Kumar Y. (eds), Futuristic Trends in Network and Communication Technologies: Proceeding of the Second International Conference of FTNCT 2019. Communications in Computer and Information Science, Vol 1206. Springer, Singapore.

https://www.springer.com/qp/book/9789811544507

27. Farkhana Muchtar, Mosleh H. Al-Adhaileh, Ili Najaa Aimi Mohd Nordin, Radzi Ambar, Pradeep Kumar Singh, Ajoze Abdul Raheem Zubair and Ajibade Lukuman Saheed (2020). ToMRobot 2.0: Real Mobility Mechanism in MANET Testbed Using Mobile Robot. In: Singh P., Paprzycki M., Bhargava B., Chhabra J., Kaushal N., Kumar Y. (eds), Futuristic Trends in Network and Communication Technologies Technologies: Proceeding of the Second International Conference of FTNCT 2019.

Communications in Computer and Information Science, Vol 1206. Springer, Singapore.

https://www.springer.com/gp/book/9789811544507

PROGRAM COMMITTEE & PANEL

- Fourth International Conference on Computing, Communications, and Cyber Security (4^{th I}IC4S- 2022).
- Third International Conference on Futuristic Trends in Networks and Computing Technologies (3RD FTNCT- 2020).
- Second International Conference on Futuristic Trends in Networks and Computing Technologies (2ND FTNCT- 2019).
- Second Joint International Conference on Emerging Computing Technology and Sports 2019 (2ND JICETS 2019)
- First International Conference on Futuristic Trends in Networks and Computing Technologies (1ST FTNCT- 2018)
- International Conference on Parallel Distributed and Grid Computing (PDGC-2018).

- 28. Farkhana Muchtar, Mosleh H. Al-Adhaileh, Raaid Alubady, Pradeep Kumar Singh, Radzi Ambar and Deris Stiawan (2020). Congestion Control for NDN Based Wireless Ad-hoc Network. In: Singh, P., Pawłowski, W., Tanwar, S., Kumar, N., Rodrigues, J., Obaidat, M. (eds), Computing, Communications and Cyber Security: Proceeding of the First International Conference of IC4S 2019. Lecture Notes in Networks and Systems, Vol 121. Springer, Singapore.
 - https://www.springer.com/gp/book/9789811533686
- 29. Faisal Bawazir Muchtar, Mosleh Hamoud Al-Adhaileh, Pradeep Kumar Singh, Minah Japang, Zeti Darleena Eri, Hazlina Haron and Farkhana Muchtar (2020). Evaluation of Students' Performance Based on Teaching Method Using LMS In: Singh, P., Pawłowski, W., Tanwar, S., Kumar, N., Rodrigues, J., Obaidat, M. (eds), Computing, Communications and Cyber Security: Proceeding of the First International Conference of IC4S 2019. Lecture Notes in Networks and Systems, Vol 121. Springer, Singapore.
 - https://www.springer.com/gp/book/9789811533686
- 30. Siti Nor Zawani Ahmmad, Muhammad Abdull Ghaffar Eswendy, Farkhana Muchtar and Pradeep Kumar Singh (2019). Development of Automated Retractable Roof for Home Line-Dry Using IoT and WSN. In: Singh, P.K., Bhargava, B.K., Paprzycki, M., Kaushal, N.C., Hong, W.-C (eds), Handbook of Wireless Sensor Networks: Issues and Challenges in Current Scenario. https://www.springer.com/gp/book/9783030403041
- 31. Siti Nor Zawani Ahmmad, Muhammad Tarmizi Muhammad, Farkhana Muchtar and Pradeep Kumar Singh (2019).

 Development of Automated Aromatherapy Candle Process Plant Using IoT and WSN. In: Singh, P.K., Bhargava, B.K., Paprzycki, M., Kaushal, N.C., Hong, W.-C. (eds), Handbook of Wireless Sensor Networks: Issues and Challenges in Current Scenario. https://www.springer.com/gp/book/9783030403041
- 32. Farkhana Muchtar, Pradeep Kumar Singh, Siti Nor Zawani Ahmmad, Radzi Ambar, Hafizul Fahri Hanafi and Suzi Iryanti Fadilah (2019). P2P on MANET A Literature Review and and Its Applications. In Fifth International Conference on Parallel, Distributed and Grid Computing (PDGC 2018), 20-22nd December, 2018, pp. 48-53, Jaypee University of Information Technology, P.O. Waknaghat, Tehsil Kandaghat, Solan-173234, Himachal Pradesh, India.
 - <u>https://ieeexplore.ieee.org/document/8745856/authors#authors</u>
- 33. Farkhana Muchtar, Pradeep Kumar Singh, Yugal Kumar, Asma Haneee Ariffin, Suzi Iryanti Fadilah and Mohd Najwadi Yusoff (2019). ToMRobot: A Low-Cost Robot for MANET Testbed. In Fifth International Conference on Parallel, Distributed and Grid Computing (PDGC 2018), 20-22nd December, 2018, pp. 54-59, Jaypee University of Information Technology, P.O. Waknaghat, Tehsil Kandaghat, Solan-173234, Himachal Pradesh, India. https://ieeexplore.ieee.org/document/8745838

ACADEMIC ASSOCIATION

- InPECAMP
- formation Technology Society (MITS) – Member
- Malaysian Science and Technology Information Centre (MASTIC) – Member
- Society of Digital Information and Wireless Communication (SDIWC) – Member
- Member of International
 Association of Computer Science
 and Information Technology
 (IACSIT) Member
- Malaysia Software Engineering Interest Group (MySEIG) – Member
- Institute of Computer Science, Social-Informatics and Telecommunication Engineering (ICST) – Member
- · Academy and Industry Research
- Collaboration Center (AIRCC) –
 Member
- Institute of Geospatial and Remote Sensing Malaysia (IGRSM)

CONFERENCES AND SEMINARS (TOTAL NUMBER OF ARTICLE = 18)

- 34. Farkhana Muchtar, Abdul Hanan, Siti Nor Zawani Ahmmad and Yugal Kumar (2019). Mobility in MANET Using Robot: A Review (2019). In: Singh P., Paprzycki M., Bhargava B., Chhabra J., Kaushal N., Kumar Y. (eds), Futuristic Trends in Network and Communication Technologies: Proceeding of the First International Conference of FTNCT 2018. Communications in Computer and Information Science, Vol 958. Springer, Singapore. https://link.springer.com/chapter/10.1007/978-981-13-3804-523
- **35. Farkhana Muchtar**, Mohd Helmy Abd Wahab, Radzi Ambar and Ili Najaa Aimi Mohd Nordin (2022). Comparison Result of NDN Based MANET and HCN Based MANET. Third International Recent Trends in Technology, Engineering and Computing Conference (IRTTEC 2022). Hard Rock Hotel Penang, Penang, Malaysia. 29 & 30 August 2022.
- **36. Farkhana Muchtar**, Mohd Helmy Abd Wahab and Radzi Ambar (2022). The Use of LDAP for Query Operation in Trader Service. Third International Recent Trends in Technology, Engineering and Computing Conference (IRTTEC 2022). Hard Rock Hotel Penang, Penang, Malaysia. 29 & 30 August 2022.
- 37. Siti Nor Zawani Ahmmad, Shahrul Syzwan Jamaludin and Farkhana Muchtar. Cold Plant System Using IoT. Third International Recent Trends in Technology, Engineering and Computing Conference (IRTTEC 2022). Hard Rock Hotel Penang, Penang, Malaysia. 29 & 30 August 2022.
- 38. Siti Nor Zawani Ahmmad, Amirul Hanif Azman and Farkhana Muchtar. Development of a Low Cost Automated Coffee Maker Using IoT. Third International Recent Trends in Technology, Engineering and Computing Conference (IRTTEC 2022). Hard Rock Hotel Penang, Penang, Malaysia. 29 & 30 August 2022.
- 39. Siti Nor Zawani Ahmmad, Mohd Amir Asraf Zainudin and Farkhana Muchtar (2022). Emergency Boat Sinking Detector Using IoT. Third International Recent Trends in Technology, Engineering and Computing Conference (IRTTEC 2022). Hard Rock Hotel Penang, Penang, Malaysia. 29 & 30 August 2022.
- 40. Siti Nor Zawani Ahmmad, Mohd Shahrul Nizam Mohd Shukri and Farkhana Muchtar (2022). Camera Tracking Human Using IoT. Third International Recent Trends in Technology, Engineering and Computing Conference (IRTTEC 2022). Hard Rock Hotel Penang, Penang, Malaysia. 29 & 30 August 2022.
- 41. Najla Aiman Nazari, Ili Najaa Aimi Mohd Nordin, Noraishikin Zulkarnain and **Farkhana Muchtar** (2019). RF Signal Detection and Alert System for Restricted Area. 2019 International Conference on Engineering and Computing (ICEEComp2019). HIG Hotel, Langkawi, Kedah, Malaysia. 20-21 th April 2019.

PUBLIC ASSOCIATION

- Persatuan Saintis Muslim Malaysia (PERINTIS) – Member
- Muslim Volunteer Malaysia
 Member
- Sukarelawan Siswa Member
- Sukarelawan Jabatan Kebudayaan Dan Kesenian Negara (JKKN) – Member
- Hidayah Foundation Centre (HCF) Member
- Rakan Hidayah Pulau Pinang –
 Member
- Pertubuhan Sokongan Ibubapa Kanak-Kanak Autisme – Member
- Persatuan Seni Silat Gayong Ma'arifat Malaysia (PSSGMM) -Member

- 42. Siti Nor Zawani Ahmmad, Noor Huda Ja'afar, Abdul Zharfan Osman, Ernie Mazuin Mohd Yussof, Mohd Ismail Yusof and Farkhana Muchtar. Smart Bed Health Monitoring Based on ECG and Body Temperature Using LabVIEW and IoT. International Research Conference and Innovation Exhibition 2019, 25-27 November 2019, KSL Resort, Johor Bahru, Malaysia.

 prezi.com/p/yq06qb94j-cq/smart-bed-health-monitoring-based-on-ecg-and-body-temperature-using-labview-and-iot/
- 43. Farkhana Muchtar, Abdul Hanan Abdullah, Muhammad Shafie Abd Latiff, Suhaidi Hassan, Mohd Helmy Abd Wahab and Gaddafi Abdul-Salaam. A Technical Review of MANET Testbed Using Mobile Robot Technology (2017). International Postgraduate Conference on Applied Science and Physics (GRASP2017), 7 December 2017, Johor.

http://toc.proceedings.com/40466webtoc.pd

- **44. Farkhana Muchtar** and Abdul Hanan Abdullah (2016). Exploring the Benefit of Using NDN in Improving Energy Efficiency of MANET. Proceedings of the 11th Postgraduate Annual Research Seminar (PARS), Faculty of Computing, Universiti Teknologi Malaysia, 3-4 April 2016.
- **45. Farkhana Muchtar** and Abdul Hanan Abdullah (2015). Content Centric MANET Middleware for Ad-hoc P2P on Mobile Device. Proceedings of the 10th Postgraduate Annual Research Seminar (PARS), Faculty of Computing, Universiti Teknologi Malaysia, 11 13 October 2015.
- **46. Farkhana Muchtar** and Abdul Hanan Abdullah (2014). Bayesian in Performance of MANET. Proceedings of the 9th Postgraduate Annual Research Seminar (PARS), Faculty of Computing, Universiti Teknologi Malaysia, 29 30 September 2014.
- **47. Farkhana Muchtar** and Zulkhairi Md Dahalin. Query Performance of CORBA Trading Service Using LDAP. Postgraduate Annual Research Seminar, School of Information Technology, Universiti Utara Malaysia, 2006.
- **48. Farkhana Muchtar** and Zulkhairi Md Dahalin. The Design and Implementation of CORBA Trading Service Using LDAP Directory. Postgraduate Annual Research Seminar, School of Information Technology, Universiti Utara Malaysia, 2006
- **49. Farkhana Muchtar** and Zulkhairi Md Dahalin. CORBA Trader Using Directory Service. Postgraduate Annual Research Seminar, School of Information Technology, Universiti Utara Malaysia, 2005.
- **50. Farkhana Muchtar** and Zulkhairi Md Dahalin. Optimizing Trader Using LDAP in Grid Environment. Postgraduate Annual Research Seminar, School of Information Technology, Universiti Utara Malaysia, 2005.
- **51. Farkhana Muchtar** and Zulkhairi Md Dahalin. Using Directory Access to Improve Performance of Trading Service. Postgraduate Annual Research Seminar, School of Information Technology, Universiti Utara Malaysia, 2004.

WORKSHOPS & COURSES ATTENDED

- The Essential Guide to Intellectual Property, 1 Jun 2022, Organized by UTM
- Research and Industry: How to Commercialise Research Products The Essence of Experimental, 31 May 2022, Organized by UTM
- Design Why Business Researchers Do it?, 31 May 2022, Organized by UTM
- How To Deliver the Perfect Viva, 31 May 2022, Organized by UTM
- Mastering Methodology Chapter,
 22 May 2022, Organized by UTM
- Effective Communication: Writing, Design and Presentation
 Specialization, 20 May 2022, Organized by UTM
- Entrepreneurship Mindset Among Post Graduate Student, 17 April 2022, Organized by UTM,
- Effective Professional Communication, 17 April 2022, Organized by UTM
- Organizing Your Research with Mendeley Reference, 17 April 2022, Organized by UTM
- Tips and Tricks to Publish in High Impact Journal, 14 April 2022, Conducted By UTM
- Organizing Your Research with Mendeley Reference, , 14 April 2022, Conducted By UTM
- Mental Health VS Productivity, 12 April 2022, Conducted By UTM
- High Impact Publishing and the Best Way to Extract Journals from Thesis, 11 April 2022, Conducted By UTM
- The Magic of Action, 28 March 2022, Organized By UTM
- Presentation Skills Training Effective Presentations, 31 March
 2022, Conducted By UTM
- Happiness Through a Postgraduate Study, 28 March 2022, Conducted By UTM
- Discover your Passion and Hidden Potential, 28 March 2022, Conducted By UTM

TEACHING MODULES (TOTAL NUMBER OF TEACHING MODULES = 2)

- **52. Fakhana Muchtar** (2007). Teaching Module for Computer Fundamental, International Islamic University Malaysia (IIUM).
- **53. Fakhana Muchtar** (2004). Module Tutorial Subjek Sistem Pengoperasian, Faculty of Information Technology, Universiti Utara Malaysia (UUM).

THESIS AND REPORT (TOTAL NUMBER OF THESIS AND REPORT = 4)

- **54. Farkhana Muchtar.** PhD Thesis (By Research). Congestion Control Solution to Improve Energy Efficiency of NDN Based MANET, Universiti Teknologi Malaysia (UTM).
- **55. Farkhana Muchtar.** Master Thesis (By Research). Query Performance of CORBA Trading Service using LDAP as Backend Storage, Universiti Utara Malaysia (UUM).
- **56. Farkhana Muchtar**. Degree Thesis. Stock and Control System, Universiti Teknologi Malaysia (UTM).
- **57. Farkhana Muchtar.** Practicum Report on PG 16 System. Intel Technology Sdn Bhd: Stock and Control System of Intel PG 16, Penang.

ARTICLE IN PROGRESS TO BE PUBLISHED (TOTAL NUMBER OF ARTICLE = 5)

- 58. Siti Nor Zawani Ahmmad, Mohd Amir Asraf ZainudinSiti Nor Zawani Ahmmad, Shahrul Syzwan Jamaludin and **Farkhana Muchtar.** Cold Plant System Using IoT (2023).
- 59. Siti Nor Zawani Ahmmad and **Farkhana Muchtar** (2023). Emergency Boat Sinking Detector Using IoT.
- 60. Siti Nor Zawani Ahmmad, Mohd Shahrul Nizam Mohd Shukri and Farkhana Muchtar (2023). Camera Tracking Human Using IoT.
- 61. Siti Nor Zawani Ahmmad, Muhammad Asrul Mohd Khadri and Farkhana Muchtar (2023). Intelligent Based Water Quality Monitoring System.
- 62. Siti Nor Zawani Ahmmad, Muhammad Aqmalunizam Paiman and Farkhana Muchtar (2023). Generate Electrical Energy Using WSN.

REFERENCES

- Prof. Dr. Abdul Hanan Abdullah
 Faculty of Computing,
 Universiti Teknologi Malaysia (UTM)
- Prof. Ts. Dr. Md. Asri Bin Ngadi Faculty of Engineering, Universiti Teknologi Malaysia (UTM)

WORKSHOPS & COURSES ATTENDED (CONTINUE)

- Computer Vision: A Discussion on It's Opportunity and Challenges, 28 March 2022, Conducted By UTM
- How to Publish High-Impact Paper: Strategies and Insight, 23 March 2022, Conducted By UTM
- Mendeley and End Note Workshop, 9-10 March 2022, Organized By UTM
- Thesis Development Journey for PhD and Master Student, 21
 February 2022, Conducted By UTM
- The Significance of Critical Thinking and How It Is, 21 February 2022, Conducted By UTM
- Stress Management for Student and Working Professional
- Happiness Through a Postgraduate, 17 February 2022, Organized By UTM
- Stress Management For Students & Working Professionals, 21 February 2022, Conducted By UTM
- How To Manage Your Postgraduate Study, 16 February 2022, Conducted By UTM
- How To Generate E-Certificate
 Using Mail Merge and Auto craft,
 13 February 2022, Conducted By
- Motivation Mastery: Fly Over for Your Research Attachment, 13
 February 2022, Conducted By UTM.
- CANVA Class 1: How to Create Presentation Slides & Video Montage? Conducted By UTM, 10 February 2022, Conducted By UTM
- Do You Want To Win Your Audience, 10 February 20222, Conducted By UTM
- How To Write A Good Literature Review Chapter, 9 February 2022, Conducted By UTM
- Publication Workshop: How to Publish in High Impact Journals, 31 January 2022, Conducted By UTM
- How to Write a High Impact (Q1) Publications, 23 January 2022, Conducted By UTM