

**UNIVERSITI TUN HUSSEIN ONN MALAYSIA  
FACULTY OF ELECTRICAL AND ELECTRONIC ENGINEERING**

**Curriculum Vitae**

**DR JIWA ABDULLAH**



<b>1. Name</b>	Dr Jiwa Abdullah
<b>2. Position</b>	Associate Professor
<b>3. Department</b>	Communication Engineering Department, Faculty of Electrical and Electronic Engineering, University Tun Hussein Onn Malaysia, 86400 Parit Raja, Johor, Malaysia
<b>4. Academic Qualifications</b>	B.Eng(Hons) Electronic Eng (Liverpool, UK) 1983 Edu. Cert. (MPPP) 1984 M.Sc Digital Communication System (Lboro, UK) 1990 PhD Electrical and Electronic Eng (Lboro, UK) July 2008
<b>5. Research Interest</b>	Mobile Ad Hoc Networks Sensor networks Vehicular Communication Mobile and Wireless Communication Spectrum Management Cognitive Radio Computer Networks / Broadband Networks Electrical Eng Education
<b>6. Professional Affiliations</b>	Institution of Electrical Electronic Engineering IEEE (No 80292346)
<b>7. Professional Affiliations</b>	Board of Engineers Malaysia BEM (No 14344)

<p><b>8. Seminar, Workshops, Short Courses and Conferences Attended</b></p>	<p><b>Conferences:</b>  ICEDSA, 11-13 April 2010, Kuala Lumpur;  IC on Geotechnical and Transportation Eng, 1-3 Dec 2010, Kota Kinabalu,  SKASM 2010, Johor Bahru, 8-10 Dec 2010.  RCEE RHED 2010, 7 – 9 Jun 2010  World Engineering Congress 2010, 2<sup>nd</sup> – 5<sup>th</sup> August 2010  Seminar Antarabangsa Aplikasi Sains &amp; Matematik 2011. Nov 2011. KL.  ICEED, 7-8 Dec 2010  IC of FGCN, 7-10 Dec 2011, SERC, Jeju, South Korea.  ICICM, IACSIT Press, 14-16 October 2011, Singapore  ADHE2011, 3-4 November 2011, MAEPS, Serdang, Selangor  NCEEE2012, May 2012, UTHM.  MUiCET 2011, Batu Pahat, 13-15 November 2011.  ISWTA 2013, Kuching, Sept 24  ROVISP2013, 10-12 Nov 2013, Penang.  4<sup>th</sup> ICCSCE 2014, 28-30 Nov 2014  5<sup>th</sup> USYS2014, 3-4 Dec 2014  Intl Conf on Electrical and Electronic Eng (iC3e), 10-11 Aug 2015, Malacca  5<sup>th</sup> ICCSCE 2015, 27-29 Nov 2015, Penang</p> <p><b>SHORT COURSES</b>  Artificial Neural Networks with Scilab, 2013  Network Simulation with Omnet, 2012  Signal Integrity (SI) Measurement Techniques for High-Speed Digital Circuits, 18-20 April 2012  Research Methodology and Supervision, 2013  Understanding Learners, 2013  Network Simulation with Omnet, 2014</p>
<p><b>9. Publications</b></p>	<p style="text-align: center;">Journals</p> <ol style="list-style-type: none"> <li>1. M.A.Amin Mansor and <b>Jiwa Abdullah</b>, <i>Evaluating the Communication Performance of an Ad Hoc Wireless Network using MCL Protocol</i>, Journal of Basic and Applied Sciences (MJBAS), ISSN 2076-0841</li> <li>2. <b>Jiwa Abdullah</b>, <i>Multiobjectives GA-based QoS Routing Protocol for Mobile Ad Hoc Network</i>, International Journal of Grid and Distributed Computing, SERSC Korea, ISSN 2005-4262, December 2010</li> <li>3. <b>Jiwa Abdullah</b>, <i>Design and Performance of QOSRGA Protocol for Mobile Adhoc Networks</i>, Intl Journal of Integrated Engineering( Issue on Electrical and Electronic Eng ) , December 2009, UTHM</li> <li>4. <b>J. Abdullah</b>, R. Ruslee and J. Jalani, <i>Performance Comparison between LQR and FLC for Automatic 3 DOF Crane Systems</i> Intl Journal of Control and Automation, SERC Korea, Dec 2011, Vol 4 No 4 (Scopus)</li> <li>5. <b>J. Abdullah</b>, <i>Effect of Maximum Node Velocity on GA-Based QOS Routing Protocol (QOSRGA) for Mobile Ad Hoc Network</i>. Communication and Networking Communications in Computer and Information Science, 2011, Volume 266, pg 301-311. Springer.</li> <li>6. <b>J. Abdullah</b>, <i>The Design of Mobile Control Car Security System</i> IACSIT International Journal of Engineering and Technology, Vol.3, No.3, June 2011</li> <li>7. <b>Jiwa Abdullah</b>, <i>Performance of QOSRGA Routing Protocol for</i></li> </ol>

	<p><i>MANET with Random Waypoint Mobility Model</i>, International Journal of Advanced Science and Technology, ISSN: 2005-4238, SERSC, Korea, Vol. 40, March, 2012</p> <p>8. N.Ngabas, <b>J. Abdullah</b>, "A survey on energy efficient range free localization techniques for WSN", International Journal of Mobile Computing and Multimedia Communications (IJMCMC) ( under review )</p> <p>9. N.S.Zakaria, <b>J. Abdullah</b>, A.M. Yusof, M.M. Azizan, N. Kimpol "A Study of Rice Husk Total Suspended Particles (TSP) Level using Optical Sensor in a Rice Mill Factory", Intl Journal of Energy and Power Engineering Research, Vol 2, UMPEDAC, University Malaya, KL, 2014 (Scopus)</p> <p>10. Nur Asfarina Idrus, <b>Jiwa Abdullah</b>, <i>The performance of Directional Flooding Routing Protocol for Underwater Sensor Networks</i> Jurnal Teknologi, UTM, Vol. 74 No. 9, 2015. (Scopus)</p> <p>11. Hassan Hamid Ekal, <b>Jiwa Abdullah</b>, "Energy Hole Problem in Corona-based Wireless Sensor Networks: A Survey" Intl Journal on Communications, Antenna and Propagation (IRECAP), Nov 2015 ISSN: 2039-5086, e-ISSN: 2039-5094 ( Scopus)</p> <p>12. Ahmed Jamal Aldoori, <b>Jiwa Abdulah</b>, "Data compression algorithm for WSN based on distributed coding for one dimensional data", Jurnal Teknologi, (Under Review )</p> <p>13. <b>J. Abdullah</b>, "QOSRGA Protocol Using Non-Disjoint Multiple Routes in Mobile Ad Hoc Networks", WSEAS Transaction on Communications, Vol 14, 2015, ISSN: 2224-2864.(Scopus)</p> <p>14. H.Hamid, <b>Jiwa Abdullah</b>, "Analytical Modeling of Innovative Node Deployment Strategy for Corona-based Wireless Sensor Networks" Journal of Engineering Science and Technology(JESTEC), Taylors University, June 2016. ( Accepted )</p> <p>15. H.Hamid, <b>Jiwa Abdullah</b>, "Energy Provisioning Technique to Balance Energy Depletion and Maximize the Lifetime of Wireless Sensor Networks", International Journal of Advanced Computer Science and Applications (IJACSA). Vol 7 No 5, 2016. pp276 – pp282 . (ISI)</p>
	Conferences Proceeding
	<p>1. <b>J. Abdullah</b> and D.J. Parish, "QoS Routing For Mobile Ad Hoc Networks" Proceedings, The 5th Annual Postgraduate Symposium on The Convergence of Telecommunications, Networking and Broadcasting, Liverpool John Moores University, UK, 28-29 June 2004, PGNET2004</p> <p>2. <b>J. Abdullah</b> and D.J.Parish, "Impact of QoS Routing Metrics for MANETs in the Pervasive Computing Environment." Proceedings, IEEE 2007 Fourth International Conference on Wireless and Optical Communications Networks, (IEEE WOCN2007), ISBN 1-4244-005-3, Singapore, July 2-4, 2007.</p> <p>3. <b>J. Abdullah</b> and D.J.Parish, "Node Connectivity Index as Mobility Metric for GA based QoS Routing in MANET", Accepted by ACM/IEEE International Conference on Mobile Technology, Application and Systems, ISBN 978-1-59593-819-0, 10-12 September, Singapore.</p> <p>4. <b>J. Abdullah</b> and D.J.Parish, "Effect of Mobility on the Performance of GA-based QoS Routing in Mobile Ad Hoc Networks", for the ICIAAS 2007, IEEE International Conference on Intelligence &amp; Advanced Systems, 25-28 Nov 2007, Kuala Lumpur.</p> <p>5. <b>J. Abdullah</b>, "The Design of QOSRGA Protocol Employing Non-Disjoint Multiple Routes in Mobile Ad Hoc Networks" for Proc. Of The MMU International Symposium on Information and Communication Technologies (M2USIC2007), ISBN: 983-43160-0-3, 19-20 Nov 2007,</p>

	<p>PJ Hilton, Petaling Jaya, Malaysia.</p> <p>6. S.M.Shah, N.A.Cholan, <b>J.Abdullah</b>, The Teaching of EMT at UTHM, <i>International Conference on Engineering Professional Ethics and Education (ICEPEE '08)</i>, 13-15 May 2008.</p> <p>7. <b>J.Abdullah</b>, Y.Ismail, N.A. Cholan, "GA-based QoS Route Selection Algorithm for Mobile Ad-Hoc Networks" Proc of National Conference on Telecommunication Technologies and Malaysia Conference on Photonics 2008 (NCTT-MCP 2008), 26-28 Aug 2008, Putrajaya.</p> <p>8. Y. Ismail, A.F.M. Zain, <b>J.Abdullah</b>, "Phase Range Analysis of Reflectarray Patch Cells Printed on Liquid Crystal Substrate", Proc of National Conference on Telecommunication Technologies and Malaysia Conference on Photonics 2008 (NCTT-MCP 2008), 26-28 Aug 2008, Putrajaya.</p> <p>9. N.A. Cholan, R.Talib, M.Othman, <b>J. Abdullah</b>, T.C.Siang and N.H.Ngajikin, <i>Analysis and Design of Optimal Demultiplexer Based on Mach-Zehnder Interferometer for CWDM Application</i>, Proc International Conference on Computer &amp; Communication Engineering (ICCCE08), ISBN: 978-1-4244-1692-9 , Kuala Lumpur, 13-15 May 2008.</p> <p>10. <b>J.Abdullah</b>, "Modeling of GA-based QOS Routing Algorithm for Mobile Ad Hoc Networks", Proc of IEEE &amp; Others 3rd International Conference on Pervasive Computing and Applications (ICPCA2008), 6-8 Oct 2008, Alexandria, Egypt.</p> <p>11. N.H.Jalani, J.Jalani and <b>J.Abdullah</b>, "Position Control for linear Motion Servo System via Nominal Characteristics Trajectory Following (NCTF) Controller" , Third International Conference on Mechatronics (ICOM 2008), IIUM, Kuala Lumpur, 18-20 Dec 2008.</p> <p>12. R. Ruslee, J.Jalani and <b>J.Abdullah</b>, "Anti-Swing Control Strategy For Automatic 3 DOF Crane System Using Fuzzy Logic Controller", Third International Conference on Mechatronics (ICOM 2008), IIUM, Kuala Lumpur, 18-20 Dec 2008.</p> <p>13. M.A.Amin Mansor and <b>Jiwa Abdullah</b>, <i>Evaluating the Communication Performance of an Ad Hoc Wireless Network using MCL Protocol</i>, CITISIA 09, The Conf of Innovative Technologies in Intelligence System &amp; Industrial Applications, 26-27 July 09, Monash University</p> <p>14. A.N.M. Yusof, <b>J.Abdullah</b>, M.M.Som, <i>The Design of Dimensional Weight Measurement System for Courier Industry</i>, Proc of International Conf on Arts, Social Sciences &amp; Technology (ICAST2010); 24-25 Feb 2010, Penang</p> <p>15. M.Y. Ismail, M.Inam, <b>J.Abdullah</b>, <i>Design Optimisation of Reconfigurable Reflection Antenna based on Phase Agility Technique</i>, Proc of Conf on Antenna and RCS Measurement, New Delhi, 11-12 Feb 2010</p> <p>16. N.Adam, M.Y.Ismail, <b>J.Abdullah</b>, <i>Effect of Node Density on Performances of Three MANET Routing Protocols</i>, Proc of 2010 International Conf on Electronics Devices, Systems and Applications, 11-13 April 2010, Kuala Lumpur; ISBN 978-1-4244-6632-0</p> <p>17. H.Masandig, <b>J.Abdullah</b>, <i>Mobile Ad-Hoc Networking for Vehicular Road and Traffic Safety</i>, Proc of the 8<sup>th</sup> International Conf on Geotechnical and Transportation Eng, 1-3 December 2010, Kota Kinabalu, Sabah</p> <p>18. <b>Jiwa Abdullah</b>, Hannes Masandig, <i>Efficient Routing Protocol Designs: Node Positioning And Movement Prediction Study For Vehicular Ad-Hoc Network</i>, SKASM 2010, Johor Bahru, 8-10 Dec 2010.</p> <p>19. M.Y. Ismail, M.Inam, <b>J.Abdullah</b>, <i>Scattering Parameter Measurements of Infinite Tunable Reflectarrays</i>; Prosiding Seminar Kebangsaan Aplikasi Sains dan Matematik 2010 (SKASM2010), Johor Bahru, Johor, 8 - 10 Disember 2010</p> <p>20. Norjali, Ayob Johari, Amran M Zaid, <b>Jiwa Abdullah</b>, <i>Industries Involvement in the Assessment of Programme Learning Outcomes (PLO)</i>;</p>
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	<p>Proceeding for 3rd Regional Conference on Engineering Education and Research in Higher Education (RCEE RHED 2010), 7 – 9 Jun 2010</p> <p>21. M.AlSayed, <b>J. Abdullah</b>, A.F.M.Zain, <i>Study Of Measurements And Prediction Models For Signal Propagation Through Vegetation At Microwave Frequencies</i> , Proceeding World Engineering Congress 2010, 2<sup>nd</sup> – 5<sup>th</sup> August 2010</p> <p>22. <b>J. Abdullah</b>, M.Hannes. <i>Clustering and Self Organized Topology Developments Techniques for Vehicular Ad-hoc Network</i>. in Seminar Antarabangsa Aplikasi Sains &amp; Matematik 2011. Nov 2011. Kuala Lumpur.</p>
	<p>23. W.Suhaimizan, <b>Jiwa Abdullah</b>, <i>Development of Medical Electronic Programme in the Faculty of Electrical and Electronic Eng UTHM</i>, Prosiding ICEED, 7-8 Dec 2010</p> <p>24. <b>J. Abdullah</b>, <i>Effect of Maximum Node Velocity on GA-Based QOS Routing Protocol (QOSRGA) for Mobile Ad Hoc Network</i>. Intl Conference of Future Generation Communication and Networking, 7-10 Dec 2011, SERC, Jeju, South Korea.</p> <p>25. M.F.L.Abdullah, <b>Jiwa Abdullah</b>, A. Z. Yonis and M. F. Ghanim, <i>Comparison Study on 3.9G and 4G Evolution</i>, 2011 International Conference on Information Communication and Management IACSIT Press, 14-16 October 2011, Singapore IPCSIT vol.16 (2011) © (2011)</p> <p>26. <b>J. Abdullah</b>, M. A. Abd Shukor and K.Mohd Isa, <i>Assessment of Outcome-Based Electrical Engineering Curriculum</i>, Faculty of Electrical and Electronic Engineering, UTHM , Conference on Academic Development in Higher Education 2011 (ADHE2011), 3-4 November 2011, MAEPS, Serdang, Selangor</p> <p>27. H. Masandig, <b>J. Abdullah</b>, “<i>The Development Of Intelligent Transportation Systems: Intelligent Classification On Demand Vector (Icodv) Routing Algorithm Case Study</i>”, NCEEE2012.</p> <p>28. Saltihie Bin Zeni, <b>Jiwa Bin Abdullah</b>, “<i>Modified LEACH Algorithm for Prolongation Network Lifetime in Wireless Sensor Network</i>”, NCEEE.</p> <p>29. Hairulazwan Hashim, <b>Jiwa Abdullah</b> and Lee Boon Yong, “<i>Campus Traffic Light Control System using PIC18F4550 Microcontroller</i>“, Malaysian Technical Universities International Conference on Engineering &amp; Technology (MUICET 2011), Batu Pahat, Johor, Malaysia. 13-15 November 2011.</p> <p>30. <b>Jiwa Abdullah</b>, Hairulazwan Hashim and Mohd Rizal Khairi, “<i>Wireless Mobile Robot with Live-Feed Video using PIC16F628A Microcontroller</i>“, Malaysian Technical Universities International Conference on Engineering &amp; Technology (MUICET 2011), Batu Pahat, Johor, Malaysia. 13-15 November 2011.</p> <p>31. Ariffuddin Joret, Siti Zuraidah Zainudin, Nor Ashidi Mat Isa, <b>Jiwa Abdullah</b>, Kamal Zuhairi Zamli, Muhammad Faiz Liew Abdullah, Asmarashid Ponniran, “<i>Classification of Data Using Multilayered Perceptron Neural Network</i>”, NCEEE2012.</p> <p>32. Ariffuddin Joret, Nur Artikah Mohd Rashid, Nor Ashidi Mat Isa, <b>Jiwa Abdullah</b>, Kamal Zuhairi Zamli, Muhammad Faiz Liew Abdullah, Asmarashid Ponniran, “<i>PC-MATLAB based Signal Generator Development</i>”, NCEEE2012.</p> <p>33. Edy Erwan Shah, <b>Jiwa Abdullah</b>, Nurulhuda Ismail, <i>Evaluating the IEEE 802.15.4a UWB Physical Layer for WSN Applications</i>, ISWTA 2013, Kuching, Sept 24</p> <p>34. <b>J. Abdullah</b>, A.M.I. Okaf; “<i>Adaptive Rate Mechanism for WLAN IEEE802.11 Based on BPA-Artificial Neural Network</i>”, "The 8th International Conference On Robotics, Vision, Signal Processing &amp; Power Applications (ROVISP2013), 10-12 Nov 2013, Penang.</p> <p>35. N.Ngabas, <b>J.Abdullah</b>, “<i>Comparison of Energy Consumption in Cooperative Range-free Localization for Wireless Sensor Network</i>”, 2013 IEEE Student Conf on Research and Development, 16-17 Dec</p>

2013, Putrajaya.

36. Noorfarha Mohd Ngabas, **Jiwa Abdullah** “A Review of WSN Localization Simulation Framework”, IEEE SCORED Conference 2014, Penang, 16-17 Dec 2014. (Scopus)

37. **Jiwa Abdullah**, Hassan Hamid Ekal, *Denoising of Auditory Brainstem Response using Diffusion and Wavelet Transform*, 4th IEEE International Conference on Control Systems, Computing and Engineering (ICCSCE 2014), , 28-30 Nov 2014, Penang.

38. **Jiwa Abdullah**, Saltihie Zeni, *Maximizing the Network Lifetime of Clustered-based WSN Using Probability of Residual Energy*, 4th IEEE International Conference on Control Systems, Computing and Engineering (ICCSCE 2014), , 28-30 Nov 2014, Penang.

39. A.N. Zainal Abidin, **J. Abdullah**, A. Asrokin, M.Z. Mohamed Jenu, S.A. Aziz, N. Hashim, *Evolution and Potential of Copper-based Broadband Access Networks in Malaysia*, International Symposium, Shenzhen, Nov 2014, Shenzhen, RRC.

40. Nur Asfarina Idrus, **Jiwa Abdullah**, “Performance of Routing Protocols for Underwater Sensor Networks” 5th International Conference on Underwater System Technology: Theory and Applications 2014, 3-4 Dec 2014, Malacca.

41. N.A.M. Alduais, L. Audah, A. Jamil and **J. Abdullah**, “Performance Evaluation Of Different Logical Topologies And Their Respective Protocols For Wireless Sensor Networks” IC3E, 10-11 August 15, Melaka

42. Lukman Audah, Ahmad Afnan Mustafa Kamal, **Jiwa Abdullah**, Shipun Anuar Hamzah and Mohd Azhar Abdul Razak. “Performance Evaluation of Voice Over IP Using Multiple Audio Codec Schemes”, IC3E, 10-11 August 15, Melaka

43. Ali Abdullah W. Abobaker, **Jiwa Abdullah**, Olakunle Elijah, “Simulation of DVB-T2 Integrated Receiver Decoder for ASEAN Countries”, ICCSCE 2015, 27-29 Nov 2015, Penang

44. A.N Zainal Abidin, **J. Abdullah**, A. Asrokin, T.C. Chuah, M.Z.M Jenu, S.A. Abd Aziz, N. Hashim , “G.fast Channel Modelling Based On Copper Cable Characteristics”, ICCSCE 2015, 27-29 Nov 2015, Penang.

45. Hassan Hamid Ekal and **Jiwa Abdullah**, “Energy Provisioning Technique to Balance Energy Depletion and Maximize the Lifetime of Wireless Sensor Networks” MALSIP 2015, Melaka. (accepted)

46. A.N Zainal Abidin, **J. Abdullah**, A. Asrokin, M.Z.M Jenu, S.A. Abd Aziz, N. Hashim , “G.fast Achievable Bit Rate Performance Based on FEXT Stochastic and 99% Worst Case Model”, 2015 IEEE International RF and Microwave Conference (RFM 2015), 14-16 Dec 2015, Kuching

47. N. A. M. Alduais, **J. Abdullah** and A. Jamil, “An Efficient Data Collection and Dissemination for IOT based WSN”, IEEE EMCON 2016 Conference, Oct 2016, Vancouver. ( Under Review )

48. Ansar Jamil, Nur Rabiul Liyana Mohamed, **J. Abdullah**, Lukman Hanif Muhammad Audah, Rozlan Alias, “Performance of ContikiMAC in Heterogenous duty-cycled Wireless Sensor Networks” ICRAMET 2016, Oct 2016, Bandung ( Under Review )

49. Hassan Hamid Ekal, **J. Abdullah**; “Energy Balance Mechanism for Improving the Lifetime in Dense Centric Wireless Sensor Networks”, IEEE EMCON 2016 Conference, Oct 2016, Vancouver. (Under Review)

50. N.M. Ngabas, **J. Abdullah**, “Selective Forwarding in DV-Hop Localization of Wireless Sensor Networks”, ICRAMET 2016, Oct 2016, Bandung ( Under Review )

	<p style="text-align: center;">Book Chapter</p> <p><b>1. J. Abdullah</b>, Book Chapter: QoS Routing Solutions for MANET, in a book entitled: Mobile Ad Hoc Network: Protocol Design, by <b>InTech.org</b>, ISBN 978-953-307-402-3</p> <p><b>2. J. Abdullah</b>, Book Chapter: Connectivity as a Fundamental Characteristics of Mobile Ad Hoc Networks, Technological Advancements and Applications in Mobile Ad Hoc Networks, IGI Publisher, Apr 2012.</p> <p><b>3. J. Abdullah</b>, Book Chapter: Radio Propagation Model For Wireless Sensor Network Simulation, Book: Advances in wireless Network Research, Publisher: Nova publisher, USA ( 2014)</p> <p><b>4. J. Abdullah</b>, N.Jailani, J.Jailani, Book Chapter: Performance Comparison Between NCTF and PV Techniques for the Control of Linear Motion Servo System, in a book “Applied Methods and Techniques for Mechatronic Systems: Modelling, Identification and Control published in “Lecture Notes in Control and Information Sciences”, Springer, 2014.</p> <p><b>5. J. Abdullah</b>, A.M.I. Okaf; Book Chapter, “Adaptive Rate Mechanism for WLAN IEEE802.11 Based on BPA-Artificial Neural Network”, Lecture Notes in Electrical Engineering, Vol 291, Chapter 31, Springer 2014.</p>
<b>10. Current research project</b>	<ol style="list-style-type: none"> <li>1. Researcher for the following FRGS grant: Vot 0398, Future Generation of Mobile Communication System, headed by M.F.Alwi.</li> <li>2. Mobile Ad Hoc Networks: General, Routing, Computational Intelligence Approach, QoS, Sensor, Mesh, Protocol, TestBed, TCP.</li> <li>3. Vehicular Communications For Future Intelligent Road and Transportation.</li> <li>4. Data Acquisitions System, Reseach Collaborator With UniKL, RM200,000 sciencefund, 09-10</li> <li>5. Digital Image Based on 3-D Object Classification system using multiple cameras, FRGS Grant of RM49,000.00, as researcher, 2010</li> <li>6. Development of Electronically Controlled Radar Cross Section Optimisation of Planar Microwave Absorber FRGS Grant of RM59,000.00, as Researcher, 2010.</li> <li>7. Short Term Grant, RM10,000.00, Dev of ad hoc inter vehicle communication</li> <li>8. Research Collaborator (UTM-Sciencefund): Enhancing Survival Rate Of Joint Replacement Implants Through Advanced Electrical Discharge Machining System, Ref No: 03-01-06-Sf0928, RM 213,600.00., 2012 – 2014.</li> <li>9. GIPS Grant, 2014, Wireless Sensor Network, RM45,000.00</li> <li>10. Point to point link, member, RM300,000.00</li> <li>11. Integration of QoS in next Generation Satellite Terrestrial Network using multipath routing. Member. RM50,000.00</li> <li>12. FRGS, WSN and IoT, Leader, RM129800.00</li> <li>13. GIPS Grant, 2015, WSN-Topology and Compression Algorithm, RM18,000.00</li> </ol>
<b>11. Consultancies</b>	<ol style="list-style-type: none"> <li>1. Editor, Basic Electronic Module for IKBN Temerloh, 2008</li> <li>2. Editor, Analog and Digital Servo System for IKBN Temerloh, 2008.</li> <li>3. P &amp; P Pelajar UiTM Pasir Gudang di Makmal FKEE, 2015 Bernilai RM146,000.00</li> </ol>
<b>12. Awards</b>	<p>Jamaludin Jalani, Noor Hisham Jalani and Jiwa Abdullah (2008). <i>Position Control for Linear Servo System via Nominal Characteristic Trajectory Following (NCTF) Controller</i>. Bronze Medal, Applied Research Category Research and Innovation Festival 2008 (R&amp;I'08), Universiti Tun Hussein Onn Malaysia.</p>

	<p>Medal “Ahli Mahkota Perlis”, 2010</p> <p>Nayef Alduais and <b>Jiwa Abdullah</b>, Poster Exhibition, “<i>Simulator for WSN</i>”, Research and Innovation, 16-17 Nov 2015, UTHM. Award: Bronze Medal.</p> <p>Nayef Alduais and <b>Jiwa Abdullah</b>, Poster Exhibition, “<i>Simulator for WSN</i>”, ITEX 2016, 11 – 14 May 2016, KLCC, Award: Gold Medal..</p>
<b>14. Post-Graduate Supervision</b>	<p><b>Master of Engineering Dissertation:</b></p> <ol style="list-style-type: none"> <li>1. Master of Eng., The Implementation of a Practical Controller for Pendulum Balancing of Linear Servo System, by Norhisham Jalani. (Cosupervisor: Jamaluddin Jalani) 07/08 S2-08/09 , Graduated.</li> <li>2. Master of Eng., Anti-Swing Control Strategy For Automatic 3 DOF Crane System Using Fuzzy Logic Controller, by Rusline Ruslee. (Cosupervisor: Jamaluddin Jalani) 07/08 S2-08/09 , Graduated.</li> <li>3. Master of Eng, QoS Routing for mobile ad hoc networks using fuzzy Logic., Nabilah Adam. Graduated 2009.</li> <li>4. Master of Eng, Wireless Communication, Sadeg Hasoanat, Graduated, 2010</li> <li>5. Master of Eng, Radar Modeling, Khalid Almarghani, Graduated 2012.</li> <li>6. Master of Eng, WLAN 802.11 Rate Adaptation Using Neural Networks, Abdo Nasser, Graduated 2012</li> <li>7. Master of Eng, Underwater Autonomous Control Using Classical Controller Technique, Khlid Mohamed, Graduated 2012</li> <li>8. Master of Eng, “Denoising of Auditory Brainstem Response via Diffusion and Wavelet Transform”, Hassan Hamid Ekal, Graduated 2013.</li> <li>9. Master of Electrical Eng, “A New Routing Metric for Dymo Protocol on Mobile Ad Hoc Network”, Noor Amani bt Salleh, Graduated 2013.</li> <li>10. Master of Electrical Eng, “Indoor Performance of Wireless Sensor Network”, Hasry Hamdan, Graduated 2012</li> <li>11. Master of Electrical Eng, “Improving on the Network Lifetime of Clustered-based WSN Using Modified LEACH Algorithm”, Noor Salthie Zeni, Graduated 2012</li> <li>12. Master of Electrical Eng, “Evaluating the IEEE 802.15.4A UWB Physical Layer For WSN Applications”, Eddy Irwan Shah Saadon, Graduated 2013</li> <li>13. Master of Electrical Eng, “Rice husk/dust air particle sensor using ZigBee Wireless Sensor Network”, Noor Shazliza Binti Zakaria, Graduated 2013</li> <li>14. Master of Electrical Eng, “Cognitive Radio Sensing “, Bareq Khawam, Graduated 2013</li> <li>15. Master of Electrical Eng, “A Qualitative and Quantitative Evaluation of Different Logical Topologies for Wireless Sensor Networks ”, Nayef Abdul Wahab, Graduated 2014.</li> <li>16. Master of Electrical Eng, “The Study of Performance of Routing Protocols for Underwater Sensor Networks”, Nur Asfarina bt Idrus, Graduated 2014</li> <li>17. Master of Electrical Eng, “A Data Compression Algorithm for WSN Based on an Optimal Order Estimation Model and Distributed Coding for One-Dimensional and Two-Dimensional Data ”, Ahmed AlDouri, Graduated 2014</li> <li>18. MEE,”DVB-T2 DTT Broadcasting Channel Modeling”, Ali Abdullah W. Abobaker, Graduated 2015.</li> <li>19. MEE,”Distance estimation through low energy effort in wireless sensor networks”, Zuher Mesken Imbargk Ebra, Graduated 2015.</li> </ol>



	<p>20. MEE, "Comparative evaluation of various GPS-free Localization Algorithm for Wireless Sensor Networks", Amal Mustafa Musbahi, Graduated 2015.</p> <p>21. MEE, "Optimal and Efficient Backoff Technique for IEEE 802.15.4 WSN", Shayma Naif Hassan, ( Graduated 2016)</p> <p><b>Phd Programme:</b></p> <ol style="list-style-type: none"> <li>1. PhD, Vehicular Mobile Ad Hoc Networks, Hannes Masandig 09/10 S1</li> <li>2. PhD, Wireless Sensor Network, Noorfarha Ngabas, 12/13 S1</li> <li>3. PhD, LTE for Mobile Broadband, Aws Zuheer Yonis, Sept 2011 ( co-supervisor with PM Dr M F Liew Abdullah) Graduated.</li> <li>4. PhD, Last Mile Copper Wire Utilization at 1 GHz, Ahmadun Nijar Zainal Abidin</li> <li>5. PhD, Novel Non-Uniform Node Deployment Mechanism for Corona-based Wireless Sensor Networks, Hassan Ahmad Ekal.</li> <li>6. PhD, Sleeping and Smart Compression for WSN, Ahmad Addoori.</li> <li>7. PhD, Integration of WSN and IoT, Nayef Adduais</li> </ol>
<b>15. Teaching Experiences</b>	<p><b>Courses Taught at Undergraduate Studies:</b></p> <ol style="list-style-type: none"> <li>1. Microprocessor</li> <li>2. Network analysis and Synthesis</li> <li>3. Data Communication Networks</li> <li>4. Engineers and Society</li> <li>5. Communication Engineering</li> <li>6. Mobile Ad Hoc Network and Wireless Sensor Networks</li> <li>7. Integrated Design Project</li> <li>8. Final Year Project</li> <li>9. Electronic Communication Systems</li> </ol> <p><b>Courses Taught Postgraduate Studies:</b></p> <ol style="list-style-type: none"> <li>1. Broadband Networks</li> <li>2. Computational Intelligence</li> <li>3. Postgraduate Dissertation</li> </ol>