

CURRICULUM VITAE



PROFESSOR DR. NOR KAMARIAH NOORDIN

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Education

1. Ph. D in Communications and Network Engineering, 2006, Universiti Putra Malaysia
2. Masters in Electrical Engineering (Telecommunications), 1990, Universiti Teknologi Malaysia
3. B.Sc. Electrical Engineering - Telecommunications, 1987, University of Alabama, USA

Areas of Interest

Mobile and Wireless Communication

Professional Qualification/ Membership/ Affiliation

1. Member, International Association of Engineers, (IAENG)
2. Member, Institute of Electrical and Electrical Engineers (IEEE)
3. Member, Malaysian Society for Engineering and Technology (MySET)
4. Associate Director (Cluster Electrical Engineering), Engineering Accreditation Council Board of Engineers

Appointments

Position	Duration
1. Director, Corporate Strategy and Communication, Office of the Vice Chancellor, UPM	Feb 2016 – Feb 2019
2. Director, Corporate Planning Division, Office of the Vice Chancellor, UPM	Sept 2011 – Sept 2014
3. Deputy Director, Corporate Planning Division, Office of the Vice Chancellor, UPM	April 2009 - Sept 2011
4. Deputy Dean (Academic, Student Affairs and Alumni), Faculty of Engineering	Oct 2007 – April 2009
5. Associate Professor, Department of Computer and Communications System Engineering, UPM	April 2008 – present
6. Senior Lecturer, Department of Computer and Communications System Engineering, UPM	2004-2008
7. Study Leave	2002-2006
8. Head, Department of Computer and Communications System Engineering, UPM	2000-2002
9. Lecturer, Department of Computer and Communications System Engineering, UPM	1997-2000
10. Unpaid Leave	1994-1997
11. Lecturer, Department of Electronics and Computer Engineering, UPM	1991-1994
12. Tutor, Department of Electronics and Computer Engineering,	1987-1990

Publications

Journals (30 recent journals)

1. M.Sami, N.K. Noordin, F.Hashim, S.Subramaniam, A.Akbari-Moghanjoughi., "An Energy-Aware Cross-Layer Cooperative MAC Protocol for Wireless Ad Hoc Networks," *Journal of Network and Computer Applications*, vol. 58, pp. 227-240, 2015. (Impact Factor 2.23)
2. M. Sami, N.K.Noordin, M.Khabazian. , "A TDMA-Based Cooperative MAC Protocol for Cognitive Networks With Opportunistic Energy Harvesting," *IEEE Communications Letters*, vol. PP, pp. 1-1, 2016. (Impact Factor 1.26)
3. M.Sami, N.K.Noordin, M.Khabazian, F.Hashim, S.Subramaniam, "A Survey and Taxonomy on Medium Access Control Strategies for Cooperative Communication in Wireless Networks: Research Issues and Challenges", "*IEEE Communication Survey and Tutorial*" (Under Review-Minor Revision, Impact Factor 6.8)
4. Gadam, M. A., Ahmed, M. A., Ng, C. K., Nordin, N. K., Sali, A., & Hashim, F. (2016). Review of Adaptive Cell Selection Techniques in LTE-Advanced Heterogeneous Networks. *Journal of Computer Networks and Communications*, 2016. (Egypt-Hindawi-Scopus)
5. Murtadha, M. K., Noordin, N. K., & Ali, B. M. (2015). Survey and analysis of integrating PMIPv6 and MIH mobility management approaches for heterogeneous wireless networks. *Wireless Personal Communications*, 82(3), 1351-1376. (Netherlands-Springer-Q3-IF=0.653 for 2014)
6. Murtadha, M. K., Noordin, N. K., Ali, B. M., & Hashim, F. (2015). Design and evaluation of distributed and dynamic mobility management approach based on PMIPv6 and MIH protocols. *Wireless Networks*, 21(8), 2747-2763. (Netherlands-Springer-Q3-IF=0.961 for 2014)
7. Murtadha, M. K., Noordin, N. K., Ali, B. M., & Hashim, F. (2016). A Comprehensive Simulation Study of a Network-Based Distributed Mobility Management Framework. *International Journal of Wireless and Mobile Computing*. (To be published) (UK-Inderscience-Scopus)
8. Salman, Mustafa Ismael, Chee Kyun Ng, Nor Kamariah Noordin, Borhanuddin Mohd Ali, and Aduwati Sali. "A self-configured link adaptation for green LTE downlink transmission." *Transactions on Emerging Telecommunications Technologies* (2014), Impact Factor: 1.049
9. Chong Jin Hui, Chee Kyun Ng, Nor Kamariah Noordin, and Borhanuddin Mohd Ali. "A low computational complexity V-BLAST/STBC detection mechanism in MIMO system." *Human-centric Computing and Information Sciences* 4, no. 1 (2014): 1-28.
10. Shahideh Kiehadroudinezhad, Nor Kamariah Noordin, A. Sali, and Zamri Zainal Abidin. Optimization of an Antenna Array Using Genetic Algorithms. *The Astronomical Journal* 147, no. 6 (2014): 147. Impact Factor: 4.965
11. Ali Mohammed Alsahag, Borhanuddin Mohd Ali, Nor Kamariah Noordin, and Hafizal Mohamad. Fair uplink bandwidth allocation and latency guarantee for mobile WiMAX using fuzzy adaptive deficit round robin. *Journal of Network and Computer Applications* 39 (2014): 17-25. Impact Factor: 1.467.
12. Munthader Qasim Abdulhasan, Mustafa Ismael Salman, Ng Chee Kyun, Nor Kamariah Noordin, Saiful Jahari Hashim, Fazirulhisham Hashim,"Review of Channel Quality Indicator Estimation Schemes for Multi-User MIMO in 3GPP LTE/LTE-A Systems", *KSII Transactions o Internet and Information Systems*, 8, no. 6 (2014): 1848-1868. Impact Factor: 0.345
13. Yaseen H. Tahir, Chee Kyun Ng, Nor K. Noordin, Borhanuddin Mohd. Ali and Sabira Khatun, "High Reliability of Real-Time Visual Data Transmission Using Superposition Coding with Receiver Diversity," *Telecommunication Systems*, Springer US, DOI 10.1007/s11235-013-9785-z, 2013
14. Mohammed A. Ben-Mubarak, Borhanuddin Mohd. Ali, Nor Kamariah Noordin, Alyani Ismail and Chee Kyun Ng, "Mobile Station Movement Direction Prediction (MMDP) Based Handover Scanning for Mobile WiMAX System," *Wireless Personal Communications*, Springer Netherlands, DOI 10.1007/s11277-013-1220-y, 2013.
15. Jin Hui Chong, Chee Kyun Ng, Nor Kamariah Noordin and Borhanuddin Mohd. Ali, "Dynamic

- Transmit Antenna Shuffling Scheme for MIMO Wireless Communication Systems,” *Journal of Convergence (JoC)*, vol. 4, no. 1, pp. 7-14, March 2013.
16. Chee Kyun Ng, Jiang Gi Fam, Gee Keng Ee and Nor Kamariah Noordin, “Finger Triggered Virtual Musical Instruments,” *Journal of Convergence (JoC)*, vol. 4, no. 1, pp. 39-46, March 2013.
 17. A.S.A. Jalal, A. Ismail, A.R.H. Alhawari, M.F.A. Rasid, N.K. Noordin, and M.A. Mahdi, "Miniaturized Metal Mount Minkowski Fractal RFID Tag Antenna with Complementary Split Ring Resonator," *Progress In Electromagnetics Research C*, vol. 39, pp. 25-36, 2013.
 18. Ali Mohammed Alsahag, Borhanuddin Mohd Ali, Nor Kamariah Noordin, Hafizal Mohamad, “Fair Uplink Bandwidth Allocation and Latency Guarantee for Mobile WiMAX Using Fuzzy Adaptive Deficit Round Robin,” *Journal of Network and Computer Applications*, <http://dx.doi.org/10.1016/j.jnca.2013.04.004>, April 2013.
 19. Yaseen H. Tahir, Chee Kyun Ng, Nor K. Noordin, Borhanuddin Mohd. Ali and Sabira Khatun, "Transmission of Visual Data over Wireless Fading Channel in Realtime Systems Based on Superposition Coding Scheme," *The Arabian Journal for Science and Engineering (AJSE)*, vol. 38, no. 6, pp. 1459-1469, June 2013.
 20. Mustafa Ismael Salman, Chee Kyun Ng, Nor Kamariah Noordin, Borhanuddin Mohd Ali, Aduwati Sali, and Muntadher Qasim Abdulhasan, “Radio Resource Management (RRM) for Green 3GPP Long Term Evolution (LTE) Cellular Networks: Review, and Trade-offs,” *The Institution of Electronics and Telecommunication Engineers (IETE) Technical Review*, vol. 30, no. 3, pp. 257-269, May-Jun 2013.
 21. Aws Ali Shakir, Chee Kyun Ng, Nor Kamariah Noordin and Alyani Ismail, "Efficient Back-off Mechanism for Multimedia Support in 802.11e EDCA Wireless Ad-hoc Networks," *Wireless Personal Communications*, Springer Netherlands, vol. 71, no. 1, pp. 439-466, July 2013.
 22. Mohammed A. Ben-Mubarak, Borhanuddin Mohd. Ali, Nor Kamariah Noordin, Alyani Ismail and Chee Kyun Ng, "Fuzzy Logic Based Self-Adaptive Handover Algorithm for Mobile WiMAX," *Wireless Personal Communications*, Springer Netherlands, vol. 71, no. 2, pp. 1421-1442, July 2013.
 23. Zahariah Manap, Chee Kyun Ng, Borhanuddin Mohd Ali, Nor Kamariah Noordin and Aduwati Sali, "A Review on Hierarchical Routing Protocols for Wireless Sensor Networks," *Wireless Personal Communications*, Springer Netherlands, vol. 72, no. 2, pp. 1077-1104, September 2013.
 24. Wei Lun Ng, Chee Kyun Ng, Borhanuddin Mohd. Ali and Nor Kamariah Noordin, "Performance Evaluation of The Proposed Wireless Controller Area Network (WCAN) using Token Frame Scheme," *Wireless Personal Communications*, Springer Netherlands, vol. 72, no. 4, pp. 1847-1873, 2013.
 25. Mohammed A. Ben-Mubarak, Borhanuddin Mohd. Ali, Nor Kmarayah Noordin, Alyani Ismail and Chee Kyun Ng, “ Mobile Station Movement Direction Prediction (MMDP) Based Handover Scanning for Mobile WiMAX System, “ *Wireless Personal Communications*, Springer Netherlands, vol. 73, no. 3, pp. 839-865, 2013. [IF:0.428 (2012)], Cited by ISI and SCOPUS.
 26. Yaseen H. Tahir, Chee Kyun Ng, Nor K. Noordin, Borhanuddin Mohd. Ali and Sabira Khatun, “High Reliability of Real-Time Visual Data Transmission Using Superposition Coding with Receiver Diversity,” *Telecommunication Systems*, Springer US DOI 10.1007/s11235-013-9785-z, 2013. [IF:1.027 (2012)]. Cited by ISI and SCOPUS.
 27. Arafat A. A. Shabaeh, Azizi Mohd Ali, Chee Kyu Ng, Nor Kamariah Noordin, Aduwati Sali and Mohd Hanif yaacob, “Review of Energy Conservation Using Duty Cycling Schemes for IEEE 802.15.4 Wireless Sensor Network,” *Wireless Personal Communications*, Springer Netherlands, DOI 10.1007/s11277-013-1524-y, 2013. [IF: 0.428(2012)], Cited by ISI and SCOPUS.
 28. Gee Keng Eee, Chee Kyun Ng, Fazirulhisyam Hashim, Nor Kamariah Noordin and Borhanuddin Mohd Ali, “ Performance Evaluation of Path recovery for LOAD-based 6LoWPAN Routing Protocol using Originator Recognition Mechanism,” *Wireless Personal Communications*, Springer Netherlands (accepted with revision)
 29. Ali Alkazmi, Borhanuddin Mohd Ali, Nor K Noordin, and Hafizal Mohamad, “Fair Uplink

bandwidth Allocation and Latency Gaurantee for Mobile WiMAX using Fuzzy Adaptive Deficit Round Robin," *Journal of Network and Computer Applications*, Science Direct [IF1.065 (2013)], Cited by ISI and SCOPUS.

30. Yaseen H. Tahir, Chee Kyun Ng, Nor K. Noordin, Borhanuddin Mohd. Ali and Sabira Khatun, "Superposition Coding with Unequal Error Protection for the Uplink of Overloaded DS-CDMA System," *Wireless Personal Communications*, Springer Netherlands, vol. 65, no. 3, pp. 567-582, August 2012. [IF: 0.458 (2011)], Cited by ISI and SCOPUS

Conference Proceedings (30 recent Conference Proceedings)

1. **N. K. Noordin**, R. S. A. Raja Abdullah, M. F. A. Rasid, S. Khatun, A. Ismail, M. Iqbal Saripan, A. F. Abas, B. M. Ali, N. Abdullah, "Adaptive Coding and Modulation and LNA Design for 3.8 Ghz Rain Fade Countermeasure", *Spectrum Research Colloquium 2008 Proceedings*. pp. 43-48.
2. **N. K. Noordin**, B. M. Ali, N. Ismail, and S. S. Jamuar, "Adaptive techniques in orthogonal frequency division multiplexing in mobile radio environment," *International Journal of Engineering and Technology, Federation of Engineering Institutions of Islamic Countries (FEIC) Journal*, Vol. 1, No. 2, 2004, pp. 115 -123
3. M. K. Abdullah, M. H. Yaakob, K. Samsudin, K. Dimiyati, H. A. A Rashid, S. Saharudin, M. Z. Jamaluddin, F. Abdullah, S. Mashohor, A. Ismail, W. A. Wann Adnan, **N. K. Noordin** and M.I. Saripan, (editors), *Proceedings of 3rd World Engineering Congress, WEC2007 for Information and Communications Technology*, 5-9th Aug 2007
4. **Nor Kamariah Noordin**, Borhanuddin Mohd Ali, M. Iqbal Saripan, Fakhru Zamani Rokhani, Mohd Fadlee A. Rashid, Kairulmizam Samsudin, and Syamsiah Mashohor, Editors, *Proceedings of 2nd World Engineering Congress, Information and Communication Technology (WEC2002)*, 22-25 July 2002, Kuching, MALAYSIA.
5. Zainol Abidin Abdul Rashid, Ahmad Jais Alias, Borhanuddin Mohd Ali, Nicholas C. H. Vun, **Nor Kamariah Noordin**. (editors), *Proceedings of IEEE 5th Malaysia International Conference on Communications*, MICC2001 Kuala Lumpur, 21st 24th Oct 2001.
6. M. R. Mukerjee, **N. K. Noordin**, Editors, *Proceedings of IEEE 2nd National Conference on Telecommunications Technologies 1998*, NCTT 98, ed., UPM, Serdang, 1-2 Dec 98.

Books / Chapters in Book (If any)

1. Mohammed A. Ben-Mubarak, Borhanuddin Mohd. Ali, Nor Kamariah Noordin, Alyani Ismail and Chee Kyun Ng, "Hybrid AHP and TOPSIS Methods Based Cell Selection (HATCS) Scheme for Mobile WiMAX," Gianni Pasolini, *Selected Topics in WIMAX*, In-Tech, intechweb.org, ISBN 978-953-51-1157-3, pp. 85-101, In-Teh, Croatia, May 2013.
2. Sandy Siu Ying Ko, Wei Lun Ng, Chee Kyun Ng, Nor Kamariah Noordin, ?A Simple Standalone Sign Based Recognition Translator without Using Super Computer Processing,? *Advances in Visual Informatics, Lecture Notes in Computer Science (LNCS)*, vol. 8237, pp. 146-156, Springer International Publishing Switzerland, 2013.
3. Mustafa Ismael Salman, Chee Kyun Ng and **Nor Kamariah Noordin**, "Energy- and Spectral-Efficient Wireless Cellular Networks," Joel J.P.C. Rodrigues et al. (Eds.), *First International Conference on Green Communications and Networking, (GreeNets 2011)*, Colmar, France, October 5-7, 2011, *Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering (LNICST)*, vol. 51, pp. 171-185, Springer Dordrecht Heidelberg, 2012.
4. Jin Hui Chong, Chee Kyun Ng, **Nor Kamariah Noordin** and Borhanuddin Mohd. Ali, "Frequency Coding Detection Algorithm for MIMO-OFDM," S.-S. Yeo et al. (eds.), *The 4th FTRA International Conference on Computer Science and its Applications (CSA-12)*, Jeju, Korea, November 22~25, 2012 *Proceedings - Part I, Lecture Notes in Electrical Engineering (LNEE)*, vol. 203, pp. 39-47, Springer Dordrecht Heidelberg, 2012.
5. Jin Hui Chong, Chee Kyun Ng, **Nor Kamariah Noordin** and Borhanuddin Mohd. Ali, "Dynamic Transmit Antenna Shuffling Scheme for MIMO Wireless Communication Systems," S.-S. Yeo et al. (eds.), *The 4th FTRA International Conference on Computer Science and its Applications*

- (CSA-12), Jeju, Korea, November 22~25, 2012 Proceedings - Part I, Lecture Notes in Electrical Engineering (LNEE), vol. 203, pp. 49-57, Springer Dordrecht Heidelberg, 2012.
6. Jin Hui Chong, Chee Kyun Ng, **Nor Kamariah Noordin** and Borhanuddin Mohd. Ali, "A Low Complexity V-BLAST/STBC Detection Algorithm for MIMO System," S.-S. Yeo et al. (eds.), The 4th FTRA International Conference on Computer Science and its Applications (CSA-12), Jeju, Korea, November 22~25, 2012 Proceedings - Part I, Lecture Notes in Electrical Engineering (LNEE), vol. 203, pp. 59-67, Springer Dordrecht Heidelberg, 2012.
 7. Chee Kyun Ng, Jiang Gi Fam and **Nor Kamariah Noordin**, "Finger Triggered Virtual Musical Instruments," S.-S. Yeo et al. (eds.), The 4th FTRA International Conference on Computer Science and its Applications (CSA-12), Jeju, Korea, November 22~25, 2012 Proceedings - Part I, Lecture Notes in Electrical Engineering (LNEE), vol. 203, pp. 29-37, Springer Dordrecht Heidelberg, 2012.
 8. Gee Keng Ee, Chee Kyun Ng, Fazirulhisyam Hashim, **Nor Kamariah Noordin** and Borhanuddin Mohd. Ali, "Originator Recognition (OR) Path Recovery Mechanism for LOAD-Based Routing Protocol," S.-S. Yeo et al. (eds.), The 4th FTRA International Conference on Computer Science and its Applications (CSA-12), Jeju, Korea, November 22~25, 2012 Proceedings - Part I, Lecture Notes in Electrical Engineering (LNEE), vol. 203, pp. 149-157, Springer Dordrecht Heidelberg, 2012.
 9. Chooi Ling Si Toh, Chee Kyun Ng and **Nor Kamariah Noordin**, "Performance Evaluation of the Developed Automatic Musical Note Translating System," International Conference on Informatics Engineering and Information Science (ICIEIS 2011), Kuala Lumpur, Malaysia, November 14-16, 2011, Proceedings - Part IV, Communications in Computer and Information Science (CCIS), vol. 254, Springer Berlin Heidelberg, pp. 164-178, November 2011. **[Cited by SCOPUS]**.
 10. Chiaw Wei Chan, Gee Keng Ee, Chee Kyun Ng, Fazirulhisyam Hashim and **Nor Kamariah Noordin**, "Development of 6LoWPAN Adaptation Layer with Fragmentation and Reassembly Mechanisms by using Qualnet Simulator," International Conference on Informatics Engineering and Information Science (ICIEIS 2011), Kuala Lumpur, Malaysia, November 14-16, 2011, Proceedings - Part IV, Communications in Computer and Information Science (CCIS), vol. 254, Springer Berlin Heidelberg, pp. 199-212, November 2011. **[Cited by SCOPUS]**.
 11. Wei Lun Ng, Chee Kyun Ng, Borhanuddin Mohd. Ali and **Nor Kamariah Noordin**, "Wireless Controller Area Network using Token Frame Scheme in Smart Home Network," International Conference on Informatics Engineering and Information Science (ICIEIS 2011), Kuala Lumpur, Malaysia, November 14-16, 2011, Proceedings - Part III, Communications in Computer and Information Science (CCIS), vol. 253, Springer Berlin Heidelberg, pp. 544-556, November 2011. **[Cited by SCOPUS]**.
 12. Wei Lun Ng, Chee Kyun Ng, **Nor Kamariah Noordin** and Borhanuddin Mohd. Ali, "Gesture Based Automating Household Appliances," The 14th International Conference on Human-Computer Interaction (Interaction Techniques and Environments), HCI International 2011, Orlando, FL, USA, July 9-14 2011 Proceedings - Part II, Lecture Notes in Computer Science, LNCS 6762, Springer Berlin Heidelberg, pp. 285-293, July 2011. **[Cited by SCOPUS]**.
 13. Yaaqob Ali. A. Qasem, Ali Z. Alhemyari, Chee Kyun Ng, **Nor Kamariah Noordin** and Omar. M. Ceesay, "Collision-free Routing Centralized Scheduling using EbMR-CS Algorithm for IEEE 802.16 Mesh Networks," Ad Hoc Networks (ADHOCNETS 2010), Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering, LNICST, vol. 49, part 4, pp. 233-248, Springer Berlin Heidelberg, December 2010.
 14. Samer A. B. Awwad, Chee Kyun Ng, **Nor K. Noordin**, Mohd. Fadlee A. Rasid and A.R.H Alhawari, "Mobility and Traffic Adapted Cluster Based Routing for Mobile Nodes (CBR-Mobile) Protocol in Wireless Sensor Networks," Ad Hoc Networks (ADHOCNETS 2010), Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering, LNICST, vol. 49, part 5, pp. 281-296, Springer Berlin Heidelberg, December 2010.
 15. A. Al-Hemyari, **N. K. Noordin**, Chee Kyun Ng, A. Ismail and S. Khatun, "Centralized Routing and Scheduling Using Multi-Channel System Single Transceiver in 802.16d," Ad Hoc Networks, Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering, LNICST, vol. 28, pp. 316 - 332, Springer Berlin Heidelberg,

23 January 2010.

16. Chee Kyun Ng, **Nor Kamariah Noordin**, Borhanuddin Mohd Ali and Sudhanshu Shekar Jamuar, "Dynamic Space Code Multiple Access (DSCMA) System: A Double Interference Cancellation Multiple Access Scheme in Wireless Communications System," Trends in Telecommunications Technologies, In-Tech, intechweb.org. ISBN 978-953-307-072-8, pp 583-612, In-Tech, Croatia, March 2010.
17. Rashid A. Saeed, Sabira Khatun, **Nor Kamariah Noordin**, and Borhanuddin Mohd Ali, "Ultra-Wideband Solutions for Last Mile Access Network" Encyclopedia of Multimedia Technology and Networking, Idea Group, Inc., Italy, Ed: Margherita Pagani, Mar 2008 (in press).
18. A. F. Abas, M. A. M. Azau, M. I. Saripan, W. A. W. Adnan, **N. K. Noordin**, A. Ismail, M. Mokhtar, K. Samsudin, S. Mashohor, M. F. A. Rasid, and R. S. A. R. Abdullah, Innovative Continuous-Grouped-Self-Learning (CGSL) System in Engineering Education, 2008 iNEER Special Volume: Innovations 2008 - World Innovations In Engineering Education And Research.
19. Rahman Wagiran, Megat Johari Megat Mohd Noor, Mohd Rasid Osman, Desa Ahmad, Mohd Saleh Jaafar, Abdul Ghani Liew Abdullah, Napsiah Ismail and **Nor Kamariah Noordin** (2005) Sistem Pengurusan Kualiti Pendidikan Tinggi (PUTRA 3Q) Jilid I: Dokumen Mandatori Mengikut Standard MS ISO 9001:2000, Universiti Putra Malaysia, Serdang. ISBN 983-3455-20-4.
20. Abdul Ghani Liew Abdullah, Megat Johari Megat Mohd Noor, Mohd Rasid Osman, Rahman Wagiran, Desa Ahmad, Mohd Saleh Jaafar, Napsiah Ismail and **Nor Kamariah Noordin** (2005) Sistem Pengurusan Kualiti Pendidikan Tinggi (PUTRA 3Q) Jilid II: Perkhidmatan Berdasarkan Keperluan Pelanggan, Universiti Putra Malaysia, Serdang. ISBN 983-3455-20-4.
21. Mohd Rasid Osman, Megat Johari Megat Mohd Noor, Rahman Wagiran, Desa Ahmad, Mohd Saleh Jaafar, Abdul Ghani Liew Abdullah, Napsiah Ismail and **Nor Kamariah Noordin** (2005) Sistem Pengurusan Kualiti Pendidikan Tinggi (PUTRA 3Q) Jilid III: Pengurusan untuk Penambahbaikan, Universiti Putra Malaysia, Serdang. ISBN 983-3455-22-0.
22. Ng Chee Kyun, Ashraf Gasim Elsid Abdalla, **Nor Kamariah Noordin**, Sabira Khatun, Borhanuddin Mohd Ali and Ratna Kalos Zakiah Sahbuddin, "Modelling and Simulation of Phased Array Antenna for LEO Satellite Tracking," Information Networking. Wireless Communications Technologies and Network Applications – Part II, Lecture Notes in Computer Science, LNCS, vol. 2344, pp. 359 - 371, Springer-Verlag, Berlin Heidelberg, 13 September 2002.
23. **N. K. Noordin**, "Personal Communication Networks: Issues and its Implementation," *UPM Engineering Review* 1990/1991 No. 3 pp 20-25.
24. **N. K. Noordin**, "The Potential of Second Generation Cordless Telephone in Malaysia," *UPM Engineering Review* 1989/1990 No.2 pp 72-80.

Research Grants

No	Project Title	Amount	Duration	Source of Fund
1.	Optimization of Energy and Spectral Efficiencies by using Adaptive Resource Allocation for Green LTE Cellular System, FRGS/1/2012/ICT06/UPM/01/1 (Project Leader)	RM 111 000	Apr 2013- Mar 2015	MOHE Fundamental Research Grant Scheme
2.	Kajian Penawaran Program IPTA-Keberkesanan dan Kerelevanan (Kluster Teknikal) (Project Leader)	RM 216 000	Apr 2013- Dec 2013	MOHE Fundamental Research Grant Scheme
3.	Kajian Penarafan Kolej Komuniti (Member)	RM262 000	Sep 2012 – Jun 2013	MOHE Fundamental Research Grant Scheme

4.	Design and Development of a Sign Based Recognition System for Scalable Automated Home Electrical Appliances in Controller Area Network (CAN) Environment (Project Leader)	RM 126 000	Oct 2010 - Present	Research University Grants Scheme (RUGS)
5.	Novel Coding Techniques for Power-Efficient Multilevel Signal Off-Chip Bus (Member)	RM 30 000	Nov 2009- April 2011	Research University Grants Scheme (RUGS)
6.	The Effect of Emission from Short Range Devices on Radio communication Services (Member)	RM 236 000	Feb 2009- Jul 2010	Malaysia Communication and Multimedia Commissions
7.	Optimized network Mobility (NEMO) Solution for Fast Handoff Mobile IPV6: Routing and Handover (Member)	RM 364 982	Jun 2009- Jun 2011	National Next Generation Networks IPV6 Research & Development Top-Down Grant
8.	Reduction of peak-to-average power ratio in orthogonal frequency division multiplexing (OFDM) Wireless Communication systems Using Statistical Techniques (Member)	RM 92 000	Aug 2009- Aug 2011	Research University Grants Scheme (RUGS)
9.	Reliable and adaptive multicast transmission Over GEO over satellite network for disaster monitoring applications (Member)	RM 25 000	Oct 2009- Oct 2010	Research University Grants Scheme (RUGS)
10.	Emerging Wireless Technologies – Issues of Reliable Communications at Frequency Bands Above 25 GHz in the Tropics (Program Leader)	RM 930 000	Sep 2007- Feb 2009	Malaysia Communication and Multimedia Commissions
11.	Design and Development of a Multiple-Input Single-Output Space-Time-Frequency Coded OFDM Modem for Broadband Communications (Project Leader)	RM 216 000	Dec 2006- Nov 2008	Science Fund
12.	A Novel Coding and Modulation Technique for OFDM System Performance Enhancement (Project Leader)	RM 180 000	Dec 2006- June 2008	Science Fund
13.	Multi User Detection Using Parallel Interference Cancellation Strategy For Combined Code And Space Division Multiple Access Technique (Member)	RM 106 000	Dec 2006- Nov 2008	Science Fund
14.	Competitive Fundamental, Space Time Coding Design and Implementation, No. 01-16-03-090K, Acct 55213 (Member and Key Researcher)	RM 35 000	May2004- April 2006	UPM
15.	OFDM Investigation, Graduate Research, No. 01-16-03-091S,Acct 55214 (Member)	RM 68 000	May2004- April 2005	UPM

and Key Researcher)

16.	Experimental Applied, IRPA, Programmable Wireless Terminal (Member)	RM 248 000	2002-2005	IRPA
17.	Experimental Applied, IRPA, Programmable Base Station (Project Leader)	RM 158 000	2002-2005	IRPA
18.	Fundamental Research, Development of Bluetooth Adapter (Project Leader)	RM 15 000	2002-2003	UPM
19.	Short-Term, Network Planning for 3G System (Project Leader)	RM 10 000	2000-2001	UPM
20.	Short-Term, Indoor Propagation for 3G System (Project Leader)	RM 10 000	1999-2000	UPM
21.	Short-Term, Wireless LAN Modem (Project Leader)	RM 10 000	1999-2000	UPM
22.	Short-Term, WLAN at Faculty of Engineering (Project Leader)	RM 10 000	1997-1998	UPM

Awards/Recognition (Current)

Num	Name of awards	Title	Award Authority	Award Type	Year
1.	Best 2016 IEEE PhD Thesis Award	-	IEEE	International	2016
2.	Best Paper Award	An Adaptive Threshold Based CQI Compression Scheme for LTE Cellular Networks	40 th Asia-Pacific Advanced Network Research Workshop	International	2015
3.	Silver Medal	A self-Configured Link Adaptation for Green LTE Downlink Transmission	Pameran Rekacipta, Penyelidikan dan Inovasi (PRPI-2014)	National	2014
4.	Anugerah 20 Tahun Perkhidmatan UPM	-	UPM	University	2014
5.	Silver Medal	Innovation of The Melody to Musical Notation Translating System	The 12th Malaysia Technology Expo (MTE 2013)	International	2013
6.	Bronze Medal	A Standalone Sign Based Recognition Translator	The 4th Exposition on Islamic Innovation 2013 (I-INOVA 13)	International	2013
7.	Silver Medal	Automatic Melody to Musical Notation System	12th Malaysia Technology Expo (MTE 2012)	International	2012



8.	Anugerah Perkhidmatan Cemerlang UPM	-	UPM	University	2012
9.	Best Paper Award	Finger Triggered Virtual Musical Instruments	FTRA International Conference on Computer Science and its Applications (CSA-12)	International	2012
10.	Gold Medal	Outcome Based Education Management System	Malaysia Technology Expo (MTE 2011)	International	2011
11.	Silver Medal	Gesture Based Automating Electrical Household Appliances	10th Malaysia Technology Expo (MTE 2011)	International	2011
12.	Anugerah Perkhidmatan Cemerlang UPM	-	Universiti Putra Malaysia	University	2010
13.	Best Student Paper Award	Cluster Based Routing Protocol for Mobile Nodes in Wireless Sensor Network	Asia Pacific Networks	International	2010
14.	Gold Medal	Concatenated Multi-dimensional Modulating Transmitter and Receiver for Digital Communication Systems	UPM PRPI	National	2010
15.	Gold Medal	Spectrum Efficiency Enhancement in Dynamic Space Coded Multiple Access (DSCMA) System	UPM PRPI	National	2010
16.	Silver Medal	Sign Based Automating Electrical Household Appliances	UPM PRPI	National	2010
17.	Silver Medal	Superposition Coding with Unequal Error Protection for the Overloaded CDMA System	UPM PRPI	National	2010
18.	Silver Medal	Cluster Based Routing Protocol for Mobile Nodes in Wireless Sensor Network	UPM PRPI	National	2010
19.	Silver Medal	MyOBE – Outcome Based Education Management System	UPM PRPI	National	2010
20.	Sijil Penghargaan Perkhidmatan Cemerlang UPM	-	UPM	University	2010



21.	Excellent Award	Teaching Evaluation	Faculty of Engineering UPM	University	2009
22.	Anugerah Perkhidmatan Cemerlang UPM	-	UPM	University	2009
23.	Bronze Medal	Theft Prevention using RFID	Pameran Rekacipta Penyelidikan dan Inovasi UPM	National	2007
24.	Bronze Medal	Large Area Synchronous Even Ternary (LAS-ET) Code with Ternary Phase Shift Keying Scheme	Pameran Rekacipta Penyelidikan dan Inovasi UPM	National	2007
25.	Best Paper Bronze Award	Space-time-frequency coded OFDM employing adaptive multiple antenna selection over WLAN fading channels	2 nd IEEE Asia Pacific Conference on Applied Electromagnetic, APACE2005	International	2005
26.	Bronze Medal	Design of a DS-CDMA Wireless Transmitter Using FPGA	S&T Exposition		2002
27.	Bronze Medal	Remote Control Light Switch	Faculty of Engineering R&D Exhibition, UPM	National	2002
28.	Gold Medal	Design of a DS-CDMA Wireless Transmitter Using FPGA	UPM Invention and Research Exhibition	National	2002
29.	Gold Medal	Design of a DS-CDMA Wireless Transmitter Using FPGA	Faculty of Engineering R&D Exhibition, UPM	National	2002
30.	Silver Medal	Inter-satellite Handover for Non-GEO Satellites Using Adaptive Steered Beams (ASB) Algorithm	Faculty of Engineering R&D Exhibition	National	2002
31.	Silver Medal	Inter-satellite Handover for Non-GEO Satellites Using Adaptive Steered Beams (ASB) Algorithm	UPM Invention and Research Exhibition	National	2002
32.	Excellent Award	Teaching Evaluation	Faculty of Engineering, UPM	University	2001
33.	Anugerah Khidmat Cemerlang	-	UPM	University	1999
34.	Anugerah Perkhidmatan Cemerlang Fakulti	-	Faculty of Engineering, UPM	University	1999
35.	Anugerah Khidmat Cemerlang	Anugerah Khidmat Cemerlang	UPM	University	1998

36. Anugerah Perkhidmatan Cemerlang Fakulti - Faculty of Engineering, University UPM 1998

Professional Services/Consultation

No	Year	Title	Authority	Amount
1.	2015 2016	Lead , Corporate Strategy in University Administration	Akademi Kepimpinan Pengajian Tinggi, AKEPT, Ministry of Higher Education	RM 60,000
2.	2015 2015	Lead , MyQUEST Improvement and Audit	Ministry of Education	RM 905 000
3.	2013	Assistant Lead , Kajian Tindakan in POPBL (Sambungan Projek Pembangunan Modul Training of Trainers (ToT) dalam Bidang Project Oriented Problem-Based Learning (PoPBL)	Akademi Kepimpinan Pengajian Tinggi, AKEPT, Ministry of Higher Education	RM 36 000
4.	2013	Member , Development of Rating Instrument for Polytechnics Polyrate	Ministry of Higher Education	RM 336 000
5.	2013	Lead , Development of Institute Pendidikan Guru Rating System	Ministry of Higher Education	RM 460 000
6.	2012 2013	Member , MyQUEST Audit and Analysis	Ministry of Higher Education	RM 450 000
7.	2012- 2013	Lead , Development of MyQUEST Satisfaction Index Instrument	Ministry of Higher Education	RM 180 000
8.	2012- 2013	Member , Development of Rating Instrument for College Community	Ministry of Higher Education	RM 226 000
9.	2012	Assistant Lead , Projek Pembangunan Modul Training of Trainers (ToT) dalam Bidang Project Oriented Problem-Based Learning (PoPBL)	Akademi Kepimpinan Pengajian Tinggi, AKEPT, Ministry of Higher Education	RM 170 000
10.	2012	Member , Projek Pembangunan Modul Practicum (ToT)	Akademi Kepimpinan Pengajian Tinggi, AKEPT	RM 170 000
11.	2011- 2012	Projek Kajian Pembangunan Rangkaian Sensor RMK10	Ministry of Information, Communication and Culture	RM 10,891 714
12.	2011- 2012	Lead, Project 1 Development of Malaysia Standards and Guidelines for Wireless Sensor Network	Ministry of Information, Communication and Culture	RM 460 406
13.	2010 2011	Member , Kajian Pembangunan Sistem Pengukuran Kualiti dan Audit (MyQUEST)	Ministry of Higher Education	RM 1113 990



14.	2010 2011	Member , <i>Projek Perintis Pelaksanaan Outcome Based Education - MyOBE</i> at Faculty of Engineering, UPM	Ministry of Higher Education	RM 259 000
15.	2009 2010	Member , Kajian Kesetaraan Kolej Swasta (Member) – MyQUEST,	Ministry of Higher Education	RM 365 355
16.	2007- 2009	Leader - Kajian Kesiediaan Penggunaan Teknologi Sensor,	Ministry of Energy, Water and Communication	RM 1 375 600
17.	2007- 2009	Member , Kajian Pembangunan Rangkaian Sensor Tanpa Wayar U Untuk Aplikasi Pertanian dan Pembangunan	Ministry of Energy, Water and Communication	RM 1,159 819
18.	2007	Member , Study on the Establishment of Professional Body for Engineering Tehnologists and Technicians	Ministry of Higher Education	RM 50 000
19.	2007	Member , Member of Malaysian Incorporated Engineers and Engineering Technicians (MIEET) – Funded by Board of Engineers, Malaysia, to study and draft a paper identifying route towards professional status for Bachelor of Engineering Technology graduates.	Ministry of Higher Education	RM 80 000
20.	2003	Member , Consultant for Ministry of Finance on Preparation and Updating of Codification System for Business Registration with the Ministry of Finance,		RM 186,779.05

Student Supervision

PhD (Main Supervisor)

No.	Name	Title	Status
1.	Muayad		Graduated
2.	Samer		Graduated
3.	Mutaffa Ismail	LTE-A Self Aware Handover for System Optimisation	Graduated
4.	Ferhad Mesrinejad	6LowPAN Adaptation Layer Energy Efficient Mechanism	Graduated
5.	Amjad Najim	Modified <i>K</i> Algorithm for MIMO Detection	Graduated
6.	Yaseen Hassan Tahir	Performance Enhancement of High Data Rate Real Time Wireless Transmission System using Superposition Coding and Unequal Error Protections	Graduated
7.	Bashar Jabbar Hamzah	Seamless Vertical Handover Between 3G UMTS and Wireless LAN with Modified Mobile Stream Control Transmission Protocol	Graduated
8.	Akram Jabbari	VANET Routing Protocol	Ongoing
9.	Moh Li Suet	Resource Allocation in LTE-A	Ongoing
10.	Mariam Ovayoza Ahmed-	Optimization of Penetration of Femtocell	Ongoing

Student Supervision

PhD (Main Supervisor)

No.	Name	Title	Status
	AbdulAzeez	Spectrum Assignment in 4G and Beyond	
11	Omar Jabbar Ibrahim	Design of a Broadband Antenna for UHF Radio Frequency Identification	Ongoing
12	Muayad Khalil Murtadha	Improving Mobility Management for LTE/WLAN Heterogeneous Networks Based on MIH Enabled Proxy MiPv6	Ongoing
13	Aiyelabowoo O Peter	Cooperative Energy Efficient Relay Selection and Pocer Allocation Scheme in Power Line Communications	Ongoing
14	Shahideh Kiehbadroulinezhad	Localization of array Antenna for Astronomy Applications	Ongoing
15	Mohammed Aliyu Gadam	Radio Resource Management RM Optimization in LTE-Advanced Heterogeneous Networks using Network-Assisted IRC Techniques	Ongoing
16	Samer Adnan Ali Bani Awad	Header Compression Scheme for IPv6 in 6LoWPAN Network	Ongoing

MS with thesis (Main Supervisor)

No.	Name	Title	Status
1.	Ee Gee Keng	Path Recovery Mechanism in 6LoWPAN Routing	Graduated
2.	Yaaqob Ali Ahmed Qasem	Interference Avoidance Routing and Scheduling using Multiple Transceivers for IEEE 802.16 Mesh Network	Graduated
3.	Alaa M. Baker	MAC and PHY Cross-layer Optimization	Graduated
4.	Samer Adnan Ali Bani Awad	Analytical Model for Degree of Coverage in Mobile WSN	Graduated
5	Mostafa Al-Harbawi	Utilising Neighbours Table to Improve Tree Routing Protocol in Zigbee Network	Graduated
6	Sabah Abdulmutalib Sewan	Impure Orthogonal Space-Time Block Codes for Multiple Transmit Antenna System	Graduated
7	Nesa Mouzehkesh	Proactive Traffic-Adaptive Tuning of Contention Window for Wireless Sensor Network Medium Access Control Protocol	Graduated
8	Ali Zuhair	Improvement of Centralised Routing and Scheduling using Cross-Layer Design and Multi-Slot Assignment in WiMAX Mesh Network	Graduated
9	Ng Chee Kyun	Design and Analysis of Phased Array Antenna Beam Steering for Satellite Tracking	Graduated
10	Aduwati Sali	Handover Management in Mobile Satellite Communications	Graduated
11	Seedahmed Sharif Mahmoud	TV Ghost Cancellation System Using Switched Capacitor Circuits	Graduated



12	Bashar	Long Term Evolution and LTE-Advanced Communication	Ongoing
13	Alaa	Control Area Network for the Elderly in Smart Home	Ongoing
14	Muntadher Qasim Abdulhasan	Constraint-Threshold Feedack Compression Scheme of Channel Quality Indicator for LTE Systems.	Ongoing
15	Musobi Masalu Malanguka	Design and implementation of pre-distortion in wideband application	Ongoing

