

Mohamad Yusoff bin Alias, PhD.

Faculty of Engineering, Multimedia University,
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Objective

- To become a successful researcher in conducting wireless communication research.
- To assist in expediting wireless communication technology.

Academic and Professional Qualifications

1. Secondary Education at Malay College Kuala Kangsar, Kuala Kangsar, Malaysia (1988-1992) with Sijil Pelajaran Malaysia (SPM) - 7A1 (Physics, Additional Mathematics, Chemistry, Mathematics, Biology, English and Islamic Studies), 1A2 (Geography) and 1C3 (Bahasa Malaysia).
2. Pre-university at Tulsa English Institute, Tulsa, USA (August-December 1994) and University of Tulsa, Tulsa, USA (Spring 1994)
3. Bachelor of Science in Engineering (Electrical Engineering) awarded May 1998 from School of Electrical, Electronics and Computer Science (EECS), University of Michigan, Ann Arbor, Michigan, USA (1994-1998) with final CGPA 3.768 (Summa Cum Laude), 5 Dean's List and 3 Class Honors.
4. Doctor of Philosophy (Ph.D.), Wireless Communication, awarded May 2005 from School of Electronics and Computer Science (ECS), University of Southampton, UK (2001-2004) under the supervision of Professor Lajos Hanzo and Professor Sheng Chen with thesis entitled "Minimum Bit Error Rate Multiuser Detection for Multiple Antenna Aided Uplink OFDM".

Work Experience

1. Associate Professor (B) at Faculty of Engineering, Multimedia University (MMU), Cyberjaya, Malaysia (December 2010 to present)
2. Academic Honorary Visitor, School of Electrical & Electronic Engineering, the University of Manchester, United Kingdom (May 2011 to October 2011)
3. Senior Lecturer at Faculty of Engineering, Multimedia University (MMU), Cyberjaya, Malaysia (May 2007 to December 2010)
4. Deputy Dean for (Student Affairs and Operation) Faculty of Engineering, Multimedia University (MMU), Cyberjaya, Malaysia (January 2008 to December 2009)
5. Lecturer at Faculty of Engineering, Multimedia University (MMU), Cyberjaya, Malaysia (January 2005 to May 2007)
6. Tutor at Faculty of Engineering, Multimedia University (MMU), Cyberjaya, Malaysia (September 1998 to January 2001)
7. Communication Engineer for Telekom Malaysia, Malaysia (June 1998 to September 1998)
 - Management Training Program from 15 June 1998 until 15 July 1998.
 - Practical training at the Telekom Service Center, Private Relation Unit and Customer Network Operation at Telekom Malaysia. (July 1998 to September 1998)

Current Main Research Areas

1. Orthogonal Frequency Division Multiplexing (OFDM)
2. Cognitive Radio OFDM
3. Femtocell and Heterogeneous Network (HetNet)

RESEARCH AND PUBLICATIONS

Chapters in a Book

1. Alias, M. Y., Chen, S. and Hanzo, L. (2006) Multi-user OFDM employing genetic algorithm aided minimum bit error rate multi-user detection, in Hanzo, L. and Keller, T., Eds. OFDM and MC-CDMA: A Primer, chapter 12, pp. 331-349. IEEE Press and John Wiley. ISBN: 0-470-03007-0

Journal/Proceedings

1. Mohammad Ghanbarisabagh, M. Y. Alias and H. A. Abdul-Rashid, "Cyclic Prefix Reduction Technique for Direct-Detection Optical OFDM Transmission over Long-distance of SSMF", International Journal of Microwave and Optical Technology (IJMOT), vol.6, no.4, pp.242-248, July 2011, University of Nevada, U.S.A.
2. Mohammad Ghanbarisabagh, M. Y. Alias and H. A. Abdul-Rashid, "Comparison of LMS-TEQ and DF-TEQ to reduce cyclic prefix length in direct detection optical OFDM system," Optik - International Journal for Light and Electron Optics, Published Online 30th August 2011.

3. Mohd Hairi HALMI, Mohd Yusoff ALIAS, and Teong Chee CHUAH, "Hybrid MIMO Scheme Combining Precoded and Non-Precoded Transmission," accepted for publication in *IET Microwaves, Antennas & Propagation*, 2011.
4. F. Choong, S. Phon-Amnuaisuk, M. Y. Alias, "Metaheuristic Methods in Hybrid Flow Shop Scheduling Problem," *Expert Systems with Applications*, vol. 38, no. 9, September 2011, pp. 10787-10793. ISSN: 0957-4174, 2011.
5. M. Ghanbarisabagh, M. Y. Alias and H. A. Abdul-Rashid "Cyclic Prefix Reduction for 20.48 Gb/s Direct-Detection Optical OFDM Transmission Over 2560 Km of SSMF", *International Journal of Communication Systems*, Wiley, Published Online 19 January 2011.
6. F. Choong, S. Phon-Amnuaisuk, M. Y. Alias, "High-level Synthesis: Evolution Using Adaptive GA," Accepted for publication in *WSEAS Transactions on Circuits and Signals*, 2010.
7. Mohd Hairi HALMI, Mohd Yusoff ALIAS, and Teong Chee CHUAH, "Semi-Blind Channel Covariance Estimation for MIMO Precoding," *IEICE TRANSACTIONS on Fundamentals of Electronics, Communications and Computer*, Vol.E94-A No.2, 2011, pp.833-837. Online ISSN: 1745-1337 Print ISSN: 0916-8508
8. Aminuddin Ahmad Kayani and Mohamad Yusoff Alias, "Performance of OFDM in the Variation of the Path Quantity in Power Line Communications", *International Journal of Network and Mobile Technologies (IJNMT)*, Vol 2, No. 1, 2011, pp. 44-48. ISSN 2229-9114 (listed in the Cabell's Directory of Publishing Opportunities in Computer Science and Business Information System)
9. John Hong Kok Han, Mohamad Yusoff Alias, and Goi Bok Min, "Simulating Denial of Service Attack Using WiMAX Experimental Setup", *International Journal of Network and Mobile Technologies (IJNMT)*, Vol 2, No. 1, 2011, pp. 30-34. ISSN 2229-9114 (listed in the Cabell's Directory of Publishing Opportunities in Computer Science and Business Information System)
10. M. Ghanbarisabagh, M. Y. Alias and H. A. Abdul-Rashid, "Cyclic Prefix Reduction Technique for OFDM System over Multipath Fading Channels", *International Journal of Microwave and Optical Technology (IJMOT)*, vol. 5, no. 4, July 2010, pp. 251-257.
11. Mohd H. Halmi, Mohamad Y. Alias and Chuah T. Chee, "Low-Complexity Semi-Coherent MIMO Systems", *IEICE transactions on Fundamentals of Electronics, Communications and Computer Sciences*, Vol.E93-A, No.4, pp.833-836, Apr. 2010.
12. Mazni Amil, Mohamad Yusoff Alias, and Khairil Anuar, "PathF3 - Improving accuracy and network load in available bandwidth estimation based on SLOPS Methodology", *International Journal of Computer and Electrical Engineering (IJCEE)*, VOL 2, NO 2, April, 2010. Pp218-222. ISSN: 1793-8198
13. Siti Azlida Ibrahim, Mohamad Yusoff Alias, and Nurul Nadia Ahmad, "Performance of adaptive modulation assisted adaptive beamforming system", *IEICE Electronics Express*, Vol. 6 (2009), No. 14, pp. 1013-1018.
14. Florence Choong Chiao Mei, Somnuk Phon-Amnuaisuk, Mohamad Yusoff Alias, "Implementation of Local Search in Multi-Objective Adaptive GA: A Case Study on High-Level Synthesis", *International Journal of Computational Intelligence Research (IJCIR)*, Volume 5, Number 3 (2009), pp. 311-326. Print ISSN 0973-1873 (Online ISSN: 0974-1259)
15. Florence Choong Chiao Mei, Somnuk Phon-Amnuaisuk, Mohamad Yusoff Alias, "New Operators of GA for Improving the Performance of High-level Synthesis", *International Journal of Computational Intelligence Research*, Volume 5, Number 3 (2009), pp. 297-310. Print ISSN 0973-1873 (Online ISSN: 0974-1259)
16. K. Ramasamy, Mohammad Umar Siddiqi, Mohamad Yusoff Alias, "Performance characteristics and weight distribution analysis of Turbo Product Code with Reed-Muller component codes", *Optik - International Journal for Light and Electron Optics*, Volume 120, Issue 3, January 2009, Pages 127-135. ISSN 0030-4026
17. Mohd H. Halmi, Mohamad Y. Alias and Chuah T. Chee, "Decoding Alamouti STBC from received signal power", *IEICE Electronics Express*, Vol. 6 (2009), No. 5, pp.249-255.
18. G. C. Chung, M. Y. Alias, and T. C. Chuah, "An adaptive LBER-Rake receiver for UWB system," *IEICE Electronics Express*, Vol. 5 (2008), No. 10, pp.381-387. ISSN: 1349-2543
19. G. C. Chung, M. Y. Alias, and T. C. Chuah, "An adaptive minimum bit-error decision-feedback equalizer for UWB systems," *IEICE ELEX*, Vol. 4 (2007), No. 14 pp.435-441, 2007. ISSN: 1349-2543
20. K. Ramasamy, Mohammad Umar Siddiqi, and Mohamad Yusoff Alias, "Performance of JPEG Image Transmission Using Proposed Asymmetric Turbo Code," *EURASIP Journal on Advances in Signal Processing*, vol. 2007, Article ID 75757, 10 pages, 2007. doi:10.1155/2007/75757 ISSN: 1110-8657
21. K. Ramasamy, M. U. Siddiqi, M. Y. Alias and A. Arunagiri, "Performance Comparison of Convolutional and Block Turbo Codes", *The IEICE Electronics Express (ELEX)*, vol. 3, no. 13, pp. 1-6, 10 July 2006. ISSN: 1349-2543

22. M. Y. Alias, S. Chen and L. Hanzo, "Multiple Antenna Aided OFDM Employing Genetic Algorithm Assisted Minimum Bit Error Rate Multiuser Detection", *The IEEE Transactions on Vehicular Technology*, vol. 54, no. 5, pp. 1713-1721, September 2005. ISSN: 0018-9545
23. M. Y. Alias, A. K. Samingan, S. Chen and L. Hanzo, "Multiple Antenna Aided OFDM Employing Minimum Bit-error Rate Multiuser Detection", *The IEE Electronics Letters*, vol. 39, no. 24, pp. 1769-1770, 27 November 2003. ISSN: 0013-5194

Conference Presentation/Workshop/Seminars

1. Razamin Ramli, Faathirah Jamaluddin, Engku Muhammad Nazri E. A. Bakar, Mohamad Yusoff Alias, Nor Idayu Mahat, Mohd Zaini Abdul Karim, Ang Chooi Leng, "Integrating Analytic Hierarchy Process with Integer Programming to Efficiently Model Spectrum Demands", accepted for publication in the 2011 International Conference on Modeling and Optimization - ICMO 2011, 1-3, October 2011, Cairo, Egypt.
2. Nor Azlina Ab. Aziz, Mohamad Yusoff Alias, Ammar W. Mohemmed, Kamarulzaman Ab. Aziz, Syabeela Syahali, "Coverage Maximization and Energy Conservation for Mobile Wireless Sensor Networks: A Two Phase Particle Swarm Optimization Algorithm", accepted for publication in the 2011 Sixth International Conference on Bio-Inspired Computing Theories and Applications (BIC-TA 2011), September 27 - 29, 2011, Penang, Malaysia.
3. Lee Ting Ling, Mohamad Yusoff Alias, "Assessment of Aggregate Interference from Ultra-Wideband Devices into Fixed-Satellite Service", *The 11th International Conference on Telecommunications 2011 (ConTEL 2011)*, 15-17, June 2011, Graz, Austria, pp 451-456.
4. Nor Azlina Ab. Aziz, Mohamad Yusoff Alias, Ammar W. Mohemmed, Kamarulzaman Ab. Aziz, "Particle Swarm Optimization for Constrained and Multiobjective Optimization: A Brief Review", 2011 International Conference on Economics, Trade and Development (ICETD 2011), 1-3, April 2011, Bali, Indonesia, pp. 146-150.
5. Chamal Sapumohotti, Mohamad Yusoff Alias, Ho Chiung Ching, Wee Kuok Kwee, "Low Cost Network Planning Tool Development using Google Maps, SRTM Data and MATLAB", *Proceedings of the International Conference on Information Networking (ICOIN) 2011*, 26-28, January 2011, Sunway Lagoon, Malaysia, pp. 13-18.
6. Mohammad Ghanbarisabagh, M. Y. Alias, H. A. Abdul-Rashid, "Performance Analysis of Decision Feedback Time-Domain Equalizer for 20.48 Gb/s Direct-Detection Optical OFDM Transmission Over 2560 km of SMF", *The 1st IEEE International Conference on Photonics 2010 (ICP2010)*, 5-7, July 2010, Holiday Villa, Langkawi, Malaysia.
7. Mohammad Ghanbarisabagh, M. Y. Alias, H. A. Abdul-Rashid, "Performance Analysis of Least Mean Square Time-Domain Equalizer in Long-Haul Direct-Detection Optical OFDM Transmission", *The 1st IEEE International Conference on Photonics 2010 (ICP2010)*, 5-7, July 2010, Holiday Villa, Langkawi, Malaysia.
8. M. Ghanbarisabagh, M. Y. Alias and H. A. Abdul-Rashid, "Performance analysis of DF-TEQ for direct-detection optical OFDM transmission in long distance SSMF", accepted for publication in the INTERNATIONAL CONFERENCE ON COMPUTER and COMMUNICATION ENGINEERING (ICCCE'10), Kuala Lumpur, Malaysia, May 11-13, 2010.
9. Mohammad Ghanbarisabagh, M. Y. Alias, H. A. Abdul-Rashid, "Cyclic Prefix Reduction for OFDM over Fast Rayleigh Fading Channel", *WIRELESS WORLD RESEARCH FORUM (WWRF), WWRF Meeting 24*, 12-14, April 2010, Penang Island, Malaysia, "Wireless Sans Frontier: Reaching out Humanity".
10. M. Ghanbarisabagh, M. Y. Alias and H. A. Abdul-Rashid, "Cyclic Prefix Reduction in Long-Haul Direct-Detection Optical OFDM Transmission", accepted for publication in the 12th International Symposium on Microwave and Optical Technology (ISMOT 2009), New Delhi, India, December 16-19, 2009.
11. Aminuddin Ahmad Kayani and Mohamad Yusoff Alias, "Performance of OFDM in the Variation of the Branch Lengths in Power Line Communications", accepted for publication in *The Ninth IEEE Malaysia International Conference on Communications (MICC 2009)*, Kuala Lumpur, December 15-17, 2009.
12. Shahrizal Sahabuddin and Mohamad Yusoff Alias, "End-to End Delay Performance Analysis of Various Codecs on VoIP Quality of Service ", accepted for publication in *The Ninth IEEE Malaysia International Conference on Communications (MICC 2009)*, Kuala Lumpur, December 15-17, 2009, pp. 607 - 612.
13. M. Ghanbarisabagh, M. Y. Alias, H. A. Abdul-Rashid, "Performance Analysis of Least Mean Square Time-Domain Equalizer for 20.48 Gb/s Direct- Detection Optical OFDM Transmission Over 2560 km of SMF", accepted for publication in *The Ninth IEEE Malaysia International Conference on Communications (MICC 2009)*, Kuala Lumpur, December 15-17, 2009, pp. 168 - 171.
14. Aminuddin Ahmad Kayani and Mohamad Yusoff Alias, "Performance of OFDM in the Variation of the Path Quantity in Power Line Communications", accepted for publication in *The International*

Conference on Recent and Emerging Advanced Technologies in Engineering (iCREATE 2009), Kuala Lumpur, November 23-24, 2009.

15. John Hong Kok Han, Mohamad Yusoff Alias, and Goi Bok Min, "Simulating Denial of Service Attack Using WiMAX Experimental Setup", accepted for publication in The International Conference on Recent and Emerging Advanced Technologies in Engineering (iCREATE 2009), Kuala Lumpur, November 23-24, 2009.
16. M. Ghanbarisabagh, M. Y. Alias, and H. A. Abdul-Rashid, "Performance Analysis of Least Mean Square Time-Domain Equalizer in Direct-Detection Optical OFDM High-Speed Transmission", accepted for publication in The International Conference on Recent and Emerging Advanced Technologies in Engineering (iCREATE 2009), Kuala Lumpur, November 23-24, 2009.
17. Low Pik Jian, Mohammad Faizal Ahmad Fauzi, Mohamad Yusoff Alias, Khairil Annuar, and M Haris Lye, "Design and Implementation of Adaptive Scalable Streaming System Over Heterogeneous Network", accepted for publication in The International Conference on Signal and Image Processing Applications 2009 (ICSIPA09), Kuala Lumpur, November 17-18, 2009, pp. 84 – 89.
18. Aminuddin Ahmad Kayani and Mohamad Yusoff Alias, "Effects of Permittivity of Insulating Materials on OFDM Performance in Power Line Communications", The International Conference on Signal and Image Processing Applications 2009 (ICSIPA09), Kuala Lumpur, November 17-18, 2009, pp. 443 – 448.
19. John Hong Kok Han, Mohamad Yusoff Alias, Goi Bok Min, "Potential Denial of Service Attacks in IEEE802.16e-2005 Networks", accepted for publication in the 9th International Symposium on Communication and Information Technology 2009 (ISCIT 2009), Incheon, Korea, September 28-30, 2009.
20. Mazni Amil, Mohamad Yusoff Alias, Khairil Annuar, "Path-F3: Improving accuracy and network load in available bandwidth estimation based on SLoPS Methodology", presented at 2009 International Conference on Machine Learning and Computing (ICMLC 2009), Perth, Australia, to be published in ISCCC, July 10 - 12, 2009.
21. Nor Azlina Bt. Ab Aziz, Ammar W. Mohemmed, Mohamad Yusoff Alias, "A Wireless Sensor Networks Coverage Optimization Algorithm Based on Particle Swarm Optimization and Voronoi Diagram", 2009 IEEE International Conference on Networking, Sensing and Control, Okayama, Japan, pp. 602-607, 26-29 March, 2009.
22. Mohamad Yusoff Alias, "LDPC Assisted Minimum Bit Error Rate Multiuser Detector in SDMA-OFDM", Mosharaka International Conference on Communications, Networking and Information Technology (MIC-CNIT 2008), Amman, Jordan, 5-7 December 2008.
23. Siamak Dawazdah Emami, Mohamad-Yusoff Alias and Hairul-Azhar Abdul-Rashid, "A Modeling of Orthogonal Frequency Division Multiplexing in Radio over Fiber Transmission", Mosharaka International Conference on Communications, Networking and Information Technology (MIC-CNIT 2008), Amman, Jordan, 5-7 December 2008.
24. Florence Choong Chiao Mei, Somnuk Phon-Amnuaisuk, Mohamad Yusoff Alias, Pang Wai Leong, "Adaptive GA: An Essential Ingredient in High-Level Synthesis", IEEE Congress on Evolutionary Computation (CEC) and IEEE World Congress on Computational Intelligence (WCCI 2008), Hong Kong Convention and Exhibition Centre, Hong Kong, pp. 3837-3844, June 1-6, 2008.
25. Siti Azlida Ibrahim, Mohamad Yusoff Alias, and Nurul Nadia Ahmad, "Joint Adaptive Modulation Adaptive Beamforming for Mobile Transmissions", 2007 IEEE International Conference on Telecommunications and Malaysia International Conference on Communications, 2007. ICT-MICC 2007 (Penang, Malaysia), pp. 254-259, 14-17 May 2007.
26. Siti Azlida Ibrahim, Mohamad Yusoff Alias and Nurul Nadia Ahmad, "Literature Study of Adaptive Modulation and Adaptive Beamforming Techniques for Mobile Transmissions", in Proceedings of the MMU International Symposium on Information and Communication Technologies (M2USIC) 2006, (Petaling Jaya, Malaysia), pp. 212-217, 16-17 November 2006.
27. H. Mohamad, S. Weiss, N. A. Mohd-Arif and M. Y. Alias, "Subband Decomposition Techniques for Adaptive Channel Equalisation", in Proceedings of the 7th IEEE Malaysia International Conference on Communications (MICC) 2005, (Kuala Lumpur, Malaysia), 16-18 November 2005.
28. M. Y. Alias, "Research Activities at Multimedia University", International Science and Practical Conference "Role and Significance of Telecommunications and Information Technologies in Modern Society", (Tashkent, Uzbekistan), 27-30 September 2005.
29. M. Y. Alias, S. Chen and L. Hanzo, "Genetic Algorithm Assisted Minimum Bit Error rate Multiuser Detection in Multiple Antenna Aided OFDM", in Proceedings of the IEEE Vehicular Technology Conference (VTC Fall), (Los Angeles, USA), 26-29 September 2004.
30. M. Y. Alias, A. K. Samingan, S. Chen and L. Hanzo, "Minimum Bit-error Rate Multiuser Detection in Multiple Antenna Aided OFDM", 8th International OFDM-Workshop, (Hamburg, Germany), pp. 16-20, 24-25 September 2003.

31. J. Y. Chung, M. Y. Alias, F. Guo and L. Hanzo, "LDPC and Turbo Coding Assisted Space-time Block Coded OFDM for H.26L Coded Wireless Telephony", Proceedings of the 14th IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC), (Beijing, China), pp. 2702-2706, 7-10 September 2003.
32. M. Y. Alias, F. Guo, S. X. Ng, T. H. Liew and L. Hanzo, "LDPC and Turbo Coding Assisted Space-time Block Coded OFDM", in Proceedings of the IEEE Vehicular Technology Conference (VTC Spring), vol. 4, (Jeju, Korea), pp. 2309-2313, 22-25 April 2003.
33. M. S. Beg, M. Y. Alias, and S. Chandran, "Modulation Alternatives in Enhanced Data rates for Global Evolution", in Proceedings of the 4th IEEE Malaysia International Conference on Communications (MICC), (Melaka, Malaysia), pp. 292-296, 17-19 November 1999.

Research Grants

National (competing at national level)

1. Project: Security Enhancement of IEEE 802.16 Wireless Broadband Standard (Project leader) - **Completed**
 Source of funding: E-Science MOSTI (01-02-01-SF0076)
 Lead researcher: Mohamad Yusoff bin Alias
 List of researchers: Goi Bok Min
 Grant value: RM73,800
 Duration: 18 months (1 January 2008 - 30 June 2009)
2. Project: Design and Performance Analysis of OFDM based Radio-over-Fiber System (Project leader) - **Completed**
 Source of funding: E-Science MOSTI (01-02-01-SF0015)
 Lead researcher: Mohamad Yusoff bin Alias
 List of researchers: Mohd. Ridzuan Mokhtar, Zulfadzli Yusoff, Wong Hin Yong, Hafizal Mohamad
 Grant value: RM214,558
 Duration: 23 months (1 December 2006 - 31 October 2008)
3. Project: The Dynamics of the Technology Transfer Process: A Study of the Multimedia Super Corridor (MSC) Flagships. - **Completed**
 Source of funding: E-Science MOSTI
 Lead researcher: Kamarulzaman Abdul Aziz
 List of researchers: Mohamad Yusoff Alias
 Grant value: RM77,372
 Duration: 24 months Project (1 December 2006 - 30 November 2008)
4. Project: A Novel Adaptive Genetic Algorithm Design for the Multi-objective Optimization of High-Level Synthesis - **Completed**
 Source of funding: E-Science MOSTI
 Lead researcher: Florence Choong
 List of researchers: Mohamad Yusoff Alias, Somnuk
 Grant value: RM117,000
 Duration: 18 months (1 September 2007 - 1 February 2009)
5. Project: A STRATEGIC MODEL IN SPECTRUM DEMAND ALLOCATION AND SPECTRUM PRICING - **Completed**
 Source of funding: MCMC
 Lead researcher: Mohd Zaki Mohd Yusuff, Director, Spectrum Research & Planning Department
 List of researchers: Lead Partner Institution - Universiti Utara Malaysia - Assoc Prof. Dr. Engku Muhamad Nazri Engku Abu Bakar (Project Manager), Assoc Prof. Dr. Ang Chooi Leng, Dr. Razamin Ramli, Dr. Nor Idayu Mahat, Prof Dr Mohd Zaini Abd Karim, Collaborative Partner Institution - Dr. Mohamad Yusof Alias (MMU)
 Grant value: RM106,600.00
 Duration: 24 months (1 February 2008 - 31 January 2010)
6. Project: A Study on Efficient Algorithm for Time Domain Equalizer in Optical OFDM Communication Systems - **On-going**
 Source of funding: TM R&D
 Lead researcher: Mohamad Yusoff Alias
 List of Researchers: Hairul Azhar Abdul Rashid, Lim Heng Siong, Tan Kim Geok
 Grant value: RM470,000.00
 Duration: 24 months (1 December 2010 - 30 November 2012)
7. Project: Adaptive Localization Techniques Based on Radio Frequency Fingerprints for Wireless local area Network- **On-going**
 Source of funding: ERGS, Ministry of Higher Education (MoHE) Malaysia
 Lead researcher: Tan Su Wei
 List of Researchers: Mohamad Yusoff Alias
 Grant value: RM98,500.00
 Duration: 24 months (1 August 2011 - 31 July 2013)

CONSULTANCY

1. Project: "Home Page Design Training"
Sponsor: MMU
List of consultants: Mohamad Yusoff Alias
Duration: 4 days
2. Project: Everything you always want to know about WiMAX Training
Sponsor: Bostonweb Academy, Malaysia
List of consultants: Mohamad Yusoff Alias
Duration: 4 days (14 & 15 August 2006 and 27 & 28 September 2006)
3. Project: WiMAX: Overview and Fundamentals
Sponsor: MIS Technologies Centre, Malaysia
List of consultants: Mohamad Yusoff Alias
Duration: 2 days (21 & 22 March 2007) MIS
4. Project: Basic Human Needs Training 2005
Sponsor: BHN, Japan
List of consultants: Mohamad Yusoff Alias
Duration: 3 Weeks
5. Project: Basic Human Needs Training 2006
Sponsor: BHN, Japan
List of consultants: Mohamad Yusoff Alias
Duration: 3 Weeks
6. Project: Basic Human Needs Training 2007
Sponsor: BHN, Japan
List of consultants: Mohamad Yusoff Alias
Duration: 3 Weeks
7. Project: Designing Engineering Diploma Programme
Sponsor: Kolej Universiti Islam Malaysia
List of consultants: Mohamad Yusoff Alias
Duration: 1 day (Sept 2005)
8. Project: Designing Certificate of Engineering Programme
Sponsor: Multimedia College (MMC)
List of consultants: Muhammad Faizal Ahmad Fauzi, Tan Ai Hui, Hafizal Mohamad, Mohd Ridzuan Mokhtar, Normiza, WL Chooi
Duration: 1 Year
9. Project: eScienceFund Evaluation Panel
Sponsor: MDeC
Duration: 3 days
10. Project: MGS Evaluation Panel
Sponsor: MDeC
Duration: 1 day
11. Project: Scalable Streaming and Bandwidth Estimation for Multimedia Distribution
Sponsor: Telekom R&D
List of consultants: Mohammad Faizal Ahmad Fauzi, Mohamad Yusoff Alias, Mohd Haris Lye Abdullah, Khairil Annuar
Duration: 18 months
12. Project: WiMAX: Overview and Fundamentals
Sponsor: iKnowledge/Total Power Solutions, Malaysia
List of consultants: Mohamad Yusoff Alias
Duration: 2 days (13 & 14 August 2008) Eastin Hotel, PJ
13. Project: WiMAX: Overview and Fundamentals
Sponsor: Suruhanjaya Komunikasi dan Multimedia (SKMM)/Malaysian Communication and Multimedia Commission (MCMC), Malaysia
List of consultants: Mohamad Yusoff Alias
Duration: 2 days (25 & 26 August 2008) SKMM/MCMC
14. Project: R&D in NPCET Technology
Sponsor: MMU CEnergy
List of consultants: Mohamad Yusoff Alias, KW Wee, Peter Ho, Fabian Kung
Duration: 18 Months (15th December 2008 – 15th June 2010), RM400,000.00
15. Project: BHN Training 2010: Mobile Personal Communications
Sponsor: MMU CEnergy
List of consultants: Mohamad Yusoff Alias, TC Chuah
Duration: 18 Months (11th November 2010 – 16th December 2010), RM3,500.00

TEACHING AND SUPERVISION

Subjects Taught

1. Lecturing Masters in Engineering in Telecommunications:

- ETM7032 - Mobile Personal Communications
 - ETM7132 - Digital Communication Systems and Design
 - ETM7106 - Network Security
 - ETM7136 - Digital Communication Systems and Design
 - ETM7206 – Special Topics on Emerging Technologies
2. Lecturing engineering undergraduate courses:
- EMM4086 - Distributed Multimedia Systems (DMS)
 - ECP1016 - Computer and Program Design
 - EMM3026 - Digital Audio Signal Processing
 - EHM3066 – Engineers and Society
 - EMM3036 - Multimedia Management and Presentation
 - ETM2046 – Analog and Digital Communications
 - EHM3066 – Engineers and Society
 - ETM3086 – Mobile and Satellite Communications

Postgraduate Supervision

1. PhD

- a. K. Ramasamy – **Completed**. Thesis submitted 15 December 2005. Degree Awarded 6 April 2006.
 - i. Topic: "Turbo Codes for Error Control in JPEG Image Transmission"
 - b. Mohd Hairi Halmi
 - i. Topic: "MIMO-OFDM for Next Generation Wireless System"
 - ii. Main-supervisor: Dr. Mohamad Yusoff Alias
 - iii. Co-supervisor: Dr. Chuah Teong Chee
 - c. Florence Choong Chiao Mei – **Completed**. Thesis submitted for examination on 17th May 2010, BOE on 20th October 2010.
 - i. Topic: "Genetic Algorithm and Reconfigurable Hardware: Design and Analysis"
 - ii. Main-supervisor: Dr Somnuk
 - d. Au Yong Jun Hoong
 - i. Topic: "Effective Mobile Ad Hoc Network Routing Protocol Design & Performance Evaluation and its Convergence with Cellular Network"
 - ii. Co-supervisor: Dr. Tan Su Wei
 - e. Mohammad Ghanbarisabagh – Thesis submitted for examination
 - i. Topic: "Cyclic Prefix Reduction Technique for OFDM Communication Systems"
 - ii. Main-supervisor: Dr. Hairul Azhar Abdul Rashid
 - f. Chung Gwo Chin
 - i. Topic: "ULTRA-WIDEBAND RADIO OVER OPTICAL FIBER (UROOF) IN HETEROGENOUS NETWORK"
 - ii. Main-supervisor: Dr. Su Sandar Thwin
2. Masters of Engineering Science (MEngSc) by research
- a. Siti Azlida Ibrahim – **Completed**. Submitted for examination on 5 April 2010. BOE on 30th July 2010, Degree Awarded 3rd December 2010.
 - i. Topic: "Adaptive Beamforming with Adaptive Modulation Techniques"
 - ii. Co-supervisor: Dr. Nurul Nadia Ahmad
 - b. Chung Gwo Chin – **Completed**. Submitted for examination in December 2008, BOE in October 2009, Degree Awarded 23rd February 2010.
 - i. Topic: "Baseband Receiver Design for UWB Wireless Communication"
 - ii. Main-supervisor: Dr. Chuah Teong Chee
 - c. Mazni Amil – **Completed**. Submitted for examination on 11 August 2010, BOE on 6th January 2011, Degree Awarded 1st June 2011.
 - i. Topic: "Bandwidth Estimation"
 - ii. Co-supervisor: Khairil Annuar
 - d. Azlina Abdul Aziz – Submitted for examination on 25 June 2010. BOE on 12th August 2011.
 - i. Topic: "Particle Swarm Optimisation for Wireless Sensor Network"
 - ii. Main-supervisor: Dr. Ammar (external consultant)
 - e. John Hong Kok Han
 - i. Topic: "WiMAX Security"
 - ii. Co-supervisor: Dr. Goi Bok Min

- f. Low Pik Jian
 - i. Topic: "Bandwidth Management and Estimation"
 - ii. Co-supervisor: Dr. Muhammad Faizal Ahmad Fauzi
 - g. Chuah Eng Yew
 - i. Topic: "Wireless System Coexistence in Extended C-Band"
 - ii. Main-supervisor: Dr. Chang Yoong Choon
 - h. Chamal Sapumohotti
 - i. Topic: "Adaptive Propagation Prediction for Cognitive Radio Networks"
 - ii. Co-supervisor: Dr. Tan Su Wei
3. M.Eng.Sc Nominal supervisor for Chan Wai Foo, 2009, Evaluation for Routing Protocols in Vanets, MMU
4. Masters of Engineering (Telecommunication) Projects
- a. Shahrizal Shahbuddin – **Completed**
 - i. Topic: "Analysis on the effects of various voice codecs on VOIP QoS"
 - b. Aminuddin Ahmad Kayani – **Completed**
 - i. Topic: "Performance Analysis of OFDM for Power Line Communications Under Noise and Multipath Effects"
 - c. Lim Jing Huey – **Completed**
 - i. Topic: "Performance Study in WCDMA system under various propagation conditions"
 - d. Ang Seong Tee – **Completed**
 - i. Topic: "PERFORMANCE ANALYSIS OF MOBILE WIMAX SPACE-TIME CODING SYSTEM OVER ITU CHANNEL MODELS"
 - e. Lee Ting Ling – **Completed**
 - i. Topic: "Assessment of interference from ultra-wideband devices into fixed-satellite service in the downlink"
 - f. Vijay Silvadurai – **Completed**
 - i. Topic: "Cell Load Sharing Implementation on a WiMAX Network"

ACADEMIC RECOGNITION AND LEADERSHIP

Academic Awards

1. Kulliyah of Engineering Research and Innovation Exhibition (KERIE) 5-6 December 2006, International Islamic University Malaysia, SILVER Medal, Project Title: "Asymmetric Turbo Code for Enhanced Performance of JPEG Coded Image Transmission over 3G Systems", Researchers: Prof. Dr. Mohammad Umar Siddiqi, Dr. K. Ramasamy and Dr. Mohamad Yusoff Alias
2. Islamic Development Bank (IDB) Post-doctorate Scholarship Award 2010

Assessor/Examiner

1. M.Eng. in Telecommunications examiner for Lee Yih Pey, 2010, MMU
2. M.Eng. in Telecommunications examiner for Arash Asadi, 2010, MMU
3. M.Eng.Sc Thesis examiner for Yousef Ali Mohammed al-Gumaei, 2010, Game Theoretic Approach using Power Control in Cognitive Radio Network, University of Malaya
4. M.Eng.Sc Thesis examiner for Ben Ooi Zee Min, 2010, Power Amplifier Modeling and EVM Measurement Technique, MMU
5. M.Eng.Sc Thesis examiner for Chong Zan Kai, 2010, Selfish Nodes Detection Mechanism in Wireless Mesh Networks, MMU
6. M.Eng.Sc Thesis examiner for Almas Uddin Ahmed, 2010, Multiple-Input Multiple-Output Space Time Coding for Wireless Communication Systems, MMU
7. M.Eng.Sc Thesis examiner for Ahmed Wasif Reza, 2009, Investigation of Grid Reader Network Based Positioning and Tracking for RFID with Indoor Coverage, MMU
8. M.Eng.Sc Thesis examiner for Chin Ji Jian, 2009, A Study on Identity-based Identification Schemes, MMU
9. M.Eng.Sc Thesis examiner for Ng Yin Hoe, 2007, Subband Adaptive Equalisation for Wireless Communications, MMU
10. M.Eng.Sc Thesis examiner for Mohd Hairi Halmi, 2005, Adaptive MIMO-OFDM Combining Space-Time Block Codes and Spatial Multiplexing in Correlated Frequency-Selective Channels, MMU
11. M.Eng. in Telecommunications examiner for Arwinder Singh, 2005, MMU

12. M.Eng. in Telecommunications examiner for Ong Keng Aik, 2006, SMS System Development for GSM Network: Content Provider System Design, MMU
13. M.Eng. in Telecommunications examiner for Yeo Siew Ying, 2005, EDGE: Link Quality Control, MMU

Referee Articles/Journals/Academic Papers Technical/Scientific Evaluation Committees

1. Reviewer for ICOIN 2011
2. Reviewer for Scientific Research and Essays
3. Reviewer for EURASIP Journal on Wireless Communications and Networking
4. Reviewer for Journal of Systems and Software
5. Reviewer for IEEE International Conference on Networks (ICON) 2007
6. Reviewer for ICT-MICC 2007
7. Reviewer for M2USIC 2005, M2USIC 2006 and M2USIC 2007
8. Reviewer for ETRI Journal
9. Reviewer for CITISIA 2008
10. Reviewer for MICC 2005 and MICC 2009
11. Reviewer for IEEE Transactions on Communications
12. Reviewer for EURASIP
13. Reviewer for Cyberscape
14. Reviewer for NETAPPS 2010

Academic/Professional Associations (Exco/Member/Secretariat)

1. IEEE - Senior Member (2010 - Present), Member (2004 - 2010), Student member (2001 - 2004).
2. Membership Committee member, 2005, IEEE Communication Society (ComSoc) Malaysian Chapter.
3. Activity Committee member, 2007, IEEE Communication Society (ComSoc) Malaysian Chapter.
4. Counselor, 2007 - present, MMU's IEEE Student Branch.
5. Graduate member, October 2000 - present, The Institution of Engineers Malaysia (IEM).
6. Registered member, February 1999, Board of Engineers Malaysia (BEM).
7. Member, December 1997 - present, Eta Kappa Nu (HKN), Beta Epsilon Chapter (HKN is the Electrical and Computer Engineering Honor Society in the USA)

Conference Committee

SERVICES TO THE UNIVERSITY

Administration

1. Programme Coordinator for Electronics Engineering Programme (January 2010 - August 2010)
2. Deputy Dean Faculty of Engineering (January 2008 - December 2009)
3. Programme Coordinator for Masters of Engineering in Telecommunications (March 2007 - July 2008) and (August 2010 - Present)
4. Assistant Programme Coordinator for Optical Engineering Programme (March 2005 - March 2007)
5. Lab supervisor for Telecommunication Lab (January 2005 - December 2008).

University Committees (personal-to-holder, i.e. by name)

1. Chairman for Centre for Broadband Communications (CBC) (April 2010-Present)
2. Chairman of DEng in Telecommunications Ad-Hoc Committee
3. Chairman for Masters of Engineering in Telecommunication for TUIT, Uzbekistan Committee
4. M2USIC 2005 Local Committee Member
5. M2USIC 2006 Local Committee Member
6. M2USIC 2007 Local Committee Member
7. Asia Pacific Wireless Broadband Forum 2008 Committee member
8. Chairman of Asia Pacific Wireless Broadband Forum (AP-WBF) 2009, 12th January 2009 Committee
9. E-Silk Committee

10. Chairman of Asian Forum on Information and Communications Technology (AFICT) 14th December 2009
11. FOE representative for e-SILK committee – January 2008-December 2009
12. FOE representative for the Student Affairs Committee (SAC) – January 2008-December 2009

Representing University in external committees/bodies/organizations

1. Represented MMU as a committee member for the IPTA R&D Exhibition 2005.
2. Representing MMU at the 2nd National Broadcasting Industry Symposium (IBIS) 2006
3. Representing MMU for "Sambutan Hari Pekerja 2005"
4. Advisor to MMU's CanSat team for CanSat Competition 2008 (Second place)
5. Advisor to MMU's CanSat team for CanSat Competition 2009.
6. Committee for IEEE-Smartcar Competition
7. MMU Alternate representative to SIRIM on the IT, Telecommunication and Multimedia Industrial Standards Committee
8. MMU Alternate member for Technical Committee on IT Interconnection, Communications and System Information - TC/G/12
9. Represented MMU at Tashkent University of Information Technology (TUIT) 50th Anniversary in Tashkent, Uzbekistan 28-30 September 2005.

SERVICES TO THE COMMUNITY

District Level/University/School/Village

1. Trainer for OFDM Workshop organized by IEEE Signal Processing Malaysian Chapter on 15th May 2010.
2. Presented talk on "Wireless Communications in the Modern Era" for e-Week 2010 organized by MMU Engineering Society on 23rd February 2010.
3. Seminar on "How to Make Use of IEEE Xplore for Final Year Project" organized by MMU IEEE Student Branch on 4th November 2009.
4. Ahli Jawatankuasa Teknologi Maklumat (IT), Lembaga Jurutera Malaysia (BEM) (2010 – present)
5. Judge for the MSC-MMU Technopreneurship Competition 2005
6. Judge for Shell Technology Innovation Award 2006/07
7. Invited speaker for the Special Session on WiMAX Technology in conjunction with National Conference on Telecommunication Technologies (NCTT) and Malaysia Conference on Photonics (MCP) 2008, Palm Garden, Putrajaya, Malaysia, 28 August 2008.
8. Trainer for IEEE Signal Processing Matlab Workshop for Communications
9. Advisor to IEEE MMU Student Branch
10. Advisor to 2009 Jactim's Career Fair
11. Advisor to 2009 EngSoc's E-Week
12. One of the judges for the Shell Innovation Award 2007.
13. Committee member for the Maxis-MMU 3G Competition 2006.
14. Invited as session chairman for M2USIC 2005, MICC 2005, APNeGeMo 2005, ICSIPA 2009, MICC 2009 and ISCIT 2009.
15. Invited as a member of the planning committee for Kolej Universiti Islam Malaysia (KUIM) new course for Telecommunication and Technology degree

OTHER SKILLS

- Proficient in Malay and English.
- Capable of operating Linux and Windows operating system (OS), and applying various softwares for both OS.
- Knowledgeable in computer hardware and architecture as well as networking.
- Active in sports activities such as volleyball, tennis, football and badminton.
- Enjoy adventurous outdoor activities such as camping, hiking and jungle tracking.
- Bengkel Peningkatan Kualiti Berterusan Melalui Pendekatan Berasaskan Hasil (Continuous Quality Improvement Through the Outcome-Based Approach) Untuk Bidang Kejuruteraan, 28 and 29 June 2005, Mines Beach Resort and Spa, Seri Kembangan
- Attended Microsoft TTT2010 .NET Framework 3.5:
 - MS2956: Core Foundations of Microsoft .NET 2.0 Development, 26 - 30 April 2010
 - MS2957: Advanced Foundations of Microsoft .NET 2.0 Development, 26 - 30 April 2010
 - MS2310: Developing Web Applications Using Microsoft Visual Studio 2008, 17 - 21 May 2010

References

1. Professor Lajos Hanzo
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2. Associate Professor Dr. Wong Hin Yong
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