

CURRICULUM VITAE



Prof. Dr. Mohammad Hamiruce Marhaban
Jabatan Kejuruteraan Elektrik dan Elektronik,
Fakulti Kejuruteraan, Universiti Putra Malaysia,
43400 UPM Serdang, Selangor

T: 03-8946 6306 M: 012-2258577
F: 03-8768 6327
mhm@upm.edu.my

Education

1. Ph.D. Electronics Engineering, 2003, University of Surrey, UK.
2. B. Eng. Electrical and Electronic Engineering, 1998, University of Salford, UK.

Areas of Interest

Artificial Intelligence, Computer Vision & Robotics

Professional Qualification/ Membership/ Affiliation

1. Executive Committee, IEEE Malaysia Section (IEEE) 2007-2009.
2. Member, Institute of Electrical and Electronics Engineers (IEEE) (80391606).
3. Member of IEEE Control Systems Society, IEEE Circuit and System Society and IEEE Communication Society.
4. Graduate Member, Board of Engineers Malaysia (BEM).
5. Taskforce, Malaysia Research Assessment (MyRA), Ministry of Higher Education Malaysia.
6. Taskforce, Higher Institution Centres of Excellence, (HICoE), Ministry of Higher Education Malaysia.
7. Ahli, Jawatankuasa Mesyuarat Timbalan Naib Canselor Penyelidikan dan Inovasi Universiti Awam.
8. Ahli, Jawatankuasa Malaysia Research University Network (MRUN).
9. Pengerusi, Jawatankuasa Kerja Penyelidikan Universiti, UPM.
10. Pengerusi, Jawatankuasa Seminar, Konferensi, Bengkel dan Latihan, UPM.
11. Pengerusi, Jawatankuasa Kelulusan Geran Penyelidikan, UPM.
12. Pengerusi, Jawatankuasa Kerja Pameran Rekacipta, Penyelidikan Dan Inovasi (PRPI), UPM.
13. Ahli, Jawatankuasa (JK) dan Jawatankuasa Kerja (JKK) di UPM:

Senat (co-opt)

Jawatankuasa Penyelidikan Universiti

Jawatankuasa Pelan Transformasi UPM

Jawatankuasa Penilaian Teknikal Geran Isu-Isu Semasa

Jawatankuasa Anugerah Jaringan Industri dan Komuniti Berimpak Tinggi (ICAN)

Jawatankuasa Pengurusan Aset Alih

Jawatankuasa Etika Penyelidikan

Jawatankuasa Institut Penjagaan dan Penggunaan Haiwan (IACUC)

Jawatankuasa Himpunan Bakat

Jawatankuasa Anugerah Penyelidikan dan Inovasi

Jawatankuasa Putra Global 200

Jawatankuasa Laman Web UPM

Jawatankuasa Teknologi Maklumat dan Komunikasi (JKTMK)

Jawatankuasa Taskforce Penjanaan Pendapatan Universiti

Jawatankuasa Pemilihan (Penyelidikan)

Jawatankuasa Pemandu Kelestarian Hijau

Jawatankuasa Penerbitan Universiti

Jawatankuasa Kerja Pengurusan Risiko

Jawatankuasa Kerja Kelestarian Hijau

Jawatankuasa Kerja Permohonan Harta Intelekt

Appointments	
Position	Duration
1. Director, Research Management Centre UPM	April 2016 to date
2. Professor, Faculty of Engineering, UPM	June 2015 to date
3. Adjunct Professor, UNITEN	June 2016 to date
4. Deputy Director, Research Management Centre UPM	July 2010 to March 2016
5. Electrical Project Advisor, UKM Perunding Kejuruteraan & Arkitek Sdn. Bhd.	April 2009– July 2010
6. Associate Professor, Faculty of Engineering, UPM	January 2008 to June 2015
7. Research Coordinator, Dept. Electrical & Electronic Engineering, Faculty of Engineering, UPM	July 2007 – July 2010
8. Head, Academic Field of Control System, Dept. of Electrical and Electronic Engineering, Faculty of Engineering, UPM	July 2007 – January 2008
9. Program Manager & Associate Researcher for Intelligent System, Intelligent System & Robotics Laboratory, ITMA	September 2003 – July 2011
10. Head, Control System Unit, Dept. of Electrical and Electronics Engineering, Faculty of Engineering, UPM	September 2003 – July 2007
11. Lecturer, Faculty of Engineering, UPM	May 2003 – December 2007
12. Tutor, Faculty of Engineering, UPM	Nov 1998 – April 2003
13. Demonstrator, University of Surrey, UK	September 2000 – September 2001

Publications

Journals (Scopus/WOS)

2017

- Jahedsaravani, A., Massinaei, M., **Marhaban, M.H.**, An image segmentation algorithm for measurement of flotation froth bubble size distributions. (2017) *Measurement: Journal of the International Measurement Confederation*, 111, pp. 29-37.
- Jahedsaravani, A., Massinaei, M., **Marhaban, M.H.**, Development of a machine vision system for real-time monitoring and control of batch flotation process. (2017) *International Journal of Mineral Processing*, 167, pp. 16-26.
- Khosropanah, P., Ramli, A.R., Lim, K.S., **Marhaban, M.H.**, Ahmedov, A., Fused multivariate empirical mode decomposition (MEMD) and inverse solution method for EEG source localization. (2017) *Biomedizinische Technik*.
- Findi, A.H.M., **Marhaban, M.H.**, Kamil, R., Hassan, M.K., Collision prediction based q-learning for mobile robot navigation in unknown dynamic environments. (2017) *Journal of Computational and Theoretical Nanoscience*, 14(6), pp. 2873-2885.
- Aqel, M.O.A., **Marhaban, M.H.**, Saripan, M.I., Ismail, N.B., Estimation of image scale variations in monocular visual odometry systems. (2017) *IEEJ Transactions on Electrical and Electronic Engineering*, 12(2), pp. 228-243.
- Jamali, N.H., Ping, K.A.H., Sahrani, S., Mat, D.A.A., **Marhaban, M.H.**, Saripan, M.I., Moriyama, T., Takenaka, T., Image reconstruction based on combination of inverse scattering technique and total variation regularization method. (2017) *Indonesian Journal of Electrical Engineering and Computer Science*, 5 (3), pp. 569-576.
- Findi, A.H.M., **Marhaban, M.H.**, Kamil, R., Hassan, M.K., Collision prediction based genetic network programming-reinforcement learning for mobile robot navigation in unknown dynamic environments. (2017) *Journal of Electrical Engineering and Technology*, 12 (2), pp. 890-903.
- Mahmood, S.F., **Marhaban, M.H.**, Rokhani, F.Z., Samsudin, K., Arigbabu, O.A., FASTA-ELM: A fast adaptive shrinkage/thresholding algorithm for extreme learning machine and its application to gender recognition. (2017) *Neurocomputing*, 219, pp. 312-322.

9. Yong, G., Ping, K.A.H., Sahrani, S., **Marhaban, M.H.**, Saripan, M.I., Moriyama, T., Takenaka, T., Profile reconstruction utilizing forward-backward time-stepping with the integration of automated edge-preserving regularization technique for object detection applications. (2017) *Progress In Electromagnetics Research M*, 54, pp. 125-135.
10. Mohafez, H., Ahmad, S.A., Hadizadeh, M., Moghimi, S., Roohi, S.A., **Marhaban, M.H.**, Saripan, M.I., Rampal, S., Quantitative assessment of wound healing using high-frequency ultrasound image analysis. (2017) *Skin Research and Technology*.
11. Joseph, E.J., Ping, K.A.H., Kipli, K., Mat, D.A.A., Sahrani, S., Zaidel, D.N.A., Saripan, M.I., **Marhaban, M.H.**, Integration of image segmentation method in inverse scattering for brain tumour detection. (2017) *Progress in Electromagnetics Research M*, 61, pp. 111-122.
12. Findi, A.H.M., **Marhaban, M.H.**, Kamil, R., Hassan, M.K., Genetic network programming-reinforcement learning based safe and smooth mobile robot navigation in unknown dynamic environments. (2017) *Journal of Theoretical and Applied Information Technology*, 95(11), pp. 2339-2351.
13. Shair, E.F., Ahmad, S.A., **Marhaban, M.H.**, Tamrin, S.B.M., Abdullah, A.R., EMG processing based measures of fatigue assessment during manual lifting. (2017) *BioMed Research International*, 2017, art. no. 3937254.
14. Shair, E.F., Ahmad, S.A., Abdullah, A.R., **Marhaban, M.H.**, Mohd Tamrin, S.B., Impact of different lifting height and load mass on muscle performance using periodogram. (2017) *Pertanika Journal of Science and Technology*, 25 (S), pp. 1-8.
15. Behrooz, F., Mariun, N., **Marhaban, M.H.**, Mohd Radzi, M.A., Ramli, A.R., A Design of a Hybrid Non-Linear Control Algorithm. (2017) *Energies* 10(11).
16. Mohafez, H., Ahmad, S.A., Hadizadeh, M., **Marhaban, M.H.**, Saripan, M.I., High-frequency Ultrasound Imaging in Wound Assessment: Current Perspectives. (2017) *Pertanika Journal of Science & Technology*, 25(4), pp. 1039-1050.
17. Shair, E.F., Ahmad, S.A., Abdullah, A.R., **Marhaban, M.H.**, Mohd Tamrin, S.B., Impact of Different Lifting Height and Load Mass on Muscle Performance using Periodogram. (2017). *Pertanika Journal of Science & Technology* 25(S), pp. 1-8.

2016

18. Aqel, M.O.A., **Marhaban, M.H.**, Saripan, M.I., Ismail, N.B., Review of visual odometry: types, approaches, challenges, and applications. (2016) *SpringerPlus*, 5 (1), art. no. 1897.
19. Aqel, M.O.A., **Marhaban, M.H.**, Saripan, M.I., Ismail, N.B., Adaptive-search template matching technique based on vehicle acceleration for monocular visual odometry system. (2016) *IEEEJ Transactions on Electrical and Electronic Engineering*, 11(6), pp. 739-752.
20. Jahedsaravani, A., **Marhaban, M.H.**, Massinaei, M., Application of statistical and intelligent techniques for modeling of metallurgical performance of a batch flotation process. (2016) *Chemical Engineering Communications*, 203(2), pp. 151-160.
21. Mahmood, S.F., **Marhaban, M.H.**, Rokhani, F.Z., Samsudin, K., Arigbabu, O.A., SVM-ELM: Pruning of Extreme Learning Machine with support vector machines for regression. (2016) *Journal of Intelligent Systems*, 25(4), pp. 555-566.
22. Arezoumand, R., Mashohor, S., **Marhaban, M.H.**, Efficient terrain coverage for deploying wireless sensor nodes on multi-robot system. (2016) *Intelligent Service Robotics*, 9(2), pp. 163-175.
23. Jahani Fariman, H., Ahmad, S.A., **Hamiruce Marhaban, M.**, Alijan Ghasab, M., Chappell, P.H.,

- Hand movements classification for myoelectric control system using adaptive resonance theory. (2016) *Australasian Physical and Engineering Sciences in Medicine*, 39(1), pp. 85-102.
24. Ghasemi, S., Kamil, R., **Marhaban, M.H.**, Nonlinear Thf-Fxlms Algorithm for Active Noise Control with Loudspeaker Nonlinearity. (2016) *Asian Journal of Control*, 18 (2), pp. 502-513.
 25. Khanaki, R., Mohd Radzi, M.A., **Marhaban, M.H.**, Artificial neural network based maximum power point tracking controller for photovoltaic standalone system. (2016) *International Journal of Green Energy*, 13(3), pp. 283-291.
 26. Mokri, S.S., Saripan, M.I., Abd Rahni, A.A., Nordin, A.J., Hashim, S., **Marhaban, M.H.**, PET Image Reconstruction Incorporating 3D Mean-Median Sinogram Filtering. (2016) *IEEE Transactions on Nuclear Science*, 63(1), art. no. 7407515, pp. 157-169.
 27. Jahedsaravani, A., **Marhaban, M.H.**, Massinaei, M., Saripan, M.I., Noor, S.B.M., Froth-based modeling and control of a batch flotation process. (2016) *International Journal of Mineral Processing*, 146, pp. 90-96.
 28. Khanaki, R., Radzi, M.A.M., Hajjighorbani, S., **Marhaban, M.H.**, Evaluation of improved MPPT-based ANN controller for PV standalone system. (2016) *Journal of Engineering and Applied Sciences*, 11(9), pp. 1972-1980.
 29. Jahedsaravani, A., Massinaei, M., **Marhaban, M.H.**, Application of Image Processing and Adaptive Neuro-fuzzy System for Estimation of the Metallurgical Parameters of a Flotation Process. (2016). *Chemical Engineering Communications*, 203(10), pp. 1395-1402.
 30. Jami'in, M.A., Hu, J., **Marhaban, M.H.**, Sutrisno, I., Mariun, N.B., Quasi-ARX neural network based adaptive predictive control for nonlinear systems. (2016) *IEEJ Transactions on Electrical and Electronic Engineering*, 11(1), pp. 83-90.
 31. Ng, S.W., Ping, K.A.H., Sahrani, S., **Marhaban, M.H.**, Sariphan, M.I., Moriyama, T., Takenaka, T., Preliminary results on estimation of the dispersive dielectric properties of an object utilizing frequency-dependent forward-backward time-stepping technique. (2016) *Progress in Electromagnetics Research M*, 49, pp. 61-68.
 32. Aqel, M.O.A., **Marhaban, M.H.**, Saripan, M.I., Ismail, N.B., Khmag A., Optimal Configuration of a Downward-Facing Monocular Camera for Visual Odometry. (2016) *Indian Journal of Science and Technology* 8(32).
 33. Sutrisno, I., Jami'in, M., Hu, J., **Marhaban, M.H.**, A Self-Organizing Quasi-Linear ARX RBFN Model for Nonlinear Dynamical Systems Identification. (2016) *SICE Journal of Control, Measurement, and System Integration* 9(2). Pp. 70-77.
 34. Ahmed, I., Aris, I.B., **Marhaban, M.H.**, Ishak, A.J., Wireless Energy Monitoring in Biped Robot Based on Xbee RF Module. (2016) *Australian Journal of Basic and Applied Sciences*, 10(11), pp. 228-235.
- 2015**
35. Mokri, S.S., Saripan, M.I., **Marhaban, M.H.**, Nordin, A.J., Hashim, S., Hybrid registration of PET/CT in thoracic region with pre-filtering PET sonogram. (2015) *Radiation Physics and Chemistry*, 116, pp. 300-304.
 36. Jahani Fariman, H., Ahmad, S.A., **Hamiruce Marhaban, M.**, Ali Jan Ghasab, M., Chappell, P.H., Simple and Computationally Efficient Movement Classification Approach for EMG-controlled Prosthetic Hand: ANFIS vs. Artificial Neural Network. (2015) *Intelligent Automation and Soft Computing*, 21(4), pp. 559-573.
 37. Riadh, M.H., Ahmad, S.A.B., **Marhaban, M.H.**, Soh, A.C., Infrared Heating in Food Drying: An Overview. (2015) *Drying Technology*, 33(3), pp. 322-335.

38. Esmaille, M.F., **Marhaban, M.H.**, Mahmud, R., Saripan, M.I., Ultrasound thyroid gland volume estimation: A review. (2015) *Current Medical Imaging Reviews*, 11(2), pp. 85-90.

2014

39. Jahedsaravani, A., **Marhaban, M.H.**, Massinaei, M., Saripan, M.I., Mehrshad, N., Development of a new algorithm for segmentation of flotation froth images. (2014) *Minerals and Metallurgical Processing*, 31(1), pp. 66-72.
40. Jahedsaravani, A., **Marhaban, M.H.**, Massinaei, M., Prediction of the metallurgical performances of a batch flotation system by image analysis and neural networks. (2014) *Minerals Engineering*, 69, pp. 137-145.
41. Shayestegan, M., **Marhaban, M.H.**, Fuzzy reactive navigation of mobile robot in unknown environments. (2014) *International Journal of Robotics and Automation*, 29(4), pp. 416-423.
42. Ya'Acob, M.E., Hizam, H., Khatib, T., Radzi, M.A.M., Gomes, C., Bakri A., M., **Marhaban, M.H.**, Elmenreich, W., Modelling of photovoltaic array temperature in a tropical site using generalized extreme value distribution. (2014) *Journal of Renewable and Sustainable Energy*, 6 (3), art. no. 033134.
43. Ahmad Nadzri, A.A.B., Ahmad, S.A., **Marhaban, M.H.**, Jaafar, H., Characterization of surface electromyography using time domain features for determining hand motion and stages of contraction. (2014) *Australasian Physical and Engineering Sciences in Medicine*, 37 (1), pp. 133-137.
44. Nadzri, A.A.A., Zaini, M.H.M., Ahmad, S.A., **Marhaban, M.H.**, Jaafar, H., Ali, S.H.M., Surface Electromyography Hand Motion Classification Using Time Domain Features and Artificial Neural Network for Real Time Application. (2014), *Advanced Science, Engineering and Medicine*, 6(8), pp. 917-920.

2013

45. Alfatni, M.S.M., Shariff, A.R.M., Abdullah, M.Z., **Marhaban, M.H.**, Shafie, S.B., Saaed, O.M.B., Recognition system of oil palm fruit bunch types based on texture feature and image processing techniques. (2013) *Advanced Science Letters*, 19(12), pp. 3441-3444.
46. Shayestegan, M., **Marhaban, M.H.**, Shafie, S., Din, A.S.B., Fuzzy logic-based robot navigation in static environment with dead cycle obstacles. (2013) *International Journal of Robotics and Automation*, 28(4), pp. 379-388.
47. Alfatni, M.S.M., Shariff, A.R.M., Abdullah, M.Z., **Marhaban, M.H.**, Shafie, S.B., Ben Saaed, O.M., Oil palm fruit ripeness grading system based on Basic Gray Level Aura Matrix feature extraction and support vector machine, K nearest neighbourhood and artificial Neural Network supervised machine learning. (2013) *Advanced Science Letters*, 19(9), pp. 2612-2614.
48. Vaithilingam, C.A., Mison, N., Aris, I., **Marhaban, M.H.**, Nirei, M., Electromagnetic design and FEM analysis of a novel dual-air-gap reluctance machine. (2013) *Progress in Electromagnetics Research*, 140, pp. 523-544.
49. Alfatni, M.S.M., Shariff, A.R.M., Abdullah, M.Z., **Marhaban, M.H.B.**, Saaed, O.M.B., The application of internal grading system technologies for agricultural products – Review. (2013) *Journal of Food Engineering*, 116(3), pp. 703-725.
50. Taghvaei, M.H., Radzi, M.A.M., Moosavain, S.M., Hizam, H., **Hamiruce Marhaban, M.**, A current and future study on non-isolated DC-DC converters for photovoltaic applications. (2013) *Renewable and Sustainable Energy Reviews*, 17, pp. 216-227.
51. Esmaille, M.F., **Marhaban, M.H.**, Mahmud, R., Saripan, M.I., Cross-sectional area calculation

- for arbitrary shape in the image using star algorithm with Green's theorem. (2013) *IEEJ Transactions on Electrical and Electronic Engineering*, 8(5), pp. 497-504.
52. Aravind, C.V., Norhisam, M., Firdaus, R.N., Aris, I., **Marhaban, M.H.**, Computation of magnetic characteristics of the double rotor switched reluctance motor using flux tube analysis. (2013) *Automatic Estimation Electro-magnetics and Mechanics* 21(3).
 53. Mahdavi, F.A., Ahmad, S.A., **Marhaban, M.H.**, Akbarzadeh-T, M.R., The Utility of Wavelet Transform in Surface Electromyography Feature Extraction-A Comparative Study of Different Mother Wavelets. (2013) *Eng. Technol. Int. J. Electr. Robot. Electr. Commun. Eng* 7(4), pp.57-62.
 54. Arezoumand, A., Mashohor, S., **Marhaban, M.H.**, Finding objects with segmentation strategy based multi robot exploration in unknown environment, *Procedia-Social and Behavioral Sciences* 97, pp. 580-586.
 55. Tang, S.H., Mahmoud, T.S., **Marhaban, M.H.**, Intelligent-classical hybrid scheme controller for better transient response and steady state error of twin rotor MIMO system. (2013) *Scientific Research and Essays* 8(20), pp. 795-806.
 56. Khammar, M.R., Sai'd, Y.A., **Marhaban, M.H.**, Zolfaghari, F., Principles of Video Segmentation Scenarios. (2013) *International Journal on Computer Science and Engineering* 5(5), pp. 349-356.
- 2012**
57. Rabiou, H., Saripan, M.I., Mashohor, S., **Marhaban, M.H.**, 3D facial expression recognition using maximum relevance minimum redundancy geometrical features. (2012) *Eurasip Journal on Advances in Signal Processing*, 2012 (1), art. no. 213.
 58. Aravind, C.V., Norhisam, M., Zare, M.R., Aris, I., **Marhaban, M.H.**, Nirei, M., Characterization of an 6/4 double rotor switched reluctance machine using fourier series approach. (2012) *International Review of Electrical Engineering*, 7(3), pp. 4366-4373.
 59. Aravind, C.V., Norhisam, M., Zare, M.R., Aris, I., **Marhaban, M.H.**, Nirei, M., Analytical design of the double rotor switched reluctance motor with optimal pole arc values. (2012) *International Review of Electrical Engineering*, 7(1), pp. 3314-3324.
 60. Sahib, M.A., Kamil, R., **Marhaban, M.H.**, Nonlinear FXLMS algorithm for active noise control systems with saturation nonlinearity. (2012) *IEEJ Transactions on Electrical and Electronic Engineering*, 7(6), pp. 598-606.
 61. Ali, H.I., Noor, S.B.B.M., Bashi, S., **Marhaban, M.H.**, Quantitative Feedback Theory control design using particle swarm optimization method. (2012) *Transactions of the Institute of Measurement and Control*, 34(4), pp. 463-476.
 62. Vaithilingam, C.A., Mison, N., Zare, M.R., Aris, I., **Marhaban, M.H.**, Computation of electromagnetic torque in a double rotor switched reluctance motor using flux tube methods. (2012) *Energies*, 5(10), pp. 4008-4026.
 63. Mahdavi, F.A., Ahmad, S.A., **Marhaban, M.H.**, Akbarzadeh-T, M.R., Surface electromyography feature extraction based on wavelet transform. (2012) *International Journal of Integrated Engineering* 4(3).
 64. Khammar, M.R., **Marhaban, M.H.** Obtaining the Initial Centroids Based on the Most Dense Colonies in the k-Means Algorithm. (2012) *Research Journal of Computer Systems Engineering*, 3(1).
 65. Khammar, M.R., Saied, Y.A., **Marhaban, M.H.**, A Digital Image Watermarking Method in the Discrete Cosine Transformation Domain. (2012) *International Journal on Advanced Science*,

Engineering and Information Technology, 2(1), pp. 96-100.

2011

66. Lutfy, O.F., Mohd Noor, S.B., **Marhaban, M.H.**, Abbas, K.A., Non-linear modelling and control of a conveyor-belt grain dryer utilizing neuro-fuzzy systems. (2011) *Proceedings of the Institution of Mechanical Engineers. Part I: Journal of Systems and Control Engineering*, 225(5), pp. 611-622.
67. Lutfy, O.F., Mohd Noor, S.B., **Marhaban, M.H.**, A simplified adaptive neuro-fuzzy inference system (ANFIS) controller trained by genetic algorithm to control nonlinear multi-input multi-output systems. (2011) *Scientific Research and Essays*, 6(31), pp. 6475-6486.
68. Sahragard, N., Ramli, A.R.B., **Marhaban, M.H.B.**, Mansor, S.B., Automatic Spike detection and correction for outdoor machine vision: Application to tomato. (2011) *Scientific Research and Essays*, 6(31), pp. 6554-6565.
69. Mehrjou, M.R., Mariun, N., **Hamiruce Marhaban, M.**, Mison, N., Rotor fault condition monitoring techniques for squirrel-cage induction machine - A review. (2011) *Mechanical Systems and Signal Processing*, 25(8), pp. 2827-2848.
70. Mison, N., Shin, N.W., Shafie, S., **Marhaban, M.H.**, Mailah, N.F., A mobile ferromagnetic shape detection sensor using a hall sensor array and magnetic imaging. (2011) *Sensors*, 11(11), pp. 10474-10489.
71. Piltan, F., Sulaiman, N., Soltani, S., **Marhaban, M.H.**, Ramli, R., An Adaptive sliding surface slope adjustment in PD sliding mode fuzzy control for robot manipulator. (2011) *International Journal of Control and Automation*, 4 (3), pp. 65-76.
72. Piltan, F., Sulaiman, N., **Marhaban, M.H.**, Nowzary, A., Tohidian, M., Design of FPGA based sliding mode controller for robot manipulator. (2011) *International Journal of Robotic and Automation* 2(3), pp. 183-204.
73. Piltan, F., Zare, A., Sulaiman, N., **Marhaban, M.H.**, Ramli, R., A Model Free Robust Sliding Surface Slope Adjustment in Sliding Mode Control for Robot Manipulator. (2011) *World Applied Science Journal* 12(12), pp. 2330-2336.
74. Piltan, F., Aryanfar, A.H., Sulaiman, N., **Marhaban, M.H.**, Ramli, R., Design Adaptive Fuzzy Robust Controllers for Robot Manipulator. (2011) *World Applied Science Journal* 12(12), pp. 2317-2329.
75. Piltan, F., Gavahian, A., Sulaiman, N., **Marhaban, M.H.**, Ramli, R., Novel Sliding Mode Controller for robot manipulator using FPGA. (2011) *Journal of Advanced Science & Engineering Research* 1(1), pp. 1-22.
76. Piltan, F., Sulaiman, N., Roosta, S., **Marhaban, M.H.**, Ramli, R., Design a new sliding mode adaptive hybrid fuzzy controller. (2011) *Journal of Advanced Science & Engineering Research* 1(1), pp. 115-123.
77. Piltan, F., Sulaiman, **Marhaban, M.H.**, Ramli, R., Design On-Line Tunable Gain Artificial Nonlinear Controller. (2011) *Journal of Advances In Computer Research* 2(4), pp. 75-83.
78. Parvez Iqbal, A.K.M., Aris, I., Mison, N., **Hamiruce Marhaban, M.**, Asrar, W., Design process involved in developing mechanism of linear motor operated multiple spray operations spray gun. (2011) *Australian Journal of Basic and Applied Sciences*, 5(7), pp. 843-850.
79. Ali, H.I., Mohd Noor, S.B., **Marhaban, M.H.**, Bashi, S.M., Design of H-inf controller with tuning of weights using particle swarm optimization method. (2011) *IAENG International Journal of Computer Science*, 38 (2), pp. 103-112.

80. Mahmoodian, H., **Marhaban, M.H.**, Abdulrahim, R., Rosli, R., Saripan, I., Using fuzzy association rule mining in cancer classification. (2011) *Australasian Physical and Engineering Sciences in Medicine*, 34(1), pp. 41-54.
81. Noor, S.B.M., Ali, H.I., **Marhaban, M.H.**, Design of combined robust controller for a pneumatic servo actuator system with uncertainty. (2011) *Scientific Research and Essays*, 6(4), pp. 949-965.
82. Davari, A., **Hamiruce Marhaban, M.**, Bahari Mohd Noor, S., Karimadini, M., Karimodini, A., Parameter estimation of K-distributed sea clutter based on fuzzy inference and Gustafson-Kessel clustering. (2011) *Fuzzy Sets and Systems*, 163(1), pp. 45-53.
83. Hussein, B.N., Sulaiman, N., Raja Ahmad, R.K., **Marhaban, M.H.**, Design of PSO-based fuzzy logic controller for single axis magnetic levitation system. (2011) *IEEJ Transactions on Electrical and Electronic Engineering*, 6 (6), pp. 577-584.
84. Hussein, B.N., Sulaiman, N., Raja Ahmad, R.K., **Marhaban, M.H.**, Ali, H.I., H_infinity controller design to control the single axis magnetic levitation system with parametric uncertainty. (2011) *Journal of Applied Sciences*, 11(1), pp. 66-75.
85. Mharib, A.M., Mashohor, S., Ramli, A.R., **Marhaban, M.H.**, The Impact of Light Compensation on the Performance of Parametric Skin Detection Model. (2011) *International Journal of Signal Processing, Image Processing and Pattern Recognition*, 4(4), pp. 29-38.
86. Ali, H.I., Noor, S.B.M., Bashi, S.M., **Marhaban, M.H.**, Intelligently Tuned Weights Based Robust H4 Controller Design For Pneumatic Servo Actuator System With Parametric Uncertainty. (2011) *Australian Journal of Basic and Applied Sciences*, 5(4), pp. 207-222.

2010

87. Lutfy, O.F., Mohd Noor, S.B., **Marhaban, M.H.**, Abbas, K.A., Utilizing global-best harmony search to train a PID-like ANFIS controller. (2010) *Australian Journal of Basic and Applied Sciences*, 4(12), pp. 6319-6330.
88. Lutfy, O.F., Mohd Noor, S.B., **Marhaban, M.H.**, Abbas, K.A., A Simplified PID-like ANFIS controller trained by genetic algorithm to control nonlinear systems. (2010) *Australian Journal of Basic and Applied Sciences*, 4(12), pp. 6331-6345.
89. Lutfy, O.F., Mohd Noor, S.B., **Marhaban, M.H.**, Abbas, K.A., Utilizing global-best harmony search to train a PID-like ANFIS controller. (2010) *Journal of Applied Sciences Research*, 6 (12), pp. 6319-6330.
90. Muhssin, M.T., Raja Ahmad, R.K., **Marhaban, M.H.**, Bafti, P.S., Development of the propagation paths and deriving observer of feedforward active noise control system by using state-space formulation. (2010) *Australian Journal of Basic and Applied Sciences*, 4(8), pp. 3770-3779.
91. Mahmoud, T.S., Hong, T.S., **Marhaban, M.H.**, Investigation of using neuro-fuzzy and self-tuning fuzzy controller to improve pitch angle response of twin rotor MIMO system. (2010) *Canadian Aeronautics and Space Journal*, 56 (2), pp. 45-52.
92. Ismail, A.H., **Marhaban, M.H.**, Noor, S.B.M., Hashim, A.T., Feature extraction from oil palm in vitro shoot images. (2010) *Journal of Oil Palm Research*, 22 (AUGUST), pp. 765-773.
93. Lutfy, O.F., Mohd Noor, S.B., **Marhaban, M.H.**, Abbas, K.A., Mansor, H., Neuro-fuzzy modeling of a conveyor-belt grain dryer. (2010) *Journal of Food, Agriculture and Environment*, 8 (3-4 PART 1), pp. 128-134.
94. Ali, H.I., Mohd Noor, S.B., Bashi, S.M., **Marhaban, M.H.**, Pso-based robust H_∞ controller

- design using cascade compensation network. (2010) *IEICE Electronics Express*, 7(12), pp. 832-838.
95. Mahmoodian, H., **Marhaban, M.H.**, Rahim, R.A., Rosli, R., Iqbal, M., Gene selection based on a hybrid algorithm. (2010) *Engineering Intelligent Systems*, 18(2), pp. 113-118.
 96. Obaid, Z.A., Sulaiman, N., **Marhaban, M.H.**, Hamidon, M.N., Analysis and performance evaluation of PD-like fuzzy logic controller design based on matlab and FPGA. (2010) *IAENG International Journal of Computer Science*, 37(2).
 97. Ali, H.I., Mohd. Noor, S.B., Bashi, S.M., **Marhaban, M.H.**, Design of H-infinity based robust control algorithms using particle swarm optimization method. (2010) *Mediterranean Journal of Measurement and Control*, 6(2), pp. 70-81.
 98. Esfandiari, E., Mariun, N., **Marhaban, M.H.**, Zakaria, A., Switch-ladder: Reliable and efficient multilevel inverter. (2010) *Electronics Letters*, 46(9), pp. 646-647.
 99. Obaid, Z.A., Sulaiman, N., **Marhaban, M.H.**, Hamidon, M.N., Implementation of multistructure PID-like fuzzy logic controller using FPGA. (2010) *IEICE Electronics Express*, 7(3), pp. 132-137.
 100. Mahmoud, T.S., **Marhaban, M.H.**, Hong, T.S., ANFIS: Self-tuning fuzzy PD controller for twin rotor MIMO system. (2010) *IEEJ Transactions on Electrical and Electronic Engineering*, 5(3), pp. 369-371.
 101. **Marhaban, M.H.**, Kaid, R.S., Mohd Noor, S.B., Automatic estimation of gestational age in ultrasound images based on direct least-squares fitting of ellipse. (2010) *IEEJ Transactions on Electrical and Electronic Engineering*, 5(5), pp. 569-573.
 102. Esfandiari, E., Mariun, N.B., **Marhaban, M.H.**, Zakaria, A., Analyzing the on-state power dissipation in stepped-output diode-clamped multi-level inverter. (2010) *IEICE Transactions on Electronics*, E93-C (12), pp. 1670-1678.
 103. Hasan, A.T., Ismail, N., Hamouda, A.M.S., Aris, I., **Marhaban, M.H.**, Al-Assadi, H.M.A.A., Artificial neural network-based kinematics Jacobian solution for serial manipulator passing through singular configurations. (2010) *Advances in Engineering Software*, 41(2), pp. 359-367.

2009

104. Mahmoodian, H., **Marhaban, M.H.**, Abdul Rahim, R., Rosli, R., Saripan, I., New entropy-based method for gene selection. (2009) *IETE Journal of Research*, 55(4), pp. 162-168.
105. Sulaiman, N., Obaid, Z.A., **Marhaban, M.H.**, Hamidon, M.N., Design and implementation of FPGA-based systems - A review. (2009) *Australian Journal of Basic and Applied Sciences*, 3(4), pp. 3575-3596.
106. Ali, H.I., Mohd Noor, S.B.B., Bashi, S.M., **Marhaban, M.H.**, Mathematical and intelligent modeling of electropneumatic servo actuator systems. (2009) *Australian Journal of Basic and Applied Sciences*, 3(4), pp. 3663-3671.
107. Che Soh, A., Khalid, M., **Marhaban, M.H.**, Yusof, R., Modeling of a multilane-multiple intersection based on queue theory and standard approach techniques. (2009) *Simulation Modelling Practice and Theory*, 17(6), pp. 1081-1105.
108. Lutfy, O.F., Mohd Noor, S.B., **Marhaban, M.H.**, Abbas, K.A., A genetically trained adaptive neuro-fuzzy inference system network utilized as a proportional-integral-derivative-like feedback controller for non-linear systems. (2009) *Proceedings of the Institution of Mechanical Engineers. Part I: Journal of Systems and Control Engineering*, 223(3), pp. 309-321.
109. Hasan, A.T., Hamouda, A.M.S., Ismail, N., Aris, I., **Marhaban, M.H.**, Trajectory tracking for a

- serial robot manipulator passing through singular configurations based on the adaptive kinematics Jacobian method. (2009) *Proceedings of the Institution of Mechanical Engineers. Part I: Journal of Systems and Control Engineering*, 223(3), pp. 393-415.
110. Ali, H.I., Noor, S.B.B.M., Bashi, S.M., **Marhaban, M.H.**, A review of pneumatic actuators (modeling and control). (2009) *Australian Journal of Basic and Applied Sciences*, 3(2), pp. 440-454.
 111. Mahmoud, T.S., Hong, T.S., **Marhaban, M.H.**, Neuro fuzzy and self tuning fuzzy controller to improve pitch and yaw control systems responses of twin rotor MIMO system. (2009) *World Academy of Science, Engineering and Technology*, 38, pp. 465-469.
 112. Azizi, A.R.M., **Hamiruce, M.M.**, Kamil, R.A.R., Dead reckoning of a skid steer mobile robot using fuzzy. (2009) *European Journal of Scientific Research*, 30(2), pp. 305-314.
 113. Rahimzadeh, H., **Marhaban, M.H.**, Kamil, R.M., Ismail, N.B., Color image segmentation based on Bayesian theorem and kernel density estimation. (2009) *European Journal of Scientific Research*, 26(3), pp. 430-436.
 114. Sulaiman, N., Obaid, Z.A., **Marhaban, M.H.**, Hamidon, M.N., FPGA-based fuzzy logic: design and applications-a review. (2009) *International Journal of Engineering and Technology* 1(5), pp. 491.
 115. Mahmoodian, H. **Marhaban, M.H.**, Rahim, R.A., Rosli, R., Saripan, M.I., A Combinatory Algorithm of Univariate and Multivariate Gene Selection. (2009) *Journal of Theoretical & Applied Information Technology* 5(2).

2008

116. Ansarpanahi, S., Noor, S.B.M., **Marhaban, M.H.**, Stability study of model predictive control in presence of undesirable factors. (2008) *Journal of Applied Sciences*, 8(20), pp. 3683-3689.
117. **Marhaban, M.H.**, Jabir, A.N., Noor, S.B.M., Modified minimum-maximum exclusive mean filter. (2008) *IEICE Electronics Express*, 5(20), pp. 865-869.
118. Lutfy, O.F., Mohd Noor, S.B., Abbas, K.A., **Marhaban, M.H.**, Some control strategies in agricultural grain driers: A review. (2008) *Journal of Food, Agriculture and Environment*, 6(2), pp. 74-85.
119. **Marhaban, M.H.**, Estimation of K-Distributed Clutter by using Characteristic Function Method. (2008) *Jurnal Teknologi*, 48(D), pp. 29-40.

2007

120. Sia, L.H., Jamuar, S.S., Sidek, R.M., **Marhaban, M.H.**, Digital-signal-processor-based waveform generator. (2007) *Measurement Science and Technology*, 18(7), art. no. N01, pp. N35-N40.
121. Chong, K.H., Aris, I.B., Sinan, M.A., **Hamiruce, B.M.**, Digital circuit structure design via evolutionary algorithm method. (2007) *Journal of Applied Sciences*, 7(3), pp. 380-385.
122. Mharib, A.M., **Marhaban, H.**, Rahman, A., Pixel-Based Skin Colour Detection Techniques Evaluation. (2007) *Pertanika Journal of Science & Technology*, 15(2), pp. 131-137.

2006

123. Koh, J.S.P., Aris, I.B., Ramachandaramurthy, V.K., Bashi, S.M., **Marhaban, M.H.**, Design, development and performance optimization of a new artificial intelligent controlled multiple-beam optical scanning module. (2006) *Journal of Applied Sciences*, 6(10), pp. 2201-2208.

2004

124. **Marhaban, M.H.**, A parameter estimation method for K-distribution. (2004) *IEICE Transactions on Communications*, E87-B (10), pp. 3158-3162.

Conference Proceedings

1. Ahmad, N., Saripan, M.I., **Marhaban, M.H.**, Rokhani, F.Z., Saad, W.H.M., Determining the ultrasound time of response using FPGA-based electronics read-out. (2017) *IECBES 2016 - IEEE-EMBS Conference on Biomedical Engineering and Sciences*, art. no. 7843554, pp. 769-773. Kuala Lumpur.
2. Ahmed, I., B. Aris, I., **Marhaban, M.H.**, Ishak, A.J., Energy Consumption Analysis Procedure for Robotic Applications in different task motion. (2015) *IOP Conference Series: Materials Science and Engineering*, 99 (1), art. no. 012008. 4th International Conference on Electronic Devices, Systems and Applications 2015 (ICEDSA), Kuala Lumpur.
3. Sutrisno, I., Jami'In, M.A., Hu, J., **Marhaban, M.H.**, Self-organizing quasi-linear ARX RBFN modeling for identification and control of nonlinear systems. (2015) *2015 54th Annual Conference of the Society of Instrument and Control Engineers of Japan, SICE 2015*, art. no. 7285332, pp. 642-647. Hangzhou.
4. Ali, S.Y., **Marhaban, M.H.**, Ahmad, S.A., Ramli, A.R., Wavelet-Based Analysis algorithm for place categorization. (2015) *2015 10th Asian Control Conference: Emerging Control Techniques for a Sustainable World, ASCC 2015*, art. no. 7244437. Kota Kinabalu.
5. Ahmed, I., Aris, I.B., **Marhaban, M.H.**, Ishak, A.J., Power consumption rate analysis of bioloid humanoid robot: Towards energy saving and source development. (2015) *2015 10th Asian Control Conference: Emerging Control Techniques for a Sustainable World, ASCC 2015*, art. no. 7244843. Kota Kinabalu.
6. Behrooz, F., Mariun, N.B., **Hamiruce Marhaban, M.**, Radzi, M.A.M., Ramli, A.R., New design approach to MIMO nonlinear controller for direct expansion air conditioning system in building automation system. (2015) *2015 IEEE 15th International Conference on Environment and Electrical Engineering, IEEEIC 2015 - Conference Proceedings*, art. no. 7165429, pp. 1706-1712. Rome.
7. Alfatni, M.S.M., Shariff, A.R.M., **Marhaban, M.H.**, Shafie, S.B., Saeed, O.M.B., Abdullah, M.Z., Amiruddind, M.D.B., Oil palm fruit maturity classification based on texture feature extraction of fruit thorns and supervised machine learning classifiers using image processing technique. (2014) *Acta Horticulturae*, 1054, pp. 351-357. Muscat.
8. Sutrisno, I., Jami'In, M.A., Hu, J., Mariun, N., **Marhaban, M.H.**, Nonlinear model-predictive control based on quasi-ARX radial-basis function-neural-network. (2014) *Proceedings - Asia Modelling Symposium 2014: 8th Asia International Conference on Mathematical Modelling and Computer Simulation, AMS 2014*, art. no. 7079283, pp. 104-109. Kuala Lumpur.
9. Jami'In, M.A., Sutrisno, I., Hu, J., Mariun, N.B., **Marhaban, M.H.**, An adaptive predictive control based on a quasi-ARX neural network model. (2014) *2014 13th International Conference on Control Automation Robotics and Vision, ICARCV 2014*, art. no. 7064314, pp. 253-258. Singapore.
10. Zolfaghari, S., Noor, S.B.M., Mariun, N., **Marhaban, M.H.**, Mehrjou, M.R., Karami, M., Broken rotor bar detection of induction machine using wavelet packet coefficient-related features. (2014) *2014 IEEE Student Conference on Research and Development, SCOReD 2014*, art. no. 7072977. Penang.
11. Sidek, M.H.M., Hasan, W.Z.W., Kadir, M.Z.A.A., Shafie, S., Radzi, M.A.M., Ahmad, S.A.,

- Marhaban, M.H.**, GPS based portable dual-axis solar tracking system using astronomical equation. (2014) *Conference Proceeding - 2014 IEEE International Conference on Power and Energy, PECon 2014*, art. no. 7062450, pp. 245-249. Kuching.
12. Jahedsaravani, A., **Marhaban, M.**, Massinaei, M., Machine vision based monitoring of a batch flotation process. (2014) *IMPC 2014 - 27th International Mineral Processing Congress*. Santiago.
 13. Suaib, N.M., **Marhaban, M.H.**, Saripan, M.I., Ahmad, S.A., Performance evaluation of feature detection and feature matching for stereo visual odometry using SIFT and SURF. (2014) *IEEE TENSYP 2014 - 2014 IEEE Region 10 Symposium*, art. no. 6863025, pp. 200-203. Kuala Lumpur.
 14. Alfatni, M.S.M., Shariff, A.R.M., Abdullah, M.Z., **Marhaban, M.H.**, Shafie, S.B., Bamiruddin, M.D., Saaed, O.M.B., Oil palm fresh fruit bunch ripeness classification based on rule-based expert system of ROI image processing technique results. (2014) *IOP Conference Series: Earth and Environmental Science*, 20 (1), art. no. 012018. 7th IGRSM International Conference and Exhibition on Remote Sensing and GIS, IGRSM 2014, Kuala Lumpur.
 15. Salih, D.M., Noor, S.B.M., **Marhaban, M.H.**, Ahmad, R.M.K.R., Wavelet network based online sequential extreme learning machine for dynamic system modeling. (2013) *2013 9th Asian Control Conference, ASCC 2013*, art. no. 6606139. Istanbul.
 16. Soh, A.C., **Marhaban, M.H.**, Khalid, M., Yusof, R., A discrete-event traffic simulation model for multilane-multiple intersection. (2013) *2013 9th Asian Control Conference, ASCC 2013*, art. no. 6606228. Istanbul.
 17. Jaafar, H., Soh, A.C., Hasan, W.Z.W., **Marhaban, M.H.**, Rashid, S.A., A wireless flipper robot using interface free controller. (2013) *Proceedings of the 2013 IEEE 8th Conference on Industrial Electronics and Applications, ICIEA 2013*, art. no. 6566638, pp. 1676-1680. Melbourne.
 18. Ishak, A.J., Soh, A.C., **Marhaban, M.H.**, Khamis, S., Ghasab, M.A.J., Automated recognition of *Ficus deltoidea* using ant colony optimization technique. (2013) *Proceedings of the 2013 IEEE 8th Conference on Industrial Electronics and Applications, ICIEA 2013*, art. no. 6566383, pp. 296-300. Melbourne.
 19. Aravind, C.V., Norhisam, M., Firdaus, R.N., Aris, I., **Marhaban, M.H.**, Nirei, M., Analysis on the torque characteristics due to outer rotor displacement in the double rotor switched reluctance machine. (2013) *Proceedings of the International Conference on Power Electronics and Drive Systems*, art. no. 6527121, pp. 773-777. Kitakyushu.
 20. Shayestegan, M., **Marhaban, M.H.**, Mobile robot safe navigation in unknown environment. (2013) *Proceedings - 2012 IEEE International Conference on Control System, Computing and Engineering, ICCSCE 2012*, art. no. 6487113, pp. 44-49. Penang.
 21. Khanaki, R., Radzi, M.A.M., **Marhaban, M.H.**, Comparison of ANN and P&O MPPT methods for PV applications under changing solar irradiation. (2013) *CEAT 2013 - 2013 IEEE Conference on Clean Energy and Technology*, art. no. 6775642, pp. 287-292. Langkawi.
 22. Rabi, H., Saripan, M.I., **Marhaban, M.H.**, Mashohor, S., 3d-based face segmentation using adaptive radius. (2013) *IEEE ICSIPA 2013 - IEEE International Conference on Signal and Image Processing Applications*, art. no. 6708010, pp. 237-240. Melaka.
 23. Shayestegan, M., **Marhaban, M.H.**, The Impact of Light C to mobile robot navigation in unknown environments. (2012) *Communications in Computer and Information Science*, 330 CCIS, pp. 75-93. 1st International Conference on Intelligent Robotics, Automation and Manufacturing, IRAM 2012. Kuala Lumpur.
 24. Mokri, S.S., Saripan, M.I., **Marhaban, M.H.**, Nordin, A.J., Lung segmentation in CT for thoracic PET-CT registration through visual study. (2012) *2012 IEEE-EMBS Conference on Biomedical Engineering and Sciences, IECBES 2012*, art. no. 6498040, pp. 550-554. Langkawi.

25. Aravind, C.V., Norhisam, M., Aris, I., **Marhaban, M.H.**, Nirei, M., Static characteristics of the double rotor switched reluctance motor. (2012) *PECon 2012 - 2012 IEEE International Conference on Power and Energy*, art. no. 6450246, pp. 402-407. Kota Kinabalu.
26. Ahmad, N., Ilis, N.M., Saad, W.H.M., Saripan, M.I., Masoumi, H., Rokhani, F.Z., **Marhaban, M.H.**, Preliminary study of ultrasonic transducer characteristic on the breast surface. (2012) *2012 IEEE-EMBS Conference on Biomedical Engineering and Sciences, IECBES 2012*, art. no. 6498038, pp. 544-549. Langkawi.
27. Habibu, R., Syamsiah, M., **Hamiruce, M.M.**, Iqbal, S.M., UPM-3D facial expression recognition database(UPM-3DFE). (2012) *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 7458 LNAI, pp. 470-479. 12th Pacific Rim International Conference on Artificial Intelligence, PRICAI 2012, 470-479. Kuching.
28. Jafari, S.A., Mashohor, S., Ramli, A.R., **Marhaban, M.H.**, Expert pruning based on genetic algorithm in regression problems. (2012) *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 7198 LNAI (PART 3), pp. 79-88. 12th Pacific Rim International Conference on Artificial Intelligence, PRICAI 2012, 470-479. Kuching.
29. Parvezi, I., Aris, I., Norhisam, M., **Marhaban, M.H.**, Asrar, W., Thrust Analysis and Measurement of a Tubular Linear Permanent Magnet Motor in Spray Application. (2011) *Asia-Pacific Symposium on Applied Electromagnetics and Mechanics(APSAEM10)*.
30. Mariun, N., Mehrjou, M.R., **Marhaban, M.H.**, Misron, N., An experimental study of induction motor current signature analysis techniques for incipient broken rotor bar detection. (2011) *International Conference on Power Engineering, Energy and Electrical Drives*, art. no. 6036457. Malaga.
31. Mohd Zaini, M.H., Ahmad, S.A., **Marhaban, M.H.**, Wan Hasan, W.Z., UPM prosthetic hand system design - Preliminary results. (2011) *Proceedings - 2011 IEEE Student Conference on Research and Development, SCOReD 2011*, art. no. 6148730, pp. 174-177. Cyberjaya.
32. Norhisam, M., Shin, N.W., **Marhaban, M.H.**, Suhaidi, S., Magnetic imaging of ferromagnetic shape with Mobile Hall Sensor Array system. (2011) *2011 IEEE International Conference on Signal and Image Processing Applications, ICSIPA 2011*, art. no. 6144068, pp. 1-6. Kuala Lumpur.
33. Aravind, C.V., Norhisam, M., Aris, I., **Marhaban, M.H.**, Ahmad, D., Nirei, M., Double-Rotor Switched Reluctance Machine (DRSRM): Fundamentals and magnetic circuit analysis. (2011) *Proceedings - 2011 IEEE Student Conference on Research and Development, SCOReD 2011*, art. no. 6148753, pp. 294-299. Cyberjaya.
34. Lutfy, O.F., Mohd Noor, S.B., **Marhaban, M.H.**, A genetically trained simplified ANFIS controller to control nonlinear MIMO systems. (2011) *InECCE 2011 - International Conference on Electrical, Control and Computer Engineering*, art. no. 5953905, pp. 349-354. Kuantan.
35. Sahragard, N., Ramli, A.R.B., **Marhaban, M.H.**, Mansor, S.B., Colour model for outdoor machine vision for tropical regions and its comparison with the CIC model. (2011) *IOP Conference Series: Materials Science and Engineering*, 17 (1), art. no. 012046. Conference on Advanced Materials and Nanotechnology, CAMAN 2009, Kuala Lumpur.
36. Khammar, M.R., Saripan, M.I., **Marhaban, M.H.**, Ishak, A.J., Removal of high density salt and pepper noise from image and video based on optimal decision based algorithm. (2011) *2014 2nd International Conference on Electronic Design, ICED 2014*, art. no. 7015796, pp. 187-191. Penang.
37. Yunusa Ali, A., **Marhaban, M.H.**, Ramli, A.R., Ahmad, S.A., Rabiun, H., Map Building for Cluttered Environment. (2014) *Proc. of the Second Intl. Conf. on Advances in Computer and Information*

Technology - ACIT 2013. Kuala Lumpur.

38. Khammar, M.R., Saripan, M.I., **Marhaban, M.H.**, Ishak, A.J., Zolfaghari, F., Restoration of missing data in old archives based on genetic algorithm. (2011) 2014 2nd International Conference on Electronic Design, ICED 2014, art. no. 7015840, pp. 409-414. Penang.
39. Jusoh, R.M., Hamzah, N., **Hamiruce Marhaban, M.**, Alias, N.M.A., Skin detection based on thresholding in RGB and hue component. (2010) ISIEA 2010 - 2010 IEEE Symposium on Industrial Electronics and Applications, art. no. 5679412, pp. 515-517. Penang.
40. Mehrjou, M.R., Mariun, N., **Marhaban, M.H.**, Misron, N., Fourier analysis of motor current for diagnosis of broken bars in squirrel-cage induction machines. (2010) *Proceeding, 2010 IEEE Student Conference on Research and Development - Engineering: Innovation and Beyond, SCOReD 2010*, art. no. 5704057, pp. 475-478. Kuala Lumpur.
41. Mehrjou, M.R., Mariun, N., **Marhaban, M.H.**, Misron, N., Evaluation of Fourier and wavelet analysis for efficient recognition of broken rotor bar in squirrel-cage induction machine. (2010) *PECon2010 - 2010 IEEE International Conference on Power and Energy*, art. no. 5697678, pp. 740-743. Kuala Lumpur.
42. Ismail, A.H., **Marhaban, M.H.**, and Hashim, A.T. Towards Mechanization of Oil Palm Tissue Culture: A Machine Vision Approach. (2010) *Proceeding of Malaysian Technical Universities Conference on Engineering and Technology (MUCET)*. Melaka.
43. Ismail, A.H., Ramli, H.R., Ahmad, M.H., **Marhaban, M.H.**, Vision-based system for line following mobile robot. (2009) *2009 IEEE Symposium on Industrial Electronics and Applications, ISIEA 2009 - Proceedings, 2*, art. no. 5356366, pp. 642-645. Kuala Lumpur.
44. Ismail, A.H., **Marhaban, M.H.**, A simple approach to determine the best threshold value for automatic image thresholding. (2009) *ICSIPA09 - 2009 IEEE International Conference on Signal and Image Processing Applications, Conference Proceedings*, art. no. 5478623, pp. 162-166. Kuala Lumpur.
45. Esfandiari, E., Mariun, N., **Marhaban, M.H.**, Zakaria, A., On-state power dissipation analysis in cascaded H-bridge staircase multilevel inverters, *Theoretical Engineering (ISTET), 2009 XV International Symposium*. Lubeck.
46. Isa, M.M., Ibrahim, N., Shamsudin, R., **Marhaban, M.H.**, Sugar content in watermelon juice based on dielectric properties at 10.45GHz. (2009) *SCOReD2009 - Proceedings of 2009 IEEE Student Conference on Research and Development*, art. no. 5442945, pp. 529-532. Serdang.
47. Soh, A.C., Khalid, M., **Marhaban, M.H.**, Yusuf, R., Improving fuzzy traffic controller for multilane-multiple intersection. (2009) *2009 IEEE International Conference on Control and Automation, ICCA 2009*, art. no. 5410573, pp. 1819-1824. Christchurch.
48. Esfandiari, E., Mariun, N.B., **Marhaban, M.H.**, Zakaria, A., Fundamental of an efficient and reliable staircase multilevel inverter for photovoltaic application. (2009) *1st IEEE-PES/IAS Conference on Sustainable Alternative Energy, SAE 2009 - Proceedings*, art. no. 5534865. Valencia.
49. Ali, H.I., Noor, S.B.M., Bashi, S.M., **Marhaban, M.H.**, Robust QFT controller design for positioning a pneumatic servo actuator, *Proc. of student conference on research and development*, Johor.
50. Mahmoud, T.Sh., **Marhaban, M.H.**, Hong, T.S., Ng, S., ANFIS controller with fuzzy subtractive clustering method to reduce coupling effects in Twin Rotor MIMO system (TRMS) with less memory and time usage. (2009) *Proceedings - International Conference on Advanced Computer Control, ICACC 2009*, art. no. 4777302, pp. 19-23. Singapore.
51. Ali, H.I., Noor, S.B.M., Bashi, S.M., **Marhaban, M.H.**, Robust controller design for positioning a

- pneumatic servo actuator. (2009) *Proceedings of the Second International Conference on Control, Instrumentation and Mechatronic Engineering (CIM09)*. Malacca.
52. Saripan, M.I., Hashim, S., Mashohor, S., Adnan, W.A.W., **Marhaban, M.H.**, Characteristics of multihole collimator gamma camera simulation modeled using MCNP5. (2008) *AIP Conference Proceedings, 1017*, pp. 205-209. *National Physics Conference 2007: Current Issues of Physics in Malaysia, PERFIK 2007*. Kuala Terengganu.
 53. Karimadini, M., Lin, H., **Marhaban, M.H.**, Noor, S.B.M., Aris, I., Davari, A., Ghazali, A.B., Universal controller for monotone systems inspired from fuzzy logic control. (2008) *Conference Proceedings - IEEE International Conference on Systems, Man and Cybernetics*, art. no. 4811405, pp. 962-967. Singapore.
 54. Morshidi, M.A., **Marhaban, M.H.**, Jantan, A., Color segmentation using multi layer neural network and the HSV color space. (2008) *Proceedings of the International Conference on Computer and Communication Engineering 2008, ICCCE08: Global Links for Human Development*, art. no. 4580822, pp. 1335-1339. Kuala Lumpur.
 55. Nasr, A.M., Ramli, A.R., **Hamiruce, M.**, Subramaniam, S.K., Audio-visual speech processing framework for lip reading. (2008) *2008 3rd International Conference on Information and Communication Technologies: From Theory to Applications, ICTTA*, art. no. 4530033. Damascus.
 56. Baha'a Al-Deen, A.A., Ramli, A.R., **Marhaban, M.H.**, Mashohor, S., Improving invisibility of blind video watermarking scheme. (2007) *2007 5th Student Conference on Research and Development, SCORED*, art. no. 4451358. Serdang.
 57. Soh, A.C., **Marhaban, M.H.**, Khalid, M., Yusof, R., Modelling and Optimisation of a Traffic Intersection Based on Queue Theory and Markov Decision Control Methods. (2007) *Proceedings - 1st Asia International Conference on Modelling and Simulation: Asia Modelling Symposium 2007, AMS 2007*, art. no. 4148707, pp. 478-483. Phuket.
 58. Huoy, S.L., Jamuar, S.S., Sidek, R.M., **Marhaban, M.H.**, Digital signal processing based waveform generator for flickermeter calibration test system. (2006) *SCORED 2006 - Proceedings of 2006 4th Student Conference on Research and Development "Towards Enhancing Research Excellence in the Region"*, art. no. 4339319, pp. 108-111. Shah Alam.
 59. **Marhaban, M.H.**, Kittler, J., Application of Characteristic Function Method in Target Detection. (2003) *Proceedings of the British Machine Conference*, pp. 31.1-31.8. Norwich.

Books

- Mehrjou, M.R., Mariun, N., Karami, M., Noor, S.B.M., Zolfaghari, S., Misron, N., Ab. Kadir, M.Z.A., Mohd. Radzi, M.A., **Marhaban, M.H.**, "Wavelet-Based Analysis of MCSA for Fault Detection in Electrical Machine," in *Wavelet Transform and Some of Its Real-World Applications*, Intech. 2015.
- Mohd Saleh Jaafar, Noraini Idris, Che Hassan Che Haron, Ruzairi Abdul Rahim, **Mohammad Hamiruce Marhaban**, "Bridging the Grand Challenge," in *Impact of Malaysian Research Universities as the Engine of Growth for Nation Building*. Penerbit USIM. 2014.
- Lutfy, O.F., Noor, S.B.M., **Marhaban, M.H.**, *Design of an Intelligent Control System for Conveyor-Belt Grain Dryers: An Application of Soft Computing Techniques in Grain Drying Systems*, LAP LAMBERT Academic Publishing, 2012.
- Mahmoud, T., Hong, T., **Marhaban, M.H.**, *An Improved Fuzzy PD-Like Controller for MIMO Twin Rotor System: Rules Reduction and Performance Improvement*. LAP Lambert Academic Publishing, 2012.
- Mohammad Hamiruce Marhaban**, "Teras Daya Usaha dan Inovasi," in *Pembangunan Pelajar, Memperkasa Kokurikulum Institusi Pengajian Tinggi*, 2009, ISBN 9789673441198.

Research Grants

No	Project Title	Amount (RM)	Year	Source of Fund
1.	Pentaksiran Terhadap Impak Program Research Acculturation Collaborative Effort (RACE)*	150,000	2017-2018	KPT
2.	Kajian dan Pembangunan Sistem Penarafan Bersepadu di Universiti dan Kolej Universiti (SETARA)	3,600,000	2017	KPT
3.	Peningkatan Imej Organisasi melalui Hiasan Elemen Dekorasi dan Seni	20,000	2017	GP-IPS
4.	Lower Exoskeleton Robot for Paraplegic Rehabilitation*	20,000	2017-2019	GP-IPS
5.	Kajian Halatuju dan Impak Sistem MyGrants	721,500	2016-2017	KPT
6.	Scale Invariant Center-Surround Extremas Detectors for The Application of Feature-Based Visual Odometry*	132,000	2014-2016	ScienceFund
7.	Establishment of Correlation Algorithms in Improving Image Quality for Nuclear Medical Imaging System	139,000	2014-2016	FRGS
8.	Automatic Classification of Alzheimer Disease (AD) based on PET/CT Brain Imaging	199,200	2013-2015	GP-IBT
9.	Intelligent Characterization And Evaluation Of Reused Cooking Oil Using Pattern Recognition Techniques	30,000	2012-2014	RUGS
10.	Position Accuracy Improvement in Regulation Structure of Servo Drive*	80,000	2011-2013	Matching Grant-Perodua
11.	Traffic Noise Reduction Inside Residential Housing Unit using Active Noise Control System	52,000	2010-2012	RUGS
12.	Machine Learning Approach for Breast Cancer Relapse Time Prediction*	65,000	2010-2012	RUGS
13.	Intelligent Fault Detection of Induction Machine	87,000	2009-2011	RUGS
14.	Reliable and Efficient Multilevel Power Inverter for Photovoltaic Application	87,000	2009-2011	RUGS
15.	Design and Develop a Detector for Measuring Maturity Indices of Watermelon	30,000	2008-2010	RUGS
16.	A Genetically Trained Fuzzy Neural Controller for Grain Driers	30,000	2008-2010	RUGS
17.	Kinematics Analysis of Serial Robot Manipulators, Analytical and Experimental Artificial Intelligence Approach	70,700	2007-2009	FRGS
18.	Weather Elements Detection and Removal in Robotic Vision*	217,000	2006-2008	ScienceFund
19.	Intelligent Predictive Control of an Autonomous Mobile Robot Navigation*	136,000	2006-2008	ScienceFund
20.	Crop Scouting Mobile Robot for Field Robot event, Germany 2006*	50,000	2006	UPM
21.	Design of Manual and Autonomous Mobile Robot for ROBOCON 2006*	200,000	2006	UPM

*As Principle Investigator

Awards/Recognition

No	Name of awards	Award Authority	Award Type	Year
1.	Excellence in Service Awards	UPM	University	2013
2.	Microchip Special Award, in MUROC 2011	UNIMAP	National	2011
3.	Champion - Rope Climbing Robot Competition in MUROC 2011	UNIMAP	National	2011
4.	3st Runner-up - Paintball Robot Competition in MUROC 2011	UNIMAP	National	2011
5.	Champion - Fire Fighting Competition in MUROC 2011	UNIMAP	National	2011
6.	Best Presenter Award - Fire Fighting Robot in MUROC 2011	UNIMAP	National	2011
7.	Best Presenter Award - Rope Climbing in MUROC 2011	UNIMAP	National	2011
8.	Excellence in Teaching Awards	Engineering, UPM	Faculty	2010
9.	Excellence in Service Awards	UPM	University	2010
10.	Industry Award - in MUROC 2010	UNIMAP	National	2010
11.	Champion - Paintball Robot Competition in MUROC 2010	UNIMAP	National	2010
12.	Champion - Rope Climbing Competition in MUROC 2010	UNIMAP	National	2010
13.	1st Runner-up - Fire Fighting Competition in MUROC 2010	UNIMAP	National	2010
14.	Best Design - Paintball Robot in MUROC 2010	UNIMAP	National	2010
15.	2 nd Runner-up, ROBOGAMEZ 2010	UNITEN	National	2010
16.	Best Design Awards, ROBOCON KL 2009	SIRIM-KPT	National	2009
17.	1st Runner-up, ROBOGAMEZ 2009	UNITEN	National	2009
18.	Best technology and design, ROBOGAMEZ 2008	UNITEN	National	2008
19.	Champion, ROBOGAMEZ 2008	UNITEN	National	2008
20.	Silver Medal, Pameran Rekacipta, Penyelidikan dan Inovasi	UPM	University	2008
21.	2 nd Runner-up, ROBOCON KL 2008	SIRIM-KPT	National	2008
22.	Excellence in Teaching Awards	Engineering, UPM	Faculty	2006
23.	Silver Medal, Pameran Rekacipta, Penyelidikan dan Inovasi	UPM	University	2006
24.	Best Freestyle Awards, Field Robot Event	Stuttgart, Germany	International	2006
25.	Dean's Special Awards for UPM ROBOCON 2005 Team	Engineering, UPM	Faculty	2005
26.	Best Design Award, ROBOCON KL 2005	SIRIM-KPT	National	2005
27.	Best Idea Award, ROBOCON KL 2005	SIRIM-KPT	National	2005
28.	2 nd Runner-up, ROBOCON KL 2005	SIRIM-KPT	National	2005
29.	Excellence in Service Awards	UPM	University	2004

Consultation

No	Year	Title	Authority	Amount
1.	2012	MDEC Technical evaluation consultant	MDEC	RM 12,000
2.	2010	Development of Pan-Tilt system for Military standard CCTV Application	Commteq Sdn. Bhd.	RM 8,000

3.	2009	Kajian Keperluan Bekalan Elektrik di TPKM Ulu Yam	UKM Perunding Kejuruteraan dan Arkitek Sdn. Bhd.	RM 18,000
4.	2008	Development of NOSS for Industrial Instrumentation Control	International Islamic Research Academy Sdn Bhd	RM 5,000
5.	2006	Development of National Occupational Skills Standard for Process Control	Ministry of Human Resource	RM 2,250

Professional Services

No	Title	Authority
1.	Internal examiner for PhD/MSc thesis	Universiti Putra Malaysia (34 PhD, 45 MSc)
2.	Chairman of thesis examination	Universiti Putra Malaysia (9 PhD, 9 MSc)
3.	External examiner for PhD/MSc thesis	<ul style="list-style-type: none"> • Universiti Tenaga Nasional (1 PhD, 2 MSc) • International Islamic University (1 PhD 3 MSc) • Universiti Teknologi Mara (1 PhD 3 MSc) • Universiti Sains Malaysia (1 MSc) • Universiti Kebangsaan Malaysia (1 PhD 2 MSc) • Universiti Malaysia Sarawak (1 PhD 1MSc) • Universiti Malaysia Sabah (1 MSc) • Universiti Teknologi Petronas (1 PhD 2 MSc) • College of Technology, Coimbatore, India (1 PhD)
4.	Journal Reviewer (most recent)	<ul style="list-style-type: none"> • Jurnal Teknologi • Pertanika Journal of Science and Technology • ASM Science Journal • Arabian Journal for Science and Engineering • Journal of the Institution of Engineers (India): Series B • Journal of the Institution of Engineers, Malaysia • Engineering Applications of Artificial Intelligence • International Journal of Computational Vision and Robotics • World Applied Science Journal • Robotica • International Journal of Speech Technology
5.	Conference Proceedings reviewer (most recent)	<ul style="list-style-type: none"> • 5th International Conference on Intelligent and Advanced Systems, 2014 • 2014 IEEE Innovative Smart Grid Technologies Conference - Asia (ISGT ASIA) • 2014 IEEE Colloquium on Humanities, Science & Engineering Research (CHUSER 2014) • 2013 IEEE International Conference on Clean Energy & Technologies (CEAT 2013) • 2013 IEEE Symposium on Business, Engineering & Industrial Applications (ISBEIA 2013)
6.	Malaysian Qualifications Agency (MQA) panel (Most Recent)	<ul style="list-style-type: none"> • Kolej Komuniti Arau • Kolej Komuniti Bayan Baru • Linton University College • Universiti Industri Selangor • UniKL British Malaysian Institute • Management & Science University • Politeknik Sultan Salahuddin Abdul Aziz Shah • Universiti Malaysia Pahang • Institut Teknologi Pertama

No	Title	Authority
		<ul style="list-style-type: none"> • Kolej Negeri • UniKL Malaysian Spanish Institute
7.	External Examiners / Assessor for Academic Program	<ul style="list-style-type: none"> • Politeknik Port Dickson • Universiti Malaya
8.	Keynote Speaker	IEEE Scored
9.	Panel, Task force to revise MyRA I & II, 2014	Ministry of Education, Malaysia
10.	Jury for National Intellectual Property Award 2013 (patent category)	Intellectual Property Corporation of Malaysia
11.	Chairman of technical committee, Structured Industrial Training in IC Design, 2009	Ministry of Higher Education
12.	Technical committee for Tender evaluation on MOHE Industrial Training in IC Design	Ministry of Higher Education
13.	Guest Speaker, Elsevier's Global Sales Kick Off 2013, Kuala Lumpur	Elsevier
14.	Guest Speaker at the SciVal Research Forum, Thailand. 2014	Elsevier

Student Supervision

PhD (Main Supervisor)

No.	Name	Title	Status
1.	Sawsan Kamel Shariah (GS15399)	Rain Streak Removal Using Emboss and Spatial-Temporal Depth Filtering Technique In Video Keyframes	Graduated
2.	Sayed Hamid Mahmoodian (GS19182)	Prediction Of Breast Cancer Relapse Time In Continuous Scale Based On Type-2 Takagi-Sugeno-Kang Fuzzy Model	Graduated
3.	Maher Faik Esmale (GS27158)	Thyroid Volume Estimation From Ultrasound Extended Field Of View Images Using Star Algorithm With Greens' Theorem	Graduated
4.	Mohammad Reza Khammar (GS29096)	Artifact Suppression From Degraded Film And Video Archives	Graduated
5.	Yunusa Ali Said (GS29824)	Map Building Using Image Features Techniques	Graduated
6.	Ahmed Hassan Mohammed (GS32088)	Collision Prediction based Genetic Network Programming Reinforcement Learning for Mobile Robot Adaptive Navigation in Unknown Dynamic Environment	Graduated
7.	Ali Jahed Saravani (GS32354)	Automatic Control of Flotation Process Using a Machine Vision Based Measurement System	Graduated
8.	Mohammad O. A. Aqel (GS35371)	Development of Monocular Visual Odometry System Using Template Matching in Low-Textured Environment	Graduated
9.	Saif F Mahmood (GS35200)	Modified Extreme Learning Machine for Classification and Regression	Ongoing
10.	Mohd Razali Mohamad Sapiee (GS43759)	A New Approach to Lower Extremity Exoskeleton Control Through the Hybrid Control Application	Ongoing
11.	Abd Razak Ahmad (GS45130)	Robotic Assistance for Rehabilitation Process of Disabled	Ongoing
12.	Nur Zulaikhah Nadzri (GS47007)	Salient Object Detection and Segmentation Based In Sparsity Distribution	Ongoing

MSc with thesis (Main Supervisor)

No.	Name	Title	Status
1.	Komeil Hadidi (GS21777)	Improvement Of Ear Recognition Rate Using Color Scale Invariant Feature Transform	Graduated
2.	Abdul Halim bin Mohd Hanafi (GS12636)	Design And Development Of A Micro-Based Fuzzy Logic Temperature Controller For Portable Cooler	Graduated
3.	Mohd Amrallah bin Mustafa (GS13663)	Hand Gesture Recognition Using Artificial Neural Networks	Graduated
4.	Tengku Mohd Afendi bin Zulcaffle (GS13695)	Development Of An Automated Technique For Reconstructing Jawi Characters In Historical Documents	Graduated
5.	Mohammadreza Abdollahi (GS20918)	Design And Evaluation Of Adaptive Fuzzy Speed Control Of Mobile Robot	Graduated
6.	Rizal b. Mat Jusoh (GS14539)	Development Of A Vision-Based Mobile Robot Navigation System For Golf Ball Detection And Location	Graduated
7.	Rakeeb Saeed Kaid (GS15522)	Estimation Of Gestational Age From Ultrasound Images Using Direct Least Squares Fitting Of Ellipses	Graduated
8.	Atefeh Davari (GS15707)	Parameter Estimation Of K-Distributed Clutter Based On Fuzzy Inference And Gustafson-Kessel Clustering	Graduated
9.	Mohd Azizi bin Abdul Rahman (GS17993)	Design Of A Fuzzy Logic Controller For Skid Steer Mobile Robot	Graduated
10.	Hamid Rahimizadeh (GS18237)	Color Image Segmentation Based On Bayesian Theorem For Mobile Robot Navigation	Graduated
11.	Hafiz Rashidi bin Harun @ Ramli (GS19353)	A Computer Vision Approach For Detecting And Tracking Of Driver's Gaze	Graduated
12.	Abdul Sattar bin Din (GS28041)	Non-Probabilistic Approach To Cooperative Position Tracking In Large Swarm Of Simple Mobile Robots Using Triangular Cross-Observation	Graduated
13.	Mohammad Reza Shoorangiz (GS28927)	Adaptive Complex Neuro-Fuzzy Inference System For Non Linear Modeling And Time Series Prediction	Graduated
14.	Malik Arman bin Morshidi (GS16086)	Penggunaan Teknik Rangkaian Neural Berbilang Lapisan Untuk Mengecam Dan Menentukan Lokasi Dasar Pokok Jagung Muda	Graduated
15.	Abdul Halim bin Ismail (GS20418)	Automated Approach For Oil Palm In Vitro Shoot Classification	Graduated
16.	Mohsen Shayestegan (GS28599)	Fuzzy Logic Controller For Robot Navigation In Environment With Obstacles And Dead-End Traps	Graduated
17.	Mohammad Karimadini (GS15000)	Crisp Fuzzy-Like Controllers Formula Based And Vectorized Approaches	Graduated
18.	Amjad Najim Jabir (GS15562)	Development Of Iterative Minimum-Maximum Filter For Reducing Impulse Noise From Highly Corrupted Images	Graduated
19.	Foo Yeun Yung (GS25040)	Laser Range Finder Features Extraction Based On Hough Transform Technique	Graduated
20.	Hamdan Yahya Ahmed Al-Ruhaimi (GS27013)	Development Of Sorting System For Oil Palm In Vitro Shoots Using Machine Vision Approach	Graduated
21.	Babahamou Hamza (GS28294)	Design Of An Assisted-Robotic Arm For Thyroid Cancer Diagnosis	Ongoing

PhD/MSc Supervision as a member of Supervisory Committee

No.	Programme	Matric No.	Name	Status
1.	PhD	GS15813	Seyed Ali Miratashi Yazdi	Graduated

No.	Programme	Matric No.	Name	Status
2.	PhD	GS12999	A.K.M. Parvez Iqbal	Graduated
3.	PhD	GS13631	Chong Kok Hen	Graduated
4.	PhD	GS17430	Nasrolah Sahragard	Graduated
5.	PhD	GS21863	Seyed Ali Jafari Kenari	Graduated
6.	PhD	GS13664	Johnny Koh Siaw Paw	Graduated
7.	PhD	GS18301	Omar F. Lutfy	Graduated
8.	PhD	GS19884	Mohammad Jalali Varnamkhasti	Graduated
9.	PhD	GS20788	Mohd Rozni bin Md. Yusof	Graduated
10.	PhD	GS22356	Chockalingam Aravind Vaithilingam	Graduated
11.	PhD	GS17149	Ali T. Hasan	Graduated
12.	PhD	GS25285	Habibu Rabi	Graduated
13.	PhD	GS20921	Ehsan Esfandiari	Graduated
14.	PhD	GS23847	Mouayad Abdulredha Sahib	Graduated
15.	PhD	GS28611	Ir. Mohammad Effendy bin Yaacob	Graduated
16.	PhD	GS20501	Hazem I. Ali	Graduated
17.	PhD	GS22758	Meftah Salem M Alfatni	Graduated
18.	PhD	GS28248	Dhiadeen - M - Salih	Ongoing
19.	PhD	GS26518	Norhayati binti Ahmad	Ongoing
20.	PhD	GS30921	Siti Salasiah binti Mokri	Ongoing
21.	PhD	GS31856	Hamidreza Mohafez	Ongoing
22.	PhD	GS33403	Pegah Khosropanah	Ongoing
23.	PhD	GS33448	Farhad Goodarzi	Ongoing
24.	PhD	GS34454	Farinaz Behrooz	Ongoing
25.	Master	GS11970	Wan Mohd Khairudin bin Wan Abdul Malik	Graduated
26.	Master	GS11659	Shashikumar a/l Krishnan	Graduated
27.	Master	GS13121	Ilanur Muhaini binti Mohd Noor	Graduated
28.	Master	GS10788	Khairul Hamzani b. Hamid	Graduated
29.	Master	GS11888	Mohd Razali bin Daud	Graduated
30.	Master	GS15044	Seyed Ali Zamani	Graduated
31.	Master	GS19170	Mohammad Rezazadeh Mehrjou	Graduated
32.	Master	GS21384	Sahar Sabbaghi Mahmouei	Graduated
33.	Master	GS22196	Farzin Piltan	Graduated
34.	Master	GS28240	Farzaneh Akhavan Mahdavi	Graduated
35.	Master	GS10629	Muhammad Nazir bin Mohammed Khalid	Graduated
36.	Master	GS14251	Sia Lih Huoy	Graduated
37.	Master	GS20007	Hadi Galavi	Graduated
38.	Master	GS27463	Muhmmmed Hussain Abdul Sahab	Graduated
39.	Master	GS15542	Ahmed Abd. Baha'a Aldeen	Graduated
40.	Master	GS17257	Shadi Ansar Panahi	Graduated
41.	Master	GS18329	Thair Sh. Mahmoud	Graduated
42.	Master	GS20058	Fatemeh Mekanik	Graduated
43.	Master	GS27111	Mohammad Hossein Taghvae	Graduated
44.	Master	GS13563	Hasmah binti Mansor	Graduated
45.	Master	GS19655	Mazin T. Muhssin	Graduated
46.	Master	GS25909	Ng Wei Shin	Graduated
47.	Master	GS31752	Mohammad Ali Jan Ghasab	Graduated
48.	Master	GS21712	Zeyad Assi Obaid	Graduated

No.	Programme	Matric No.	Name	Status
49.	Master	GS23060	Basheer Noaman Hussein	Graduated
50.	Master	GS29822	Razieh Khanaki	Ongoing
51.	Master	GS28012	Mohd Hanif bin Mohamad Zaini	Ongoing
52.	Master	GS28019	Mohd Hasimi bin Mohd Sidek	Ongoing
53.	Master	GS32840	Hessam Jahani Fariman	Ongoing
54.	Master	GS32862	Reza Arezoumand	Ongoing
55.	Master	GS33341	Sepehr Ghasemi Dehkordi	Ongoing
56.	Master	GS34284	Adel Amiri Bahmanshiri	Ongoing
57.	Master	GS35443	Ahmad Akmal bin Ahmad Nadzri	Ongoing

Teaching

No.	Course	Semester
1.	KEE3901 Electrical & Electronic Laboratory	Mei-03/04
2.	KEE4410 Computer Control System	Mei-03/04, 1-04/05, 1-05/06 1-06/07, 1-07/08, 1-08/09
3.	KEE3118 Signal Processing	Nov-03/04, 2-04/05
4.	KEE5415 / EEE5403 Pattern Recognition	1-04/05, 1-05/06, 1-06/07, 2-07/08, 1-09/10, 2-10/11, 1-12/13, 1-13/14
5.	KEE5413 Fuzzy Logic Modelling and Control	2-04/05
6.	KEE4407/EEE4407 Multivariable Control System	2-05/06, 1-10/11
7.	KEE4412 Intelligent Control System	2-06/07, 2-07/08, 2-08/09
8.	ECC3002 Mathematics II	1-09/10, 1-10/11
9.	EEE3401 Control System	2-11/12, 2-12/13, 2-13/14
10.	EEE4404 Intelligent Control System	1-16/17, 1-17/18