

Academic Profile



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2. Malaysia Graduate Engineer Registration No. : 72324A (Since July 19, 2011)
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University Malaysia Perlis,
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8. Academic qualification:

Degree	Specialisation (if any)	Year degree is granted	Institution that granted the degree
Ph.D	Mechatronics	2009	Kagawa University, Japan
B. Eng	Electrical & Electronic	1999	Yamaguchi University, Japan

Selected Publications

JOURNALS

2012	
1.	Khairunizam Wan , Azri Abdul Aziz, Shahrman AB, Siti Khadijah Zaaba, Zuwairie Ibrahim, Zulkifli Yusoff, Ismail Ibrahim, Jameel Abdulla Ahmed Mukred, and Norrima Mokhtar (2012): "Probability Distribution of Arm Trajectory for Motion Estimation and Gesture Recognition," <i>Advanced Science Letters</i> , pp. 534-539.
2.	Jameel A. A. Mukred, Zuwairie Ibrahim, Ismail Ibrahim, Asrul Adam, Khairunizam Wan , Zulkifli Md. Yusof, and N. Mokhtar (2012): "A Binary Particle Swarm Optimization Approach to Optimize Assembly Sequence Planning," <i>Advanced Science Letters</i> , Vol. 13, pp. 732-738. .
3.	Ismail Ibrahim, Zuwairie Ibrahim, Kamal Khalil, Musa Mohd Mokji, Syed Abdul Rahman Syed Abu Bakar, N. Mokhtar, and Khairunizam Wan (2012): "An Improved Defect Classification Algorithm for Six Printing Defects and its Implementation on Real Printed Circuit Board Images," <i>International Journal of Innovative Computing, Information and Control</i> , Vol. 8, No. 5, pp. 3239- 3250.
4.	Farhaana Yakop, Zuwairie Ibrahim, Amar Faiz Zainal Abidin, Zulkifli Md. Yusof, Mohd Saberi Mohamad, Khairunizam Wan and Junzo Watada (2012): "AN ANT COLONY SYSTEM FOR SOLVING DNA SEQUENCE DESIGN PROBLEM IN DNA COMPUTING," <i>International Journal of Innovative Computing, Information and Control</i> , IJICIC-IMIP0205, ACCEPTED.
5.	M. Hariharan, J. Saraswathy, R. Sindhu, Khairunizam Wan and Sazali Yaacob (2012): "Infant cry classification to identify asphyxia using time-frequency analysis and radial basis neural networks," <i>Expert Systems with Applications</i> , Volume 39, Issue 10, pp. 9515–9523.
6.	Nazrul H Adnan, Khairunizam Wan and Shahrman Ab (2012): "Accurate Measurement of the Force Sensor for Intermediate and Proximal Phalanges of Index Finger," <i>International Journal of Computer Applications</i> , Vol. 45, No. 15, pp. 59-65.. ISBN : 973-93-80868-50-6
7.	Azri A. AZIZ, Khairunizam WAN , SK Zaaba, Shahrman A.B, Nazrul H. ADNAN, Rudzuan M. Nor, M. Nasir Ayob, A.H. Ismail, M. Fadhil Ramly and Ismail I (2012): "Development of Gesture Database for an Adaptive Gesture Recognition System," <i>International Journal of Electrical & Computer Sciences IJECS / IJENS</i> , Vol. 12, No. 4, SSN: 2077-1231.
8.	Nazrul H. ADNAN, Khairunizam WAN , Shahrman A.B., M. Hazwan ALI , M. Nasir Ayob and Azri A. AZIZ (2012): "Development of Low Cost "GloveMAP" Based on Fingertip Bending Tracking Techniques for Virtual Interaction," <i>International Journal of Mechanical & Mechatronics Engineering IJMME / IJENS</i> , Vol. 12, No. 4, ISSN: 2077-124X (Online).

2009	
1.	Khairunizam Wan and Hideyuki Sawada (2009): "Gesture Recognition based on the Probability Distribution of Arm Trajectories," <i>SICE Journal of Control, Measurement and System Integration (JCMSI)</i> , Vol.2, No.5, pp.263-p.270.

12. National & international conferences attended in the past 3 years

INTERNATIONAL CONFERENCES PROCEEDING

2012	
1.	Khairunizam Wan , Nazrul Hamizi Bin Adnan, Shahrman AB, Siti Khadijah Za'ba, Mohd Azri Abd Aziz, and Zulkifli Md. Yusof (2012): "Gesture Recognition Based On Hand Postures And Trajectories By Using Dataglove: A Fuzzy Probability Approach – A Review," In the Proceeding of <i>International Conference on Man Machine System (ICOMMS 2012)</i> . (CD ROM)
2.	Mohd Azri ABD AZIZ, Khairunizam WAN , Shahrman A.B, Siti Khadijah ZA'ABA, Abdul Halim ISMAIL and Zuwairie IBRAHIM (2012): "Development of Gesture Database for an Adaptive Gesture Recognition System," In the Proceeding of <i>International Conference on Man Machine System (ICOMMS 2012)</i> . (CD ROM)
3.	Shahrman AB, Muhammad Muadz, Khairunizam WAN , Zunaidi IB, Abd Syiddiq Mazelan, Muhammad Zulhilmi Abd Samad (2012): "Intelligent Irrigation and Flood Management System using Renewable Hybrid powered Energy and Wireless Control System," In the Proceeding of <i>International Conference on Applications and Design in Mechanical Engineering (ICADME 2012)</i> . (CD ROM)
4.	Shahrman AB, M.N. Rahman Y, Khairunizam WAN , Zunaidi IB and Siti Khadijah Za'ba (2012): "Intelligent Irrigation and Flood Management System using Renewable Hybrid powered Energy and Wireless Control System," In the Proceeding of <i>International Conference on Biomedical Engineering (ICoBE)</i> . (CD ROM)
5.	J. Saraswathy, M. Hariharan, Sazali Yaacob and Khairunizam WAN (2012): "Automatic Classification of Infant Cry: A Review," In the Proceeding of <i>International Conference on Biomedical Engineering (ICoBE)</i> . (CD ROM)
6.	M. N. Rahman Y, Shahrman A.B., Siti Khadijah ZA'ABA, Roohi S.A., Khairunizam WAN , A.H. Ismail (2012): "Computational Analysis of Hemodynamic Effect on Mismatch End-to-end Reverse Saphenous Vein Graft Diameters," <i>The 2nd International Malaysia-Ireland Joint Symposium on Engineering, Science and Business</i> , IMIEJS 2012.
7.	M.K.Faizi, Shahrman AB, D. Hazry, D.Ruslizam, Khairunizam WAN and Siti Khadijah Za'aba (2012): "Study of Workers Posture on Napier Harvest Process," <i>The 2nd International Malaysia-Ireland Joint Symposium on Engineering, Science and Business</i> , IMIEJS 2012.
8.	Mohd Azri ABD AZIZ, Khairunizam WAN , Shahrman A.B, Siti Khadijah ZA'ABA, Shafriza Nisha Basah, Abdul Halim ISMAIL, Nazrul Hamizi B. Adnan, Hazry Desa and M. Fadhil Ramly (2012): "Development of An Adaptive Hand Gesture Database: Motion Trajectories Cue," <i>The 2nd International Malaysia-Ireland Joint Symposium on Engineering, Science and Business</i> , IMIEJS 2012.
9.	Nazrul Hamizi Adnan, Khairunizam Wan , Shahrman AB, Siti Khadijah Za'ba1, Hazry Desa and Mohd Azri Abd Aziz (2012): "The Development of a Low Cost DataGlove by Using Flexible Bend Sensor for Resistive Interfaces," <i>The 2nd International Malaysia-Ireland Joint Symposium on Engineering, Science and Business</i> , IMIEJS 2012.
10.	J. Saraswathy, M. Hariharan, Vikneswaran Vijejan, Sazali Yaacob and Wan Khairunizam (2012): "Performance Comparison of Daubechies Wavelet Family in Infant Cry Classification," 2012 IEEE 8th International Colloquium on Signal

	Processing and its Applications, pp. 451-455.
11.	Jerritta S, M Murugappan, Khairuizam Wan , Sazali Yaacob (2012): "Emotion Recognition from Electrocardiogram Signals using Hilbert Huang Transform," 2012 IEEE STUDENT Conference (Accepted).
12.	Rudzuan M. Nor, D. Hazry, Khairunizam WAN , Shahrman AB, M. Saifizi and M. Nasir Ayob (2012): "Differential Steering Control for an Autonomous Mobile Robot: A Preliminary Experimental Study," <i>Procedia Engineering in International Symposium on Robotics and Intelligent Sensors 2012 (IRIS 2012)</i> .
13.	Nazrul H. Adnan, Khairunizam WAN , Shahrman A.B., SK Za'aba, Shafriza nisha, BASAH, Zuradzman M. Razlan, D.Hazry, M. Nasir Ayob, Rudzuan M.Nor and Azri A. AZIZ (2012): "Measurement of the Flexible Bending Force of the Index and Middle Fingers for Virtual Interaction," <i>Procedia Engineering in International Symposium on Robotics and Intelligent Sensors 2012 (IRIS 2012)</i> .
14.	Abdul Halim Ismail, Muhamad Safwan Muhamad Azmi, Shahrman Abu Bakar, Khairunizam WAN , Hassrizal Hassan Basri, Norasmadi Abdul Rahim and Mohd Nasir Ayob (2012): "Investigation of Homogeneous Multi Robots Communication Via Bluetooth," In the Proceeding of 2012 IEEE Colloquium on Humanities, Science & Engineering Research.
15.	Muhd Nur Rahman Yahya, Shahrman Abu Bakar, SK Zaaba, Sharifah Roohi Syed Waseem Ahmad, Khairunizam WAN , M. Nasir Ayob, A.H. Ismail (2012): "Computational Analysis on Upper Extremity Vein Graft: Simulation on Kinked Vein Graft," <i>Procedia Engineering in International Symposium on Robotics and Intelligent Sensors 2012 (IRIS 2012)</i> .
16.	M. N. Rahman Y., Shahrman A.B., SK Za'aba, SA Roohi, Khairunizam WAN and A.H. Ismail (2012): "Computational Fluid Dynamic Analysis On Microvascular Vein Grafting: Effect of Mismatched Conduit Diameters," In the Proceeding of 2012 IEEE EMBS International Conference on Biomedical Engineering and Sciences.
17.	Nurul Diyana Mohd., Shahrman Abu Baka, SK Za'aba, Khairunizam WAN (2012): "Study on Bovine Bone Surface After Atmospheric Plasma Treatment," In the Proceeding of 2012 IEEE EMBS International Conference on Biomedical Engineering and Sciences.

2011

1.	Ismail Ibrahim, Syed Abdul Rahman Syed Abu Bakar, Musa Mohd Mokji, Kamal Khalil, Zulkifli Md Yusof, Jameel Abdulla Ahmed Mukred, Zuwairie Ibrahim, Mohd Saberi Mohamad, Khairunizam Wan (2011): "Performance Measurement of Thresholding Algorithms in Printed Circuit Board Inspection System," <i>International Conference on Computational Intelligence, Modelling & Simulation</i> , 2011.
2.	Mohd Azri ABD AZIZ, Khairunizam WAN , Shahrman A.B, Siti Khadijah ZA'ABA and Shamsul Azri MOHD NOR (2011): "An Adaptive Gesture Recognition System: Body Structure Cue," <i>International Postgraduate Conference (IPCE 2011)</i> . (CD-ROM)
3.	Nazrul Hamizi Bin Adnan, Khairunizam WAN , Shariman AB and Siti Khadijah Binti ZA'BA (2011): "DESIGN AND DEVELOPMENT OF A PORTABLE ONION PEELER MACHINE," <i>International Postgraduate Conference (IPCE 2011)</i> . (CD-ROM)
4.	Khairunizam WAN , Shahrman A.B and Siti Khadijah ZAABA (2011): "Sign Language Recognition based on Fuzzy Information of Arm Motions," In the <i>Proceeding of International Conference on Robotics and Automations System (ICORAS 2011)</i>

5.	Shahriman A.B, Khairunizam WAN and Siti Khadijah ZA'ABA (2011): "Hybrid Power Study For Irrigation And Flood Control System," In the <i>Proceeding of International Conference on Robotics and Automations System (ICORAS 2011)</i>
6.	Siti Khadijah ZA'ABA, Shahriman A.B and Khairunizam WAN (2011): "Introduction on Biomedical Applications of Atmospheric Plasma," In the <i>Proceeding of International Conference on Robotics and Automations System (ICORAS 2011)</i>
7.	Jeritta S, Murugappan M, R. Nagarajan and Khairunizam WAN (2011): "Investigation on Different Emotion Elicitations Methods for Human Computer Interaction," In the <i>Proceeding of International Conference on Robotics and Automations System (ICORAS 2011)</i>
8.	Jeritta S, Murugappan M, R. Nagarajan and Khairunizam WAN (2011): "Physiological Signals based Emotion Recognition : A Review," In the <i>Proceeding of IEEE Colloquium on Signal Processing and Applications (CSPA 2011)</i>
2008	
1.	Khairunizam WAN and Hideyuki SAWADA (2008): "Dynamic Gesture Recognition Based on the Probabilistic Distribution of Arm Trajectory," In the <i>Proceeding of IEEE International Conference on Mechatronics and Automation, (ICMA 2008)</i> , pp. 426-43.
2.	Khairunizam Wan , Atsushi Todo, Hideyuki Sawada, Olivier Passalacqua, Eric Benoit, Marc-Philippe Huget and Patrice Moreaux (2008): "Video conference smart room: an information fusion system based on distributed sensors," In the <i>Proceeding of 7th France-Japan Congress on Mecatronics (Mecatronics2008)</i> , Version 1, 31 July 2008, Hal-00308562.
2007	
1.	Khairunizam WAN and Hideyuki SAWADA (2007): "3D Motion prediction of human upper body by tracking reflective markers on a moving body," In the <i>Proceeding of Malaysia-Japan International Symposium On Advanced Technology 2007</i> , (MJISAT 2007), MJISAT-172, (Electronic publication on CD-ROM).
2.	Khairunizam WAN and Hideyuki SAWADA (2007): "An Information Fusion System of Sensors for Human-machine Communication," In the <i>Proceeding of an Annual Conference of the IEEE Industrial Electronics Society, (IECON2007)</i> , pp. 239-244.
3.	Khairunizam WAN and Hideyuki SAWADA (2007): "OPTICAL TRACKING FOR THE ESTIMATION OF HUMAN UPPER BODY MODEL AND ITS 3D MOTION," In the <i>Proceeding of Micro-optics Conference 2007, (MOC 2007)</i> , pp. 284-285.
4.	Khairunizam WAN and Hideyuki SAWADA (2007): "3D Measurement of human upper body for gesture recognition," In the <i>Proceeding of International Symposium on Optomechatronics Technologies 2007, (ISOT 2007)</i> , Vol. 6718 67180 (Electronic publication on CD-ROM).
5.	Atsushi Todo, Khairunizam WAN and Hideyuki Sawada (2007): "Sensor Fusion Technique for Human Tracking", <i>IEEJ Shikoku Branch, Japan</i> .
2006	
1.	IEEE Best Presentation Award, Khairunizam Wan and Hideyuki Sawada (2006): "Model-based Estimation for 3D Motion of Human Upper Body," In CD-ROM <i>Shikoku-Section Joint Convention of the Institutes of Electrical and related Engineers 2006</i> , p. 340.
2.	Khairunizam WAN and Masanori SUGISAKA (2006): "A Stepping Motor Control for Electric Vehicle," In the <i>Proceeding of Artificial Life and Robotic 2006, (AROB 2006)</i> , Japan.

NATIONAL CONFERENCES

2011	
1.	Jeritta S, Murugappan M, R. Nagarajan and Khairunizam WAN (2010) : "Development of Intelligent Humanoid System using Physiological signals," <i>Post Graduate Research Seminar (PGR)</i> , UniMAP.
2.	Azri A. AZIZ, Khairunizam WAN , Shariman AB, Siti Khadijah Binti ZA'BA, Abdul Halim ISMAIL, M.K. Ali HASSAN and M. Nasir AYOB (2011): "The Usability of Human-Computer Interaction (HCI) and Robotics in Medicine and Health Care," <i>Colloquium of Health Science and Engineering Technology</i> , HUSM, 16-17 October.
3.	Muhaimin Mohd Fadzil ,Shahriman AB, Khairunizam WAN , Siti Khadijah Za'aba, Abdul Halim ISMAIL, M.K. Ali HASSAN and M.Nasir AYOB (2011): " TRANSPORTATION DRIVING CONDITION STUDIES BY USING A SIMULATOR: A STUDY ON HUMAN ALERTNESS USING IRIS RECOGNITION AND OTHER HUMAN SENSE," <i>Colloquium of Health Science and Engineering Technology</i> , HUSM, 16-17 October.
4.	Siti Khadijah ZA'ABA, Shahriman AB, Khairunizam WAN , Abdul Halim ISMAIL, M.K. Ali HASSAN and M.Nasir AYOB (2011): "ATMOSPHERIC PLASMA PROCESSES FOR BIOMEDICAL APPLICATIONS," <i>Colloquium of Health Science and Engineering Technology</i> , HUSM, 16-17 October.
5.	Muhd Nur Rahman Y., Shahriman A.B., S. Roohi S.W.A, Khairunizam WAN , Siti Khadijah Za'aba, Abdul Halim ISMAIL, M.K. Ali HASSAN and M.Nasir AYOB (2011): " Theoretical hydraulic study on vein graft procuring and prolonging survival," <i>Colloquium of Health Science and Engineering Technology</i> , HUSM, 16-17 October.
6.	Mohd Azri ABD AZIZ, Khairunizam WAN , Shahriman AB, Siti Khadijah ZA'BA, Abdul Halim ISMAIL, M.K. Ali HASSAN and M.Nasir AYOB (2011): " A Real Time Hand Tracking for Virtual Object Manipulation," <i>Malaysian Technical Universities International Conference on Engineering & Technology (MUiCET 2011)</i> .
7.	Jerritta S , M Murugappan , R Nagarajan and Khairunizam Wan (2011) : "Digital Filtering based Pre-processing of Electrocardiogram (ECG) Signals for Human Emotion Recognition," <i>Malaysian Technical Universities International Conference on Engineering & Technology (MUiCET 2011)</i> .
8.	Teh Jenn Hooi, shahriman A.B, Khairunizam WAN , siti Khadijah ZA'BA, Muhammad Khairul A.H, Abdul Halim I, Mohd Nasir A, M Safwan M.A (2011): "Development of Universal Motorcycle Basket Shield-A Strong shield for Theft Prevention and Safety," <i>Malaysian Technical Universities International Conference on Engineering & Technology (MUiCET 2011)</i> .

2010	
1.	Jeritta S, Murugappan M, R. Nagarajan and Khairunizam WAN (2010) : "Development of Intelligent Humanoid System using Physiological signals," <i>Post Graduate Research Seminar (PGR)</i> , UniMAP.