

CURRICULUM VITAE



A. BUTIR-BUTIR PERIBADI *(Personal Details)*

Nama Penuh <i>(Full Name)</i>	RIBHAN ZAFIRA BINTI ABDUL RAHMAN		Gelaran <i>(Title)</i> : Dr
No. MyKad / No. Pasport <i>(Mykad No. / Passport No.)</i> 730813-01-5790	Warganegara <i>(Citizenship)</i> MALAYSIA	Bangsa <i>(Race)</i> MALAY	Jantina <i>(Gender)</i> FEMALE
Jawatan <i>(Designation)</i>	Senior Lecturer	Tarikh Lahir <i>(Date of Birth)</i>	13 August 1973

Alamat Semasa <i>(Current Address)</i>	Jabatan/Fakulti <i>(Department/Faculty)</i>	E-mel dan URL <i>(E-mail Address and URL)</i>
26, Jln Prima Saujana 1/4H, Tmn Prima Saujana, 43000 Kajang, Selangor. Tel: 013-3331308	Department. of Electrical and Electronic Engineering, Faculty of Engineering, Universiti Putra Malaysia 43400 UPM Serdang, Selangor. Tel: 03-89464449 Fax: 03-89466327	E-mail: ribhan@upm.edu.my URL: H/P: 013-3331308

B. KELAYAKAN AKADEMIK *(Academic Qualification)*

Nama Sijil / Kelayakan <i>(Certificate / Qualification obtained)</i>	Nama Sekolah Institusi <i>(Name of School / Institution)</i>	Tahun <i>(Year obtained)</i>	Bidang pengkhususan <i>(Area of Specialization)</i>
phD in Electrical Engineering	<i>Universiti Teknologi Malaysia, Malaysia</i>	2013	Electrical
M.E. in Electrical Eng.	<i>Universiti Teknologi Malaysia, Malaysia</i>	2001	Electrical
B.Eng. (Hons) in Electrical and Electronics Engineering	<i>Liverpool John Moores University, UK</i>	1998	Electrical and Electronics
Diploma In Electrical And Electronic Engineering	<i>Institut Teknologi Mara, Malaysia</i>	1995	Electrical and Electronics

C. KEMAHIRAN BAHASA *(Language Proficiency)*

Bahasa / <i>Language</i>	Lemah <i>Poor (1)</i>	Sederhana <i>Moderate (2)</i>	Baik <i>Good (3)</i>	Amat Baik <i>Very good (4)</i>	Cemerlang <i>Excellent (5)</i>
English				√	
Bahasa Melayu					√
Chinese					
Lain-lain <i>(other)</i> :					

D. PENGALAMAN SAINTIFIK DAN PENGKHUSUSAN (<i>Scientific experience and Specialisation</i>)				
Organization	Position	Start Date	End Date	Expertise
Universiti Putra Malaysia	Senior Lecturer	12/11/2013	present	Control Engineering
Universiti Putra Malaysia	Lecturer	3/7/2001	11/11/2013	Control Engineering
Universiti Putra Malaysia	Tutor	1/4/1999	1/7/2001	Control Engineering

E. PEKERJAAN (<i>Employment</i>)				
Majikan / Employer	Jawatan / Designation	Jabatan / Department	Tarikh lantikan / Start Date	Tarikh tamat / Date Ended
MATSUSHITA TELEVISION (M) Sdn. Bhd, Shah Alam	Technician	Research and Development	Nov 1995	August 1996
TERASAKI ELECTRIC (M) Sdn. Bhd, Shah Alam	Production Operator	Operation	July 1995	Nov 1995
SONY-TV Sdn. Bhd	Practical Training		April 1993	May 1993

F. ANUGERAH DAN HADIAH (<i>Honours and Awards</i>)				
Name of awards	Title	Award Authority	Award Type	Year
Academic Awards				
Non-Academic Awards				
Awards of Merit				

G. SENARAI PENERBITAN (Sila masukan nama pengarang, tajuk, nama jurnal, jilid, muka surat dan tahun diterbitkan) (<i>List of publications – author (s), title, journal, volume, page and year published</i>)	
Journal	<ol style="list-style-type: none"> 1. Jasronita Jasni, Samsul Bahari M.N., Ribhan Zafira A.R., <i>Diagnosis Kerosakan Litar Menggunakan Pspice dan Rangkaian Neural Tiruan – published in Technology Journal, UTM, No. 39, Dec 2003, ISSN 0127-9696, pp 75-86.</i> 2. Ribhan Zafira A R, Rubiyah Y, Marzuki K, Faisal I, <i>Fuzzy Modelling using Genetic Algorithm and Recursive Least Square for Process Control Application – published in International Journal of Simulation Systems, Science & Technology, ISSN: 1473-804x online, 1473-8031, pp 34-46.</i> 3. Azura Che Soh, Erny Aznida Alwi, Ribhan Zafira Abdul Rahman and Li Hong Fey, <i>Effect of Fuzzy Logic Controller Implementation on</i>

	<p><i>a Digitally Controlled Robot Movement</i>, Kathmandu University Journal of Engineering, Science and Technology, Vol. I, No. V, 2008, 28-39.</p> <p>4. Azura Che Soh and Ribhan Zafira Abdul Rahman, <i>Fault Detection and Diagnosis for DC Motor in Robot Movement System using Neural Network</i>. The Pacific Journal of Science and Technology (PJST), Akamai University, USA, 10(1), 2009, 35-43.</p> <p>5. Rubiyah Yusof, Ribhan Zafira Abdul Rahman, Marzuki Khalid, Faisal Ibrahim, <i>Optimisation of Fuzzy Model using Genetic Algorithm for Process Control Application</i> – accepted for publication to Journal of Franklin Institute, Elsevier</p> <p>6. Ribhan Zafira Abdul Rahman, Azura Che Soh, Fadzlina Muhammad, <i>Fault Detection and Diagnosis for Continuous Stirred Tank Reactor using Neural Network</i>, <i>Kathmandu University Journal of Science, Engineering and Technology</i> Vol.6. No II, November, 2010, pp.66-74</p> <p>7. Rubiyah Yusof, Ribhan Zafira Abdul Rahman and Marzuki Khalid, <i>Fault Detection and Diagnosis for Process Control Rig using Artificial Intelligent</i>, ICIC Express Letters, An International Journal of Research and Surveys, Vol 4, No 5(B), Oct 2010, ICI International 2010 ISSN 1881-803X, pp 1811-1816.</p> <p>8. Rubiyah Yusof, Ribhan Zafira Abdul Rahman, Marzuki Khalid, and Mohd Faisal Ibrahim, <i>Optimization of Fuzzy Model using Genetic Algorithm for Process Control Application</i>, Journal of the Franklin Institute, Elsevier, Vol 348 issues 7, (Sept 2011) pp. 1717-1737. IF: 1.492.</p> <p>9. Mohd. Khair H., Aishwarya. K., Ribhan Zafira. A.R. and Siti Anom A, <i>Design a PID Controller for a Constant Speed of Combustion Engine</i>, Australian Journal of Basic and Applied Sciences, ISSN 1991-8178 5(12) , 2011, pp 1586-1593.</p> <p>10. M.K.Hassan, R. Z. Abdul Rahman, A. Che .Soh., M.Z.A.Ab Kadir, <i>Lightning Strike Mapping For Peninsular Malaysia Using Artificial Intelligence Techniques</i>, Journal of Theoretical and Applied Information Technology, 34(2), 2011, pp 202-214.</p> <p>11. A.Che Soh, R. Z. Abdul Rahman, M.Z.A.Ab Kadir and N.S. Mohd Sharif, <i>Development of the Lightning Location Mapping System Using Fuzzy Logic Techniques</i>, International Review on Modelling and Simulations (IREMOS), 4(6), 2011, Part C.</p> <p>12. Azura Che Soh, Mohd Khair Hassan, Ribhan Zafira Abdul Rahman, <i>A Fuzzy-Fault Classifier System for Malfunction Traffic Light System Classification</i>, Journal of Theoretical and Applied Information Technology, 34(2), 2011, pp 226-240</p> <p>13. Ribhan Zafira bt.Abdul Rahman, Tan Loo Pei, Azura Che Soh, <i>Temperature Control of Portable Cooler</i>, World Academy of Science, Engineering and Technology, ISSN 2010-3778, 72, pp 547-552, 2012 (Scopus)</p> <p>14. A Che Soh, R.Z. Abdul Rahman, H. Md. Sarkan and L.T. Yeo,</p>
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	<p><i>Intelligent Control of Twin-Rotor MIMO System Using Fuzzy Inference Techniques</i>. International Review of Automatic Control (IREACO), 6(1), Jan 2013. (Scopus)</p> <p>15. G.R. Lai, A.Che Soh, H.Md.Sarkan, R.Z.Abdul Rahman, M.K. Hassan, "Controlling Traffic Flow in Multilane-Isolated Intersection Using ANFIS Approach Technique," Journal of Engineering Science and Technology (JESTEC) Vol (10), No. 8(2015), 1009-1034.(Scopus)</p> <p>16. A.J. Ishak, R.Z. Abdul Rahman, A.C. Soh, R. Shamsudin, S.A. Jalo, F.C. Lim and H.K. Lin, <i>Quality Identification Of Used Cooking Oil Based On Feature Fusion Of Gas Sensor And Color</i> International Journal of Control Theory and Applications (I J C T A), ISSN 0952-8091, 9(5), 2016, pp. 321-329 (Scopus)</p> <p>17. Tanaselan Ramalu, Mohd Amran Mohd Radzi, Muhammad Ammirul Atiqi Mohd Zainuri, Noor Izzri Abdul Wahab and Ribhan Zafira Abdul Rahman, <i>Photovoltaic Based SEPIC Converter with Dual-Fuzzy Maximum Power Point Tracking for Optimal Buck and Boost Operations</i> Energies, ISSN 1996-1073, 9(8), 2016, pp 1-17 (JCR – 2.077)</p> <p>18. N.F.Elya Saidon, Chikamune Wada, Siti A. Ahmad, Ribhan Zafira Abdul Rahman, Kiyotaka Eguchi, Yoshiyuki Tomiyama and Farida Izni Abd Rahman, Real-time Human Motion Analysis and Grasping Force using the OptiTrack System and Flexi-force Sensor, <i>Pertanika Journal Science & Technology</i> Vol 25(S): 69-76 (2017) (Scopus)</p> <p>19. Elya M.N, S.B. Mohd Noor, Ribhan Zafira A. R. and Syaril Azrad, Application of Sliding Mode Control with Extended High Gain Observer to stabilize the Underactuated Quadrotor System, <i>Pertanika Journal Science & Technology</i> Vol 25(S): 343-352 (2017) (Scopus)</p>
Books/Monographs	Intelligent Fault Detection And Diagnosis Based On Optimized Fuzzy Model For Process Control Rig, PhD Thesis, Universiti Teknologi Malaysia, 2014
Chapter in book	
Proceedings	<ol style="list-style-type: none"> Ribhan Zafira A.R., Azura C.S., Emy A.A., Samsul Bahari M.N., J.B. Gomm, <i>Process Fault Detection and Diagnosis Using A Dynamic Neural Networks Model</i>, Proc of World Engineering Congress 2002, 22-24 July 2002, Kuching Sarawak, Malaysia. Mohd. Khair Hassan, Ribhan Zafira Abdul Rahman, Norhayati Hamid, Mohd Liakot Ali, <i>Learning Aid for Electric Circuits Analysis with MATLAB based GUI</i>, Proceeding, The Seventh Triennial AEESEAP Conference, Univ.Malaya. 8, 9 Dec 2003. Editorial Committee Board, <i>Proceedings of Student Conference on Research and Development SCORed 2003</i>, IEEE Catalog Number: 03EX752C, ISBN: 0-7803-8174-2. Ribhan Zafira Abdul Rahman, Rubiyah Yusof, and Marzuki Khalid, <i>Recursive Least Square and Fuzzy Modelling using Genetic Algorithm for Process Control Application</i>, Proceeding AMS 2007, Phuket

	<p>Thailand, 27-30 Mac 2007, pp 388-393.</p> <ol style="list-style-type: none"> 5. Ribhan Zafira A. R., R.Yusof and M.Khalid, <i>Modelling of a Process Control Rig using Genetic Algorithm based Fuzzy Approach</i>, Malaysia-Japan International Symposium Advanced Technology, MJISAT 2007, 12Nov-15Nov 2007, Kuala Lumpur. 6. R.Yusof, Ribhan Zafira A. R. and M.Khalid, <i>Fuzzy Modeling with Genetic Algorithm for Process Control Rig, - International Conference on Modeling, Simulation and Applied Optimisation</i>, ICMSAO 2009, 20th Jan - 22nd Jan 2009, Sharjah, U.A.E 7. Lai Guan Rhung, Azura Che Soh, Ribhan Zafira Abdul Rahman, Mohd Khair Hassan, <i>Fuzzy Traffic Light Controller Using Sugeno Method for Isolated Intersection</i>, Proceedings of 2009 Student Conference on Research and Development (SCOReD 2009), 16-18 Nov. 2009, UPM Serdang, Malaysia 8. Ribhan Zafira Abdul Rahman, Muhammad Shukor A. Wahab, <i>Development of a Robe Climbing Robot</i>, Proc of World Engineering Congress 2002, 2nd-5th August 2010, Kuching Sarawak, Malaysia, pp283-288. 9. Rubiyah Yusof, Ribhan Zafira Abdul Rahman and Marzuki Khalid, <i>Fault Detection and Diagnosis for Process Control Rig using Artificial Intelligent</i>, Proceeding of The Third International Symposium on Intelligent Informatics (ISII2010), 5-7 Sept 2010, Dalian, China. 10. Azura Che Soh, Ribhan Zafira Abdul Rahman, Lai Guan Rhung and Haslina Md Sarkan, <i>Traffic Signal Control Based on Adaptive Neural-Fuzzy Inference System Applied to Intersection</i>, Proceeding of 2011 IEEE Conference on Open Systems, 25-28 September 2011, Langkawi, Malaysia. 11. Ribhan Zafira Abdul Rahman, Azura Che Soh and Siti Nur Naznin Adnan, <i>Lightning Characteristics & Mapping for Peninsular Malaysia using Neural Network Method</i>, Proceeding of The 3rd International Conference on Computational Intelligence, Modeling and Simulation , 20-22 September 2011, Langkawi, Malaysia. 12. Ribhan Zafira Abdul Rahman and Nusrat Jahan Shoumy, <i>Neural Networks Controller for Two-Degree-Freedom Helicopter Control System</i>, Proceeding of The 2012 12th International Conference on Control, Automation and Systems, 17-21 October 2012, ICC Jeju Island, Korea. 13. Ribhan Zafira Abdul Rahman, Tan Loo Pei and Azura Che Soh, <i>Temperature Control of Portable Cooler</i>, Proceeding of International Conference on Electrical, Computer, Electronics and Communication Engineering, 6-7 December 2012, Penang, malaysia, pp 547-552. 14. Ribhan Zafira Abdul Rahman, Rubiyah Yusof, and Fatimah Sham Ismail, <i>Model-based Fault Detection and Diagnosis Optimization for Process Control Rig</i> , Proceeding 9th Asian Control Conference (ASCC), June 23-26, 2013, Istanbul, Turkey, ISBN: 978-1-4673-5768-5 15. Mohd Rafiuddin Mohd Nordin, Ribhan Zafira Abdul Rahman, Mohd Khair Hassan, A. Che Soh and Siti Anom Ahmad, "Identify The High And Low RFI Level Base On Image Processing With Gray Level Co-Occurrence Method", World Research and Innovation Convention of Engineering & Technology (WRICET), 25-26 Nov 2014, Putrajaya,
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	<p>Malaysia.</p> <p>16. N. Mohamad Zaber, A.J Ishak, A. Che Soh, M.K. Hassan, R.Z. Abdul Rahman and Z. Zainal Abidin, “Control Positioning of Radio Telescope using PID Controller with Varying Parameters for High Precision Output”, The 6th International Conference On Postgraduate Education (ICPE-6 2014), 17-18 Dec 2014, UTeM, Melaka</p> <p>17. S.A Jalo, A.J Ishak, A.C Soh, R. Z.A Rahman and R. Shamsuddin, “Optimising Effect of Frying Cycles on Cooking Oil Properties Using Particle Swarm Optimisation”, The 2015 10th Asian Control Conference(ASCC 2015), May 31-3 June, 2015, Kota Kinabalu, Sabah, Malaysia</p> <p>18. N.A. Abdullah,A.CheSoh, R.Z.Abdul Rahman, S.B. Mohd Noor, <i>Analysis of a Gain Tuning PID Controller for Pressure Control in UCP Plant</i>, 3rdInternational Symposium on Applied Engineering and Sciences (SAES2015) Universiti Putra Malaysia 23rd – 24thNov 2015</p>
Other publications	<p>1. Hossein Ghapanchi Zadeh, Asnor Juraiza Ishak, Azura Che Soh, Ribhan Zafira Abdul Rahman, Siti Anom Ahmad, <i>Low Cost and Portable Multichannel Surface EMG Acquisition System</i>, 2015</p> <p>2. Azura Che Soh, Asnor Juraiza Ishak, Mohd Khair Hassan, Ribhan Zafira Abdul Rahman, Siti Anom Ahmad, Umi Kalsom Mohamad Yusof, <i>Rekabentuk Susun Atur Litar Bersepadu: Phyto-Herbal Electronic Nose</i>, 2015</p> <p>3. Azura Che Soh, Hazlina Selamat, Ribhan Zafira Abdul Rahman, Asnor Juraiza Ishak, Siti Anom Ahmad, Hafiz Rashidi Harun@ Ramli, Ahmad ‘Athif Mohd Faudzi, 2015 10th Asian Control Conference (ASCC) “Emerging Control Techniques for a Sustainable World”, IEEE Catalog Number: CFP15832-ART, ISBN: 978-1-4799-7862-5 MAY 31-JUNE 3, 2015, Sutera Harbour Resort Kota Kinabalu, Malaysia</p>
Computer software	

H. PROJEK PENYELIDIKAN TERDAHULU (Past Research Project)					
Project No.	Project Title	Role	Year	Source of fund	Status
	Fault Detection and Diagnosis using Neural Networks for CSTR (RM10,000)	Project Leader	2003	UPM	Completed
	Development of Hybrid Control for Distillation Column (RM117,000)	Researcher	2004-2006	MOHE	Completed
	Modeling of Process Control using fuzzy Logic	Project Leader	2010-2012	RUGS, UPM	Completed

	Exploration on Hybrid Artificial Intelligence of Model-Based Calibration Engine (RM63,000)	Researcher	2011 – 2013	FRGS	Completed
	Development of E-Nose Herbs Recognition System Based on Artificial Intelligence Technique (RM63,000)	Researcher	2012 – 2014	RUGS	Completed
	Intelligent characterisation and evaluation of reused cooking oil using Pattern Recognition Techniques (RM30,000)	Researcher	2012 – 2014	RUGS	Completed
	Intelligent Five-Fingered Robotic Hand Design and Development for Prosthetic Application (RM174,000)	Researcher	2012-2014	eScience Fund	Completed
	Formulation of Algorithm to Classify Distinctive odors Pattern of Aromatic Plant Species using Hybrid Artificial Intelligence Techniques (RM121,500)	Researcher	2013-2015	FRGS	Completed
	Lightning Surges On Distribution Line and Its Effect On Transformer Design And Protection (RM146,700)	Researcher	2015-2017	GP-IPB	Completed
	Modeling and Design of High Output Force Dielectric Elastomer Actuator	Researcher	2015-2017	FRGS	Ongoing

	(RM77,000)				
	Regenerative Braking Strategy for Electric Vehicles using Adaptive Genetic Algorithm (RM20,000)	Researcher	2015-2017	GP-IPS	Ongoing
	Formulation of Hybrid Algorithm to Identify Distinctive Electromyography Signals Pattern of Lower Limb Muscle Activities based on Various Type of Motion for Rehabilitation Therapy. (RM84,000)	Researcher	2015-2017	FRGS	Ongoing
	Development of An Automated Cleaning System: Knife and Chicken Neck. (RM37,540)	Researcher	2016	PPRN-Public Private Research Network (MOHE)	Completed
	Nonlinear Hybrid Neural Networks-Based Model Prediction Control of Co-Current Two Fluid Nozzle Spray Dryer (RM20,000)	Researcher	2016 – 2018	GP-IPS	Ongoing
	An Auto-Tuning Of Hybrid Intelligent Controller For Process Control System (RM20,000)	Researcher	2016-2018	GP-IPS	Ongoing