



## CURRICULUM VITAE



**Dr. Mohd Amrallah bin Mustafa**  
**Senior Lecturer**

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### Education

1. PhD (Eng.) , 2013, Shizuoka University, JAPAN
2. MSc (Control and Automation Engineering), 2007 Universiti Putra Malaysia, MALAYSIA
3. B. Eng. (Electrical and Electronics), 2000 Universiti Putra Malaysia, MALAYSIA

### Language Proficiency

Language	Level
1. English	Excellent
2. Malay language	Excellent
3. Others (Japanese)	Moderate

### Areas of Interest

1. Solar Cell
2. CMOS Image Sensors
3. Analog IC Design
4. Robotics

### Professional Qualification/Membership/Affiliation

1. Executive Committee, IEEE CASS (M) 2015-2019
2. Executive Committee, IEEE EDS (M) 2016 – 2018
3. Second Secretary IEEE EDS (M) 2017 – 2018

### Appointments

Position	Duration
1. Advisor of UPM Robotic Club Department of Electrical and Electronic, Faculty of Engineering, UPM	January 2013 – April 2019
2. Micro group Academic Co-ordinator Department of Electrical and Electronic, Faculty of Engineering, UPM	October 2015 – March 2019
3. Head of Laboratory Department of Electrical and Electronic, Faculty of Engineering, UPM	August 2013 – August 2015

## Publications

### Journals

1. Mohd.Khair Hassan, **Mohd Amrallah**, Norhayati Othman, A Comprehensive Matlab Based Gui For Modern Control And Electric Circuits Analysis. Journal of Industrial Technology, SIRIM Berhad.
2. M.K. Hassan, **A. Mustafa** and Norhayati “ A Comprehensive Gui with Matlab Based for Classical Control, Modern Control and Electric Circuit Analysis”, Published in Engineering Transactions, A Research Publication of Mahanakorn University of Technology, Thailand, No. 1(16), January-June 2004, ISSN 0859-9238, pp. 57-75.
3. **Mohd Amrallah bin Mustafa**, Shinya Itoh, Shoji Kawahito, “Reduction of Random Telegraph Signal (RTS) Noise in CMOS Image Sensors using Histogram Analysis”, Journal of Automation, Mobile, Robotics & Intelligent Systems (JAMRIS), Volume 3, N<sup>o</sup>4, pp 202-203, 2009.
4. **Mohd Amrallah bin Mustafa**, Min-WoongSeo, Shoji Kawahito, Keita Yasutomi and Keiichiro Kagawa, “RTS Noise Reduction of CMOS Image Sensors using Amplifier-Selection Pixels”, IEICE Electronics Express, Vol. 10, No. 15, 1-7, 2013.
5. Suhaidi Shafie, **Mohd Amrallah bin Mustafa** and Fauzan Ahmad, “Investigation of TiO<sub>2</sub>/Graphene Nanocomposite based photoanode in Dye-sensitized Solar Cell”, Solid State Science and Technology, Vol. 26, No. 2, 2018.

### Conference Proceedings

1. **M.A. Mustafa**, M. H. Marhaban, S. B. M. Noor and A.R. Ramli, Hand Gesture Recognition using Artificial Neural Networks. World Engineering Congress 2007, 206-214, 2007, Penang, Malaysia.
2. M. A. Mustafa, S. Itoh, S. Kawhito, “Reduction of Random Telegraph Signat (RTS) Noise in CMOS Image Sensors using Histogram Analysis”, Inter-Academia, Sept. 2009, Kazimierz, Poland.
3. T. Iida, **M. A. Mustafa**, L. Zhuo, K. Yasutomi, S. Itoh, S. Kawahito, “ A column parallel ccllc ADC with an embedded programmable gain amplifier for CMOS image sensors”, 2010 International Conference on Solid State Devices and Materials (SSDM 2010), Sept. 2010, Tokyo, Japan.
4. T. Iida, T. Akohari, **M. A. Mustafa**, K. Yasutomi, S. Kawahito, “ The A/D converter for CMOS Image Sensor with Integrated Variable Gain Amplification”, National Conference (Japan Language) of Visual Information Media Society of Information Sensing (IST2010) July 2010, Osaka, Japan.
5. **M. A. Mustafa**, M.W. Seo, K. Yasutomi, S. Kawahito, “Reduction of Temporal Noise in 0.18um CMOS Image Sensors using Correlated Multiple Sampling (CMS)”, The 13<sup>th</sup>TakayanagiKenjiro Memorial Symposium, S3-9, 1-4, Nov. 2011, Shizuoka, Japan.
6. Hussien A. AlSultan, **M. A. Mustafa**, S. Shafie, W. Z. W. Hasan, A. Khalifa, “Graphene Doping Technique in TiO<sub>2</sub> for Dye Sensitized Solar Cells Photo-Anode”, Proc. Of the 5<sup>th</sup> IEEE International Conference on Smart Instrument, Measurement and Applications (ICSIMA), November 2018, Thailand.
7. M. R. AL-Obaidi, **M. A. Mustafa**, Wan Zuha Wan Hasan, Norhafiz B. Azis, S.P. Ang, Zainidi Haji Abdul Hamid, “ Efficient Charging Pad for Unmanned Aerial Vehicle Based on Direct Contact”, Proc. Of the 5<sup>th</sup> IEEE International Conference on Smart Instrument, Measurement and Applications (ICSIMA), November 2018, Thailand.
8. Suhaidi Shafie, M. Z. A. Ab. Kadir, Norhafiz B Aziz, Mohd Amran Mohd Radzi, W. H. Wan Zuha, **Mohd Amrallah Mustafa**, “High Efficiency Portable Solar Generator Utilizing Optimum Solar Panel Orientation”, Proc. Of the 5<sup>th</sup> IEEE International Conference on Smart Instrument, Measurement and Applications (ICSIMA), November 2018, Thailand.

9. Julie Roslita Rusli, R. M. Sidek, Hasmayadi Majid, W. Z. Wan Hasan, **Mohd Amrallah Mustafa**, Suhaidi Shafie, "Design and Verification of Low Voltage Low Power Dynamic Comparator over PVT Variation", Proc. Of the 5<sup>th</sup> IEEE International Conference on Smart Instrument, Measurement and Applications (ICSIMA), November 2018, Thailand.

### Research Grants

No	Project Title	Amount (RM)	Year	Source of Fund
1.	Development of a High Efficiency Portable Solar Generator utilizing Optimum Solar Panel Orientation for Flood Evacuation Centre - <b>Member of research grant.</b>	80,000.00	2015-2015	PRGS
2.	Graphene Thin Films as Photo-Electrode For Dye Sensitized Solar Cell - <b>Head of project</b>	60,000.00	2016-2019	UPM PUTRA GRANT IPM
3.	Investigation on the effect of double layer structure ZnO/TiO <sub>2</sub> @G in Dye-sensitized Solar Cell for enhancement of Power Conversion - <b>Head of project</b>	93,000.00	2019-2020	FRGS

### Patent

No.	File Number	Title	Status
1.	PI 2019001800	A Method for Preparation Charging Platform of Chess-pad Configuration for UAV	Submitted to MYPO MALAYSIA on 1 April 2019

### Student Supervision

#### Master Student (Research)

No.	Name	Title	Status
1.	Mohd Farhan bin Mohd Amin - <b>Co-Supervisor</b>	Implementation of a reconfigurable MPEG4 Processor on Field Programmable Gate Array (FPGA)	On going
2.	Hussien Abdul Salam Ali - <b>Main Supervisor</b>	Enhancement of Power Conversion in Dye-Sensitized Solar Cell by Applying Oxygen Free Graphene Doped TiO <sub>2</sub>	On going
3.	Al Obaidi Mohammed Rmaez Hadi - <b>Main Supervisor</b>	Power Consumption measurements analysis and modeling with enhancing by efficient charging pad for Unmanned Aerial Vehicle.	On going

### Student Supervision

#### Bachelor of Engineering (Main Supervisor)

No	Name	Title	Status
1.	Sai Que Ken	Solar Car System	Completed (2014)
2.	Mohd Shukri Wahab	A Design of load cell using MEM Technology	Completed (2014)
3.	Mohd Noor Hamizan M. Jeffri	Solar Car Control System	Completed (2014)
4.	Muhammad Arham bin Yusuf	Improvement of Putra Solar Car System	Completed (2015)
5.	MuhamadAsryzulzaman	Battery Management System of Putra Solar car	Completed (2015)
6.	Mohd Faizal bin Zulkeffali	Improvement of Battery Management System in Putra Solar Car	Completed (2016)
7.	Rifhan Narrissa binti Razali	Analysis of Graphene as Photo-Electrode for Dye-Sensitized Solar Cells	Completed (2016)
8.	Tan Wui Meng	LED Billboard System using Raspberry Pi	Completed (2017)
9.	Farah Nadia binti Mansor	Zinc Oxide as Photo-Electrode For Dye Sensitized Solar Cell Wireless Mobile Robot	Completed (2018)
10.	Muhd Fikri bin Muhd Yusoff	Wireless Mobile Robot	Completed (2018)
11.	Mohamad Syawal Hafzan bin Kamal Azmi	Autonomous Movement of Legged Robot using Limit Switches	Completed (2019)

### Professional Services

Type	Name	Level	Year
Conference Reviewer	International Conference of Electrical & Electronic Technology (IEETech 2016)	International	2016
Conference Reviewer	International Conference on Intelligent & Advanced System (ICIAS 2016)	International	2016
Journal Reviewer	UPM Pertanika Journal	International	2016
Conference Reviewer	IEEE Region 10 Conference (TENCON) 2017	International	2017
Conference Reviewer	Malaysian Technical Universities Conference on Engineering and Technology (MUCET) 2017	International	2017
Conference Reviewer	Symposium on Advanced Materials and Nanotechnology (SAMN 2017)	International	2017
Conference Reviewer	IEEE Regional Symposium on Micro and Nanoelectronic (RSM) 2017	International	2017



Conference Reviewer	5 <sup>th</sup> International Conference on Communication and Computer Engineering (ICOCOE) 2018	International	2018
Conference Reviewer	IEEE International Conference on Semiconductor Electronics (ICSE) 2018	International	2018
Journal Reviewer	The International Journal of Electrical Engineering and Education	International	2018
Journal Reviewer	International Journal of Engineering Research in Electrical & Electronic Engineering (IJEREE)	International	2018
Journal Reviewer	Journal of Solid State Science & Technology (JSST)	International	2018
Journal Reviewer	IEICE Transactions on Electronics	International	2019