

#### **CURRICULUM VITAE**



# PROF. DR. SYED ABDUL RAHMAN AL-HADDAD SYED MOHAMED (A02069)

Department of Computer and Communication Systems Engineering, Faculty of Engineering, Universiti Putra Malaysia, 43400 UPM Serdang, Selangor

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#### Education

- 1. PHD in Electrical, Electronics And System Engineering, 2011, National University Malaysia (UKM)
- 2. M.Sc. in Computer And Communication Systems Engineering, 2000, Universiti Putra Malaysia (UPM)
- Degree In Computer Science (Major In Software Engineering), 1997, Universiti Teknologi Malaysia (UTM)
- 4. Diploma In Computer Science, 1995, Institut Teknologi Mara (ITM)
- 5. Associate Diploma Computer Studies, 1992, Swansea Institute of Higher Education, UK.

#### Areas of Interest

 Speech/Voice/Sound Recognition; Spoken/Natural Language Understanding; Dialog Modelling, Animal Sound Processing, Al-Quran Sound Processing, ECG, EEG Signal and Image Processing

## **Professional Qualification/ Membership/ Affiliation**

- 1. IEEE Senior Membership
- 2. MySET
- 3. Microsoft Certified Technology Specialist (MCTS), Microsoft Institute, 2010
- 4. Microsoft Certified Professional Developer (MCPD), Microsoft Institute, 2010
- 5. Essential Of BDA On Fusionex Platform, Dream Cather Consulting & Fusionex Institute, 2016
- 6. Essential Bigdata Analytics On Fusionex Platform, Myprocert Institute, 2016

| Appointments      |  |                |  |  |  |
|-------------------|--|----------------|--|--|--|
| Position Duration |  |                |  |  |  |
| 1.                | Professor (Grade VK7)  | 2020 – to date |  |  |  |
|                   | Dept. of Computer and Communication Systems                    |                |  |  |  |
|                   | Engineering, Faculty of Engineering, UPM                       |                |  |  |  |
| 2.                | Associate Professor (Grade DS54),                              | 2012 - 2020    |  |  |  |
|                   | Dept. of Computer and Communication Systems Engineering,       |                |  |  |  |
|                   | Faculty of Engineering, UPM                                    |                |  |  |  |
| 3.                | Senior Lecturer (Grade DS52), Dept. of Computer and            | 2006 - 2012    |  |  |  |
|                   | Communication Systems Engineering, Faculty of Engineering, UPM |                |  |  |  |
| 4.                | Lecturer (Grade DS45), Dept. of Computer and                   | 2000- 2005     |  |  |  |
|                   | Communication Systems Engineering, Faculty of Engineering, UPM |                |  |  |  |



5. Tutor, Dept. of Computer and Communication Systems Engineering, Faculty of Engineering, UPM

1997 - 2000

6. Lecturer, Tun Abdul Razak Institute of Technology, Kuala Lumpur

1997

# **Publications**

## Journals (Recent 30 Journals)

- 1. Google Scholar: https://scholar.google.com.my/citations?user=ON1QjFUAAAAJ&hl=en
- 2. Scopus: https://www.scopus.com/authid/detail.uri?authorId=49963059800
- SH Abdulhussain, S.A.R. Al-Haddad, MI Saripan, BM Mahmmod, A Hussien, 2020. Fast Temporal Video Segmentation Based on Krawtchouk-Tchebichef Moments, IEEE Access 8, 72347-72359
- 2. ZN Idan, SH Abdulhussain, **S.A.R. Al-Haddad**, 2020. A New Separable Moments Based on Tchebichef-Krawtchouk Polynomials, IEEE Access, 41013-41025
- 3. LE Hamid, **S.A.R. Al-Haddad**, 2019. Automated Leaf Alignment and Partial Shape Feature Extraction for Plant Leaf Classification, ELCVIA: electronic letters on computer vision and image analysis 18 (1)
- 4. Sadiq H Abdulhussain, **S.A.R. Al-Haddad**, Abd Rahman Ramli, Basheera M Mahmmod, M Iqbal Saripan, Wissam A Jassim, 2019. A new hybrid form of Krawtchouk and Tchebichef polynomials: Design and application, Journal of Mathematical Imaging and Vision 61 (4), 555-570
- 5. Sadiq H Abdulhussain, **S.A.R. Al-Haddad**, Abd Rahman Ramli, Basheera M Mahmmod, M Iqbal Saripan, Wissam A Jassim, 2019. Shot boundary detection based on orthogonal polynomial, Multimedia Tools and Applications, Pg 1-22
- 6. Khmag, A., Al Haddad, S.A.R., Ramlee, R.A., Kamarudin, N., Malallah, F.L. 2018. Natural image noise removal using nonlocal means and hidden Markov models in transform domain, Visual Computer34(12), pp. 1661-1675
- 7. Khmag, A., Al Haddad, S.A.R., Ramlee, R.A., Kamarudin, N., Malallah, F.L., 2018. Natural image noise removal using non local means and hidden Markov models in stationary wavelet transform domain, Multimedia Tools and Applications, 77(15), pp. 20065-20086
- 8. Khmag, A., Al-Haddad, S.A.R., Ramli, A.R., Kalantar, B., 2018. Natural image noise level estimation based on local statistics for blind noise reduction, Visual Computer, 34(4), pp. 575-587
- 9. Khmag, A., Ghoul, S., Al-Haddad, S.A.R., Kamarudin, N. 2018. Noise level estimation for digital images using local statistics and its applications to noise removal, Entropy, 20(4),214
- 10. Abdulhussain, S.H., Ramli, A.R., Al-Haddad, S.A.R., Mahmmod, B.M., Jassim, W.A. 2018. Fast Recursive Computation of Krawtchouk Polynomials, Journal of Mathematical Imaging and Vision, 60(3), pp. 285-303
- 11. A Khmag, SAR Al Haddad, RA Ramlee, N Kamarudin, FL Malallah, 2018. Natural image noise removal using non local means and hidden Markov models in stationary wavelet transform domain, Multimedia Tools and Applications 77 (15), 20065-20086
- 12. SH Abdulhussain, AR Ramli, MI Saripan, BM Mahmmod, **S.A.R. Al-Haddad**, 2018. Methods and challenges in shot boundary detection: a review, Entropy 20 (4), 214
- Khosravinia, K., Hassan, M.K., Rahman, R.Z.A., Al-Haddad, S.A.R. 2018, Improved Latency of CAN Vehicle Data Extraction Method, Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 11253 LNCS, pp. 14-26
- 14. A Khmag, **S.A.R. Al-Haddad**, AR Ramli, B Kalantar, 2018. Single image dehazing using second-generation wavelet transforms and the mean vector L2-norm, Visual Computer 34 (5), 675-684
- A Khmag, S Ghoul, S.A.R. Al-Haddad, N Kamarudin, 2018. Noise Level Estimation for Digital Images Using Local Statistics and Its Applications to Noise Removal, TELKOMNIKA 16 (2), 915-924
- 16. A Khmag, AR Ramli, **S.A.R. Al-Haddad**, N Kamarudin, 2018. Natural image noise level estimation based on local statistics for blind noise reduction Visual Computer 34 (4), 575-587
- 17. SH Abdulhussain, AR Ramli, MI Saripan, BM Mahmmod, **S.A.R. Al-Haddad**, 2018. Methods and Challenges in Shot Boundary Detection: A Review. Entropy 20 (4), 214



- SH Abdulhussain, AR Ramli, S.A.R. Al-Haddad, BM Mahmmod, WA Jassi, 2018. Fast Recursive Computation of Krawtchouk Polynomials, Journal of Mathematical Imaging and Vision 60 (3), 285-303
- 19. A Najih, **S.A.R. Al-Haddad**, AR Ramli, SJ Hashim, MA Nematollahi (2017). "Digital image watermarking based on angle quantization in discrete contourlet transform", Journal of King Saud University-Computer and Information Sciences, Elsevier 29(3): 288-294
- 20. BM Mahmmod, AR bin Ramli, SH Abdulhussain, **S.A.R. Al-Haddad**, 2017. Signal compression and enhancement using a new orthogonal-polynomial-based discrete transform, IET Signal Processing 12 (1), 129-142
- 21. BM Mahmmod, AR Ramli, SH Abdulhussain, **S.A.R. Al-Haddad**, WA Jassim (2017). "Low-Distortion MMSE Speech Enhancement Estimator Based on Laplacian Prior", IEEE Access
- 22. Asem Khmag, **S.A.R. Al-Haddad**, Abd Rahman Ramli, Bahareh Kalantar, (2017). Single Image Dehazing Using Second-Generation Wavelet Transforms And The Mean Vector L2-Norm, Visual Computer, Springer Berlin Heidelberg, pg 1-14
- 23. Sadiq H Abdulhussain, Abd Rahman Ramli, Basheera M Mahmmod, **S.A.R. Al-Haddad**, Wissam A Jassim, (2017). Image Edge Detection Operators Based On Orthogonal Polynomials, International Journal of Image and Data Fusion, 1-16
- 24. Mohammad Ali Nematollahi, Hamurabi Gamboa-Rosales, Francisco J Martinez-Ruiz, I Jose, S.A.R. Al-Haddad, Mansour Esmaeilpour, (2017). Multi-factor Authentication Model Based On Multipurpose Speech Watermarking And Online Speaker Recognition, Journal Multimedia Tools and Applications, Springer US, pg 1-31
- 25. Asem Khmag, Abd Rahman Ramli, S.A.R.Al-haddad, Noraziahtulhidayu Kamarudin, (2017). Natural Image Noise Level Estimation Based on Local Statistics for Blind Noise Reduction, Visual Computer
- 26. Mohammad Ali Nematollahi, S.A.R Al-Haddad, Abdul Rahman Ramli, Azhar Kassim, Shaiful Jahari Hashim, (2017). Frequency Domain Processing For Artificial Synthesis of Swiftlet's Sound Waves, Journal of Telecommunication, Electronic and Computer Engineering (JTEC), Vol 9, Issue 1-3, Page 8 93
- 27. Abdulmawla Najih, S.A.R Al-Haddad, Abd Rahman Ramli, S. J. Hashim and Asem Khmag, (2017). Face Selection for Digital Image Watermarking, International Journal of Applied Engineering Research, Research India Publications. Vol 12, number 5.
- Sadiq H. Abdulhussain, Abd Rahman Ramli, Syed Abdul Rahman Al-Haddad, Basheera M. Mahmmod, Wissam A. Jassim, (2017). On Computational Aspects of Tchebichef Polynomials for Higher Polynomial Order, IEEE Access. Vol 5, pg 2470-2478.
- 29. Sura Khalil Abda, S.A.R Al-Haddad, Fazirulhisyam Hashimb, Azizol B.H.J. Abdullahc, Salman Yussof, (2017). An Effective Approach For Managing Power Consumption In Cloud Computing Infrastructure, Journal of Computational Science, Elsevier B.V.pg 12.
- 30. Abdulmawla Najih, S.A.R. Al-Haddad, Abd Rahman Ramli and S.J. Hashim, Mohammad Ali Nematollahi, (2016). An Overview of Multimodal Biometric Approaches Based on Digital Image Watermarking, Research Journal of Applied Sciences, Engineering and Technology 13(6): 481-494, 2016.

#### **Conference Proceedings (30 recent Conference Proceedings)**

- 1. NH Kamarudin, Bakri Madon, Eileen Ong, Rauf Hassan, S.A.R. Al-Haddad, Asem Khmag, 2019. Preliminary Identification of Speech Hoarseness from Cancer and Normal Speech, 2019 IEEE 6th International Conference on Engineering Technologies and Applied Sciences (ICETAS).
- 2. Sadiq H Abdulhussain, Basheera M Mahmmod, M Iqbal Saripan, S.A.R. Al-Haddad, Thar Baker, Wameedh N Flayyih, Wissam A Jassim, 2019. A fast feature extraction algorithm for image and video processing, 2019 international joint conference on neural networks (IJCNN)
- 3. Kavian Khosravinia, Mohd Khair Hassan, Syed Abdul Rahman Al-Haddad Ribhan Zafira Abdul Rahman, 2018. Improved Latency of CAN Vehicle Data Extraction Method, International Conference on Internet of Vehicles
- 4. Maryamsadat Hejazi, S.A.R. Al-Haddad, Shaiful Jahari Hashim, Ahmad Fazli Abdul Aziz, Yashwant Prasad Singh, 2017. Non-fiducial based ECG biometric authentication using one-class support vector machine, 2017 Signal Processing: Algorithms, Architectures, Arrangements, and Applications (SPA), Poland.



- Sura Khalil Abd, Syed Abdul Rahman Al-Haddad, Fazirulhisyam Hashim, Azizol BHJ Abdullah, Salman Yussof, 2017. Energy-aware fault tolerant task offloading of mobile cloud computing, 2017 5th IEEE International Conference on Mobile Cloud Computing, Services, and Engineering (MobileCloud), Macau.
- Sura Khalil Abd, Syed Abdul Rahman Al-Haddad, Fazirulhisyam Hashim, Azizol BHJ Abdullah, Salman Yussof, 2017. Energy-aware fault tolerant task offloading of mobile cloud computing, 2017 5th IEEE International Conference on Mobile Cloud Computing, Services, and Engineering (MobileCloud), USA.
- 7. SH Masoumi, Syed Abdul Rahman Al-Haddad, Fakhrul Zaman Rokhani, 2017. New tool for converting high-level representations of finite state machines to verilog HDL, 2017 IEEE 15th Student Conference on Research and Development (SCOReD)
- 8. Maryamsadat Hejazi, S.A.R. Al-Haddad, Shaiful Jahari Hashim, Ahmad Fazli Abdul Aziz, Yashwant Prasad Singh, (2016). Feature level fusion for biometric verification with two-lead ECG signals, 2016 IEEE 12th International Colloquium on Signal Processing & Its Applications (CSPA), IEEE pg 54-59
- 9. Paul Yong Ng, Chee Kyun Ng, Syed Abdul Rahman Al-Haddad, (2015). Physiotherapy for Elderly through Exergames using Microsoft Kinect Sensor, Journal Proceedings of the Asia-Pacific Advanced Network, pg 119-129
- 10. Abdulmawla Najih, Syed Abdul Rahman Al-Haddad, Abd Rahman Ramli, Shaiful Jahari Hashim, (2015). A New Colour Image Watermarking Technique Using Special Domain, IT Convergence and Security (ICITCS), 2015 5th International Conference, IEEE, pg 1-5
- Sura Khalil Abd, Rawia Tahrir Salih, S.A.R. Al-Haddad, Fazirulhisyam Hashim, Azizol B HJ Abdullah, Salman Yussof, (2015). Cloud Computing Security Risks With Authorization Access For Secure Multi-Tenancy Based On AAAS Protocol, Conference TENCON 2015-2015 IEEE Region 10 Conference, IEEE, pg 1-5
- 12. Sura Khalil Abd, S.A.R. Al-Haddad, Fazirulhisyam Hashim, Azizol Abdullah, A review of cloud security based on cryptographic mechanisms, Biometrics and Security Technologies (ISBAST), 2014 International Symposium IEEE, 106-111.
- 13. Noraziahtulhidayu Kamarudin, S.A.R. Al-Haddad, Shaiful Jahari Hashim, Mohammad Ali Nematollahi, Bin Hassan, Abd Rauf, Feature extraction using Spectral Centroid and Mel Frequency Cepstral Coefficient for Quranic Accent Automatic Identification, Research and Development (SCOReD), 2014 IEEE Student Conference, Batu Ferringhi.
- 14. MA Nematollahi, S.A.R. Al-Haddad, S Doraisamy, M Ranjbari, Digital speech watermarking for anti-spoofing attack in speaker recognition, Region 10 Symposium, 2014 IEEE, 476-479.
- 15. N Kamarudin, S.A.R. Al-Haddad, ARB Hassan, MAM Abushariah, Al-quran learning using mobile speech recognition: An overview, International Conference Computer and Information Sciences (ICCOINS), 2014.
- 16. M.A nematollahi, S.A.R al haddad, shymala doraisamy, Blind Digital Speech Watermarking based on Eigen-Value Quantization in DWT, TENSYMP 2014 IEEE conference, Kuala Lumpur
- 17. Asem Khmag, Abd Rahman Ramli, Syed Abdul Rahman Al-Haddad and Shaiful Jahari Bin Hashim, "A Detailed Study on Image Denoising Algorithms by Using the Discrete Wavelet Transformation". International Conference on Advances in Computer Science, Electronics & Communication Technologies 25th January, 2014 Bangkok, Thailand.
- 18. S.A.R Al-Haddad , Future Human Data, Keynotes The International Conference on Circuits, Power and Computing Technologies (ICCPCT-2013), India
- 19. A.K. Mwinyi, S.A.R. Al-Haddad, S. J. Hashim, R. Hj Abdullah, Adaptive Design Model on Heterogeneous Learning Management System (LMS) by Utilizing Multi-Agent System (MAS), 2nd International Conference on Computer Science and Data Mining (ICCSDM'13), Pattaya, Thailand
- 20. A.K. Mwinyi, S.A.R. Al-Haddad, S. J. Hashim, R. Hj Abdullah, Interoperability of Multi-Agent System in Heterogeneous Learning Management System (HLMS) by Deploying Wireless Sensor Networks (WSNS), Proceedings of the 4th International Conference on Computing and Informatics, ICOCI 2013 28-29 August, 2013 Sarawak, Malaysia.
- 21. A.K. Mwinyi, S.A.R. Al-Haddad, S. J. Hashim, R. Hj Abdullah, Intelligent Students Assessments and Teaching Activity Monitoring for Putra Learning Management System (PLMS), International Conference On Assessment For Higher Education Across Domains And Skills (AHEADS2013) Kuala Lumpur, 17-19 December 2013



- 22. M.A nematollahi, S.A.R al haddad, Shymaladoraisamy, Faranehzarafshan, Interacting Video Information via Speech Watermarking for Mobile Second Screen in Android Smartphone IEEE SCORED 2013
- 23. Che Yong Yeo, S.A.R. Al-Haddad, Chee Kyun Ng, Dog voice Identification (ID) for Detection System, Second International Conference on Digital Information Processing and Communications (ICDIPC), 2012, Klaipeda, Lithuania
- 24. MA Nematollahi, S.A.R. Al-Haddad, S Doraisamy, MIB Saripan, Digital Audio and Speech Watermarking Based on the Multiple Discrete Wavelets Transform and Singular Value Decomposition, Modelling Symposium (AMS), 2012 Sixth Asia, pg 109-114
- 25. H Faiiazee, R Abdullah, S.A.R. Al-Haddad, K Samsudin Text mining in bioinformatics: Past, present and future, International Information Retrieval & Knowledge Management (CAMP), 2012
- 26. Mohd Hafidz Mohamad Jamil, S.A.R. Al-Haddad and Chee Kyun Ng, A Flexible Speech Recognition System for Cerebral Palsy Disabled, Communications in Computer and Information Science" (CCIS) Series of Springer LNCS, 2011
- 27. M. Hafidz M. J., S.A.R. Al-Haddad, Chee Kyun Ng, 2011. Speech Recognition System for Cerebral Palsy, International Conference on Communications and Information Technology (CIT '11), Corfu, Greece, July 14-17, 2011.
- 28. Faraneh Zarafshan, Abbas Karimi, S. A. R. Al-Haddad, M. Iqbal Saripan, Shamala Subramaniam, 2011. A Preliminary Study on Ancestral Voting Algorithm for Availability Improvement of Mutual Exclusion in Partitioned Distributed Systems. International Conference on Computers And Computing (ICCC '11), Lanzarote, Canary Islands, Spain May 27-29, 2011.
- 29. Zarafshan, F., Karimi, A., A. B. Jantan and S.A.R. Al-Haddad, A Novel Fuzzy Diffusion Approach for Improving Energy Efficiency in Wireless Sensor Networks. In 3rd International Conference on Machine Learning and Computing (ICMLC 2011), 2011, Singapore, Scopus, ISI-P
- 30. Yeo Che Yong, S. A. R. Al-Haddad, Ng Chee Kyun "Animal Voice Recognition for Controlling Home Devices", The 7th International Colloquium on Signal Processing and its Applications (CSPA 2011), Penang, Malaysia, March 9-11, 2011.

#### Books (If any)

1. S.A.R. Al-Haddad, Mohd Hafidz Mohamad Jamil, and Chee Kyun Ng Cerebral Palsy Speech Recognition System, LAP Lambert Academic Publishing, 2012

### Chapter in Books (If any)

- Mohd Hafidz Mohamad Jamil, S.A.R. Al-Haddad and Chee Kyun Ng Chapter in Book, A Flexible Speech Recognition System for Cerebral Palsy Disabled, International Communications in Computer and Information Science" (CCIS) Series of Springer LNCS, 2011
- 3. Abd Rahman Ramli, Syed Abdul Rahman Syed Mohamed and Beh Kok Siang, Short Messaging Services (SMS) Past, Present and Future, Advanced Technology Research Bulletin, Institute of Advanced Technology, UPM, Vol. 2, No. 1, pp. 10-11, June 2004.
- 4. Mohd Yusof Ismail, Ab. Rahman Ramli, Napsiah Ismail, Syed Abd Rahman Al-Haddad, Rosiah Osman, Juraina Md Yusof and Muhammad Saufi Mohd Kassim (Editors) Advanced Technology Congress 2003, Universiti Putra Press 2004, ISBN 983-2871-55-7
- 5. Syed Abdul Rahman, Tan Cheng Hong, Abd Rahman Ramli, "World Wide Fax", Tribun Putra, Universiti Putra Malaysia, Mei/Jun 2002
- 6. Syed Abdul Rahman Al-Haddad, Book on C (On progress)

|    | Research Grants  |        |              |                |             |  |
|----|--|--------|--------------|----------------|-------------|--|
| No | Title  | Role   | Sponsor body | Amount<br>(RM) | Year/Status |  |
| 1. | SMS Gateway Interface                                      | Member | UPM          | RM 10,000      | 2002-2004   |  |
| 2. | Audio on Demand System Using RTP protocol Based on JMF API | Member | UPM          | RM 30,000      | 2002-2004   |  |



| 3. Remote Database Uploading Using Fax   | Head        | UPM  | RM 10,000  | 2002-2003<br>(Completed) |
|--|-------------|------|------------|--------------------------|
| Develop Fax Based Registration 4. Software   | Member      | UPM  | RM 10,000  | 2000-2002                |
| 5. Develop Fax Based Registration Software   | Head        | FRGS | RM 80,000  | 2000-2002<br>(Completed) |
| Development of Combinatorial  6. Optimisation for Cutting Tool Path Strategy                                 | Member      | RUGS | RM 70,000  | 2007-2009<br>(Completed) |
| Study on the Extraction and Freeze- 7. Drying Processes of Piper betle L.Standardized Extract                | Member      | UPM  | RM 57,000  | 2007-2009<br>(Completed) |
| Malay Digit Speech Recognition  8. System for Dysarthric   | Head        | RUGS | RM 30,000  | 2010-2011<br>(Completed) |
| The Design of Speech Segmentation  9. Algorithm For Malay News  Broadcasting                                 | Member      | FRGS | RM 50,000  | 2009-2011<br>(Completed) |
| 10. Modeling a Hybrid Mobile AD Hoc<br>Network Based Algorithm   | Head        | FRGS | RM 63,000  | 2012-2013<br>(Completed) |
| A novel dynamic distributed voting 11. algorithm for fault-tolerance in distributed systems                  | Head        | RUGS | RM 15,000  | 2012-2013<br>(Completed) |
| 12. Modeling Software agents on bioinformatics datasets  | Head        | RUGS | RM 25,000  | 2012-2013<br>(Completed) |
| 13. Intuitive Learning Environment in Higher Learning Institution  | Member      | GIPP | RM 10,000  | 2012-2014<br>(Completed) |
| Second Screen Video Via Mobile Digital Video Identification  | Head        | MDEC | RM 15,000  | 2013<br>(Completed)      |
| Swiftlets Wave Sound Detection, 15. Recognition and Synthesis through Spectrogram Processing                 | Head        | MOA  | RM 150,800 | 2013-2015<br>(Completed) |
| 16. Power quality stability and demand response analysis of power system                                     | Member      | UPM  | RM 150,000 | 2013-2015<br>(Ongoing)   |
| Exploring a New Interoperability 17. Model on Heterogeneous LMS by Utlizing Multi-Agent Systems (MAS)        | Head        | UPM  | RM 63,000  | 2013-2015<br>(Completed) |
| Fault Tolerant Control of Unmanned 18. Aerial Vehicles (UAVs) Flying in Swarms                               | l<br>Member | UPM  | RM 55,800  | 2013-2016<br>(Completed) |
| A Study On Subject Recognition Nor<br>19. Fiducial Electrocardiogram Biometri<br>System Using Kernel Methods |             | FRGS | RM 82,800  | 2014-2016<br>(Completed) |



| Data Transfer Security in Cloud Using Combination of Multicast Key Management and Symmetric Encryption Algorithm  | Head   | RUGS    | RM 20,000 | 2015-2016<br>(Completed) |
|---|--------|---------|-----------|--------------------------|
| Acoustic Echo Cancellation Using 21. Affine Projection Algorithm for Accents Automatic Identification   | Head   | GP      | RM 20,000 | 2016-2018<br>(Completed) |
| Resource Optimization and Safety Management for One Way EV Car Network Sharing System in UPM Campus Testbed   | Member | UPM     | RM27,000  | 2017-2018                |
| Reliable Wireless Network Systems 23. Using the Rotating Polarization Wave Technology   | Head   | HITACHI | RM60,000  | 2018-2019                |
| Smart Drive-Through Takeaway Utilizing Wirelessly Powered Passive Tag Automatic Identification for Vehicle Security and Services with Energy Harvesting. Capability | Member | МСМС    | RM130,000 | 2018-2020                |

|   | Awards/Recognition (Current) |      |   |  |  |
|---|------------------------------|------|---|--|--|
| - | Award                        | Year | Title   |  |  |
| 1 | Bronze Medal                 | 2002 | Syed Abdul Rahman Al-Haddad, Tan Cheng Hong, Abd Rahman Ramli and V. Prakash, "Fax Net View", at Invention, Innovation, Industrial Deasign Technology (I.TEX 2002) Kuala Lumpur, 29-31 Mac 2002.                                |  |  |
| 2 | 2 <sup>nd</sup> Runner Up    | 2002 | Tan Cheng Hong, Syed Abdul Rahman, Abd Rahman Ramli,<br>"Remote Database Uploading Using Fax", Shell-SPE-UTM<br>Inter-Varsity Student Paper Presentation Contest, University<br>Teknologi Malaysia, Skudai, Johor. 2-3 Feb 2002 |  |  |
| 3 | Celcom Award for 2002        | 2002 | Tan Cheng Hong, Syed Abdul Rahman, Abd Rahman Ramli,<br>"Remote Database Uploading Using Fax", 2002   |  |  |
| 4 | Winner PIKOM                 | 2003 | Abd Rahman Ramli, Syed Abdul Rahman Syed Mohamed, Beh Kok Siang, "SMS Gateway Interface", IPTA Research & Development Expositions, PWTC, Kuala Lumpur, 9-12, October, 2003.   |  |  |
| 5 | Timedotcom 2004              | 2004 | Mohd. Fairulrazi Md Fadzil, Syed Abdul Rahman Al-Haddad, Abd Rahman Ramli, "Wireless and mobile system for doctors in hospital", 2004.  |  |  |



| 6  | Excellence Award                       | 2006   | Syed Abdul Rahman Al-Haddad, Tan Cheng Hong, Abd Rahman Ramli and V. Prakash, "Fax Net View", at Invention, Innovation, Industrial Deasign Technology (I.TEX 2002) Kuala Lumpur, 29-31 Mac 2002.   |
|----|--|--|--|
| 7  | Bronze Medal                           | 2009   | S.A.R. Al-Haddad, S.A. Samad, A. Hussain, K.A. Ishak and A.O.A. Noor "Speech Recognition for Disable People" at Invention, Innovation, Industrial Design Technology (I.TEX 2009) KLCC Kuala Lumpur, 29-31 Mac 2009.  |
| 8  | Certificate                            | 2011   | Syed Abdul Rahman, Abdul Rahman Ramli, Rusli Abdullah,<br>Shaifulsahari Hashim at World Intellectual Property<br>Organization  |
| 9  | Excellence Award                       | 2006,<br>2010,<br>2011,<br>2012,<br>2013,<br>2014,<br>2015 | Excellence Award Year Achivements  |
| 10 | Certificate                            | 2014   | Mohammad Ali Nematollahi and S.A.R. Al-Haddad, Digital Speech Watermarking For Online Speaker Recognition Through G.722 VoIP Channel at Pameran Rekacipta, Penyelidikan dan Inovasi (PRPI) 2014  |
| 11 | Bronze Medal                           | 2015   | Prof. Madya Syed Abdul Rahman Al Haddad, Digital Speech Watermarking For Online Speaker Recognition Through G.722 VolP Channel   |
| 12 | Gold Medal                             | 2015   | Syed Abdul Rahman Al-Haddad and Abd Rahman Ramli,<br>GULAGA Second Screen Video Information via Mobile<br>Digital Video Identification at The World Exhibition on<br>Inventions, Researchs and New Technologies (INNOVA),<br>Brussels, Belgium.  |
| 13 | Special Award<br>form Jury<br>(Bosnia) | 2015   | Syed Abdul Rahman Al-Haddad and Abd Rahman Ramli,<br>GULAGA Second Screen Video Information via Mobile<br>Digital Video Identification at The World Exhibition on<br>Inventions, Research and New Technologies (INNOVA),<br>Brussels, Belgium.   |
| 14 | Young Scientist<br>Awards              | 2015   | Sura Khalil (UPM); Rawia Tahir (UPM); S.A.R Al-haddad (UPM); Fazirulhisyam Hashim (UPM); Azizol B Hj Abdullah (UPM); Salman Yussof (UNITEN)IEEE TENCON 2015, Macau   |
| 15 | Bronze Medal                           | 2016   | Syed Abdul Rahman Al Haddad, Rusli Abdullah, Shaiful Jahari Hashim, Heterogonous Learning Management Systems, at Invention & Innovation Awards 2016, Malaysia Technology Expo 2016, Kuala Lumpur   |
| 16 | Bronze Medal                           | 2016   | Shaiful Jahari Hashim, Ahmad Faeq Hussain, Ahmad Fazli<br>Abdul Aziz, Fakhrul Zaman Rokhani, Syed Abdul Rahman Al<br>Haddad, Wan Azizun Wan Adnan, Real Time Early<br>Detection of Heart Disease (Arrhythmia) by ECG Signals<br>Employing A Novel Time – Frequency Technique, PRPi16,<br>November 2016 |
| 17 | Silver Medal                           | 2016   | Syed Abdul Rahman Al Haddad, Sura Khalil Abd,<br>FazirulHisyam Hashim, Azizol B Hj Abdullah, Salman<br>Yussof, ENEFDA: Improving Energy Consumption in Cloud<br>Computing Data Centre, PRPi16, November 2016   |



| 18 | Silver Medal   | 2016 | Syed Abdul Rahman Al Haddad, Maryamsadat Hejazi,<br>Yashwant Prasad Singh, Shaiful Jahari Hashim, Ahmad<br>Fazli Abdul Aziz, Kernel Methods in ECG Biometrics,<br>PRPi16, November 2016   |
|----|--|------|---|
| 19 | Finalist Best of<br>Media and<br>Entertainment<br>Technology   | 2016 | Syed Abdul Rahman Al Haddad, Abd Rahman Ramli, Ali<br>Nematollah, GULAGA: Second Screen Video, APICTA<br>2016, 20 Oct 2016  |
| 20 | Silver Medal   | 2016 | Syed Abdul Rahman Al Haddad, Abd Rauf Hassan, Shaiful Jahari Hashim, Asem Khmag, NorAziahtulhidayu, Sheikh Qiraat: Accents Automatic Identification Through Feature Selection (Extended Ant Colony Optimization & Sequential Parameterizing) On Echo Cancellation & Pattern Classification. |
| 21 | Silver Medal   | 2017 | Syed Abdul Rahman Al-Haddad, Sura Khalil, Fazirulhisyam, Azizol, Salman Yussof, Improving Energy Consumption In Cloud Computing Data Centre, 28th International Invention, Innovation & Technology Exhibition 2017.   |
| 22 | UPM Excellence<br>Award  | 2018 | UPM Excellence Award Year Achivements   |
| 23 | NOMINATED OF<br>UNESCO – KING<br>HAMAD BIN AL-<br>KHALIFA PRIZE<br>FOR THE USE<br>OF ICT IN<br>EDUCATION | 2017 | Heterogeneous Learning Management System (HLMS) model fulfils the needs of the higher institutions to share learning contents in web-based system.  |

# **Professional Services/Consultation**

| N<br>o | Name of project   | Role            | Institution   | Year       |
|--------|---|-----------------|---|------------|
| 1      | Industry Research and<br>Development Grant<br>Scheme (IGS)                    | Panel           | Ministry of Science<br>Technology and<br>Innovation (MOSTI)<br>MOSTI, Parcel C, Putra<br>Jaya | 2003- 2005 |
| 2      | Prepare course content for Petronas Oil and Gas                               | Consultant      | Petronas  | 2011       |
| 3      | Malaysia Qualification<br>Agency  | Senior Panel    | MQA, Malaysia   | 2011       |
| 4      | Second Screen Video<br>Information via Mobile<br>Digital Video Identification | Project Manager | WAFINA and MDEC   | 2013       |
| 5      | Lecture to Petronas on<br>Security and Surveillance                           | Lecture         | Petronas  | Dec 2014   |
| 6      | Review on 3D Anamophic  | Expert Matter   | MTDC  | 2016       |
| 7      | MyCOMS Project  | Researcher      | Toyota Auto Body<br>(Malaysia) Sdn Bhd  | 2016       |



Reliable Wireless
Network Systems Using the Rotating Polarization
Wave Technology

Researcher

HITACHI JAPAN

2018

# **Student Supervision**

## PhD (Main Supervisor)

|     | ול (wain St      | <u> </u>                                 |         |   |
|-----|------------------|--|---------|---|
| No  | Year<br>Enrolled | Name of<br>Student                       | Matric  | Project Title   |
| 1.  | 2010             | Faraneh<br>Zarafshan                     | GS25621 | PERMISSION-BASED FAULT TOLERANT MUTUAL EXCLUSION ALGORITHM FOR MOBILE AD HOC NETWORKS   |
| 2.  | 2011             | Amir Kombo<br>Mwinyi                     | GS31558 | SYNCHRONIZATION COMMUNICATION COST ON HETEROGENEOUS LEARNING MANAGEMENT SYSTEM MODEL USING MULTI-AGENT RSYNC ALGORITHM                      |
| 3.  | 2011             | Mohamad Ali<br>Nemattolahi               | GS31565 | Digital Speech Watermarking For Online Speaker Recognition  |
| 4.  | 2012             | Maryam Sadat<br>Hejazi                   | GS33580 | NON-FIDUCIAL BASED ELECTRODARIOGRAM BIOMETRICS WITH KERNEL METHODS  |
| 5.  | 2012             | AbdulMawla<br>Najih                      | GS35603 | SECURING MULTIBIOMETRIC AUTHENTICATION<br>SYSTEM USING FRAGILE WATERMARKING AND<br>CONVOLUTIONAL NEURAL NETWORK                             |
| 6.  | 2013             | Noraziahtulhiday<br>u Binti<br>Kamarudin | GS37053 | Qira'at Identification Through Sequential Windowing<br>Parameterizing And X-Ant Colony Optimization   |
| 7.  | 2013             | Sura Khalil Abd                          | GS37091 | Improving Energy Consumption in Cloud Computing Datacenter using a Combination of Energy Aware Resource Allocation and Scheduling Mechanism |
| 8.  | 2014             | Hasan<br>Mohammad<br>Hasan<br>Abdelqader | GS40829 | Real-time Robust and Secure Communications in Vehicular Ad Hoc Networks (VANETs)  |
| 9.  | 2018             | Shahril Azwin bin<br>Zainul Abidin       | GS53878 |   |
| 10. | 2019             | Suresh Kumar<br>Natarajan                | GS54210 | Distance Speech Recognition for controlling home appliances using Microphone Array and Beamforming  |

## **MS** with thesis (Main Supervisor)

|     | Titli tilesis (Maili Gapei Visor)        |   |
|-----|--|---|
| No. | Name                                     | Title   |
| 1.  | Kamala Ernest (GSO6628)                  | Online energy- use benchmarking for industries in Malaysia  |
| 2.  | Isah Abdul Azeez Watson (GS29893)        | Reinforcement of Security Architecture for RFID- Based Authentication protocol in Mobile Payment Platform |
| 3.  | Seyed Hossein Masoumid Ezfouli (GS30876) | Sound Localization Detection  |
| 4.  | Laith Emad Hamid (GS31508)               | Automated Plant Classification System using a   |

