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EDUCATION

2007 - 7 Feb 2013	NANYANG TECHNOLOGICAL UNIVERSITY Singapore Doctor of Philosophy <i>Title : Cognitive-Inspired Speaker Affective State Profiling ~Without Correction</i>
2002 - 2005	UNIVERSITI MALAYA Kuala Lumpur, Malaysia Master of Software Engineering (MSE) <i>Thesis : An Animated Agent for Multiple Programming Platforms Methodology CGPA: 3.55 out of 4</i>
1998 - 2001	UNIVERSITI KEBANGSAAN MALAYSIA Bangi, Selangor, Malaysia Bachelor of Information Technology (Computer Science) <i>Final Year Project : Flow Chart Generator based on Pseudo Code CGPA: 2nd Class Upper 3.15 out of 4</i>
1992 - 1996	SEKOLAH MENENGAH SULTAN ABDUL HALIM Jitra, Kedah, Malaysia <i>SPM : (1996) 9 Agregates PMR : (1994) 8As out of 8 subjects</i>
1986 - 1991	SEKOLAH KEBANGSAAN JERAM MENGGUANG Bidor, Perak, Malaysia <i>UPSR : (1991) 4As out of 4 subjects</i>

PROFESIONAL AFFILIATION

International	International Speech Communication Association (ISCA) <i>Student member since 2009</i> International Society for Computers and their Applications (ISCA) <i>Member since 2008</i> The European Network of Excellence HUMAINE (Human-Machine Interaction Network on Emotion) <i>Student member since 2009</i> The Institute of Electrical and Electronics Engineers (IEEE) <i>Member since 2012</i>
National	Persatuan Capaian Maklumat dan Pengurusan Pengetahuan (PECAMP) <i>Lifelong membership since 2011</i>

WORK EXPERIENCE

7 February 2013 - present	UNIVERSITY TEKNOLOGI MARA (UiTM) Shah Alam, Selangor, Malaysia Faculty of Computer and Mathematical Sciences <i>Lecturer (DM51)</i> <i>Confirmation: 19 April 2014</i>
24 January 2011 - 6 February 2013	UNIVERSITY TEKNOLOGI MARA (UiTM) Shah Alam, Selangor, Malaysia Faculty of Computer and Mathematical Sciences <i>Lecturer (DM45)</i>
2007 - 2010	UNIVERSITY TEKNOLOGI MARA (UiTM) Shah Alam, Selangor, Malaysia Faculty of Computer and Mathematical Sciences <i>PhD scholar</i>
2001 - 2006 <i>Jan 2006 - Dec 2006</i> <i>Apr 2001 - Dec 2005</i>	KOLEJ PTPL Shah Alam, Selangor, Malaysia <i>Lecturer</i> <i>Tutor</i>

INDUSTRIAL TRAINING EXPERIENCE

Jun 2000 - Nov 2000	KOLEJ LATIHAN TELEKOM (UTARA) MALAYSIA Taiping, Perak, Malaysia <i>Programmer</i>
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RESEARCH ACTIVITIES

Specific area of interest	Speech emotion recognition, inter and intra cultural assessment, speech emotion profiling, related application for speech emotion, cerebellar model articulation control, EEG, human behavior analysis particularly on driver behavior, correlation between human brain signal and speech, neural network and fuzzy neural network\
Related area of interest	Speech technology, robotic, intelligent tutoring system, intelligent agent, data mining, digital signal processing, in-vehicle safety system
Reviewer	<ul style="list-style-type: none"> • IEEE Transaction on Human-Machine System, IEEE • Computer Methods and Programs in Biomedicine, Elsevier • Informatics in Medicine Unlocked, Elsevier • Computational and Mathematical Method in Medicine, Hindawi • The Journal of the Franklin Institute, Elsevier • Journal Engineering Science and Technology, Elsevier • Computers in Biology and Medicine, Elsevier • Journal of Advance Computer Science and Technology Research, Design for Scientific Research (DSR) • International Journal of Information Technology and Decision Making, World Scientific <p>The 16th International Conference on Neural Information Processing (ICONIP 2009) Bangkok, Thailand, December 1-5, 2009</p>

The 23rd International Conference on Computers and Their Applications in Industry and Engineering (CAINE 2010) Las Vegas, Nevada, USA, November 8-10, 2010

The 17th International Conference on Neural Information Processing (ICONIP 2010) Sydney, Australia, November 22-25, 2010

The 14th International IEEE Conference on Intelligent Transportation Systems (ITSC 11) Washington D. C., USA, October 5 – 7, 2011

The 24th International Conference on Computers and Their Applications in Industry and Engineering (CAINE 2011) Las Vegas, Nevada, USA, November 16 -18, 2011

The 2012 IEEE Symposium on Humanities, Science & Engineering Research (SHUSER 2012), Kuala Lumpur, Malaysia, June 24 -27, 2012

The International Conference on Computer and Information Sciences (ICCIS 2012), Kuala Lumpur, June 12 – 14, 2012

The 34th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC '12), San Diego, USA, 28 August – 1 September, 2012

The IEEE Symposium on Business, Engineering & Industrial Applications (ISBEIA 2012), Bandung, Indonesia, 23 -26 September 2012

The 25th International Conference on Computers and Their Applications in Industry and Engineering (CAINE 2012), New Orleans, Louisiana, USA, November 14 -16, 2012

The 2012 IEEE Colloquium on Humanities, Science and Engineering Research (CHUSER 2012), Kota Kinabalu, Sabah, Malaysia, 3 – 4 December 2012

The 2013 IEEE Business, Engineering and Industrial Applications Colloquium (BEIAC 2013), Langkawi, Kedah, Malaysia, 7 -9 April 2013

The 2013 IEEE Symposium on Humanities, Science & Engineering Research (SHUSER 2013), Penang, Malaysia, June 23 -26, 2013

The 26th International Conference on Computers and Their Applications in Industry and Engineering (CAINE 2013), Los Angeles, California, USA, September 25 - 27, 2013

The 4th International Conference on Information and Communication Technology for the Muslim World (ICT4M 2013), Rabat, Morocco, March 25 – 27, 2013

The 35th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC '13), Osaka, Japan, 3 – 7 July, 2013

The 2014 IEEE Colloquium on Humanities, Science and Engineering Research (CHUSER 2014), Penang, Malaysia, 7 – 9 April 2014

The 2013 IEEE Symposium on Business, Engineering and Industrial Applications (ISBEIA 2013), Kuala Lumpur, Malaysia, 22 – 25 September 2013

The 6th International IEEE EMBS Neural Engineering Conference (NER 2013), San Diego, California, USA, 6 – 8 November 2013

The 2nd Middle East Conference on Biomedical Engineering (MECBME 2014), Doha, Qatar, 17 – 20 February 2014

The 27th International Conference on Computers and Their Applications in Industry and Engineering (CAINE 2014), New Orleans, Louisiana, USA, October 13 - 15, 2014

The 36th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC '14), Chicago, Illinois, USA, 26 – 30 August, 2014

The 5th International Conference on Information and Communication Technology for the Muslim World (ICT4M 2014), Kuching, Sarawak, Malaysia, November 17 – 19, 2014

The 2014 International Symposium on Research of Arts, Design and Humanities (ISRADH 2014), Kota Kinabalu, Sabah, Malaysia, September 28 – October 1, 2014

The 2014 IEEE Symposium on Business, Engineering & Industrial Applications (ISBEIA 2014), Kota Kinabalu, Sabah, Malaysia, September 28 – October 1, 2014

The 7th International IEEE EMBS Neural Engineering Conference (NER 2015), Montpellier, France, April 22 – 24, 2015

The 1st International Conference of Computer Science and Technologies' Engineering, Dubai, UAE, March 8 – 9, 2015

The 28th International Conference on Computers and Their Applications in Industry and Engineering (CAINE 2015), New Orleans, Louisiana, USA, October 12 -14, 2015

The 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC'15), Milan, Italy, August 25 – 29, 2015

The 2015 Recent Advancement in Informatics, Electrical and Electronics Engineering International Conference (RAIEIC 2015), Medan, Indonesia, December 8 – 10, 2015

The International Conference on Biomedical and Health Informatics (BHI 2016), Las Vegas, Nevada, Februari 24 -27, 2016

The 8th International IEEE EMBS Neural Engineering Conference (NER 2017), 25 Mac – 28 Mac 2017, Shanghai, China.

The 39th Annual International Conference of the Engineering in Medicine & Biology Society (EMBC 2017), 11 Jul – 15 Jul 2017, Jeju Island, Korea.

The 30th International Conference on Computer Applications in Industry and Engineering (CAINE 2017), 2 Oct – 4 Oct 2017, San Diego, US.

The 16th International Conference on Intelligent Software Methodologies, Tools and Techniques, 26 Sep – 28 Sep 2017, Kitakyushu, Japan.

The International Conference on Biomedical and Health Informatics (BHI 2017), 16 Feb – 19 Feb 2017, Florida, US.

The 5th International Conference on Advanced Computer Science Applications and Technologies (ACSAT 2017), 11 Dec – 14 Dec 2017, Kuala Lumpur.

The International Conference on Soft Computing in Data Science (SCDS 2017), 27 Nov – 28 Nov 2017, Yogyakarta, Indonesia.

The International Conference on Biomedical and Health Informatics (BHI 2018), 4 Mac – 7 Mac 2018, Las Vegas, US.

The 38th Annual International Conference of the Engineering in Medical and Biology Society 2016 (EMBC 2016), 16 - 20 Aug 2016 Orlando, Florida, USA.

The 29th International Conference on Computer Applications in Industry and Engineering 2016 (CAINE 2016), 26 - 28 Sep 2016, Denver, Colorado, US.

Art and Design International Conference 2016 (AnDIC 2016), 9 -12 October 2016, Shah Alam, Selangor, Malaysia.

International Conference on Collective Human Intelligence and Crowd Sourcing Applications 2016 (ICHICA 2016), 5 -6 Oct 2016, Putrajaya, Malaysia.

International Conference on Information Science, Technology, Management, Humanities and Business 2016 (ITMAHuB 2016), 21 - 23 Nov 2016, Penang, Malaysia.

The International Conference on Biomedical and Health Informatics 2017 (BHI 2017), 16 - 19 Feb 2017, Orlando, Florida, USA,

International Program
Committee

Chair for ICT for Education & Training Track

The 4th International Conference on Information and Communication Technology for the Muslim World (ICT4M 2013), Rabat, Morocco, March 25 – 27, 2013

Programme Committee

Workshop on Cultural Characters in Games and Learning (CCGL 2013), Edinburgh, United Kingdom, 28 August 2013

Secretary Co-chair & Master of Ceremony

The 10th Asia Information Retrieval Societies Conference (AIRS 2014), Kuching, Sarawak, Malaysia, December 3 – 5, 2014

National Program
Committee

Secretary for Bidding

The 9th Asia Information Retrieval Societies Conference (AIRS 2013), Kuching, Sarawak, Malaysia

Secretary for Bidding

The 10th Asia Information Retrieval Societies Conference (AIRS 2014), Kuching, Sarawak, Malaysia, December 3 – 5, 2014

Chair for Web 2.0 and Data Mining

Malaysian Conference on Information System (MCIS2013), Kota Kinabalu, Sabah, Malaysia, February 13 – 16, 2013

Master of Ceremony for Keynote Speech

The 3rd International Conference on User Science and Engineering (i-USer 2014), Shah Alam, Selangor, Malaysia, August 26, 2014

PUBLICATION

JOURNAL

1. **Kamaruddin N.** and Wahab A. Features Extraction for Speech Emotion. Journal of Computational Methods in Science and Engineering (JCMSE), Vol. 9, Supplement 1, pp. S1-S12, 2009.
2. Wahab, A., **Kamaruddin, N.**, Palaniappan, L. K., Li, M., Khosrowabadi, R. EEG Signals for Emotion Recognition. Journal of Computational Methods in Science and Engineering (JCMSE), Vol 10, Supplement 1, pp. S1-S11, 2010
3. **Kamaruddin, N.**, Wahab, A. and Chai, Q. Cultural Dependency Analysis for Understanding Speech Emotion. Expert Systems with Applications (ESWA), Vol. 39, Issue 5, 5115 – 5133, April 2012
4. **Kamaruddin, N.** and Wahab, A. Investigation on Dynamic Speech Emotion from the Perspective of Brain Associative Memory. Procedia- Social and Behavioral Sciences, Vol. 97 (2013), pp. 46 – 53, 2013
5. Yaacob, Y., Wahab, A. and **Kamaruddin, N.** CMAC-based Computational Model of Affect (CCMA) from Self-organizing Feature Mapping Weight for Classification of Emotion using EEG Signals. International Journal of Computers and Their Applications, Vol. 22, Issue 1, 31 – 42, 2015
6. Qayoom, A., Wahab, A., **Kamaruddin, N.** and Zahid. Artifacts Classification in EEG Signals based on Temporal Average Statistic. Jurnal Teknologi, Vol. 77, Issue 7, 73 – 77, 2015.
7. **Kamaruddin, N.**, Wahab, A. and Sayuti, A. A. K. Cultural-influenced Speech Emotion Recognition System using Multi-Layer Perceptron and Support Vector Machine. Advanced Science Letters, Vol. 21, Issue 10, 3009 – 3013, 2015
8. Alarabi, K. F., Wahab, A., Dzulkifli, M. A. and **Kamaruddin, N.** Understanding the Correlation of Explicit and Implicit Memory Effectiveness using Electroencephalograph-based Emotional Arousal. Advanced Science Letters, Vol. 21, Issue 10, 3142 – 3145, 2015.
9. **Kamaruddin, N.**, Wahab, A., Mazlan, M. J. and Norzilan, N. A. Universality and Diversity of Cultural-Influenced Speech Emotion Recognition System. Social Sciences, Vol 11, Issue 16, 3828 – 3832, 2016.
10. **Kamaruddin, N.**, Handayani, D. and Wahab, A. Computational Visualization of Customer Mood using Affective Space Model Approach, Frontiers in Artificial Intelligence and Applications, Vol 297, 298 – 311, 2017.
11. Alarabi, K. F., Wahab, A., Dzulkifli M. A. and **Kamaruddin, N.** A Conceptual Framework for Personality Modelling in

Correlation with EEG-based Affect, *Science International*, Vol. 29, Issue 4, 803 – 808, 2017.

CONFERENCE

1. Syed Mustapha, S. M. F. D. and **Kamaruddin, N.** *Methodology for Building Tool in Constructing Animated Agent Using ActiveX Technology*. In: Proceeding of the International Conference in Information Technology and Communication in Management (ICTM 05) 23 - 25 May 2005, Malacca, Malaysia
2. Wahab, A., Wen T. G. and **Kamaruddin, N.** *Understanding Driver Behavior Using Multi-dimensional CMAC*. In: Proceeding of the 6th International Conference on Information, Communication & Signal Processing. (ICICS '07) Pp. 1-5, 10 - 13 Dec 2007, Singapore
3. **Kamaruddin, N.** and Wahab, A. *Feature Extraction for Speech Emotion*. In: Proceeding of the 17th International Conference on Software Engineering and Data Engineering (SEDE '08), Pp. 120-125, 30 June – 2 July 2008, Los Angeles, California, USA
~Nominated for best paper award
4. **Kamaruddin, N** and Wahab, A. *Speaker Independent Emotion Recognition System – SIERS*. In: Proceeding of the 2008 International Conference on Artificial Intelligence (ICAI '08). Pp. 10-15, 14 - 17 Jul 2008, Las Vegas, Nevada, USA
5. Wahab, A., Keat, H. W. and **Kamaruddin, N.** *CMAC-GMM Driver Verification*. In: Proceeding of the 2008 International Conference on Artificial Intelligence (ICAI '08). Pp. 269-274, 14 - 17 Jul 2008, Las Vegas, Nevada, USA
6. Khalid, M., Wahab, A. and **Kamaruddin, N.** *Real Time Driving Data Collection and Driver Verification Using CMAC-MFCC*. In: Proceeding of the 2008 International Conference on Artificial Intelligence (ICAI '08). Pp. 219-224, 14 - 17 Jul 2008, Las Vegas, Nevada, USA
7. **Kamaruddin, N.** and Wahab, A. *Speech Emotion Verification System (SEVS) Based On MFCC For Real Time Applications*. In: Proceeding of the 4th International Conference on Intelligent Environments (IE '08). Pp. 1-7, 21 - 22 Jul 2008, Seattle, Washington, USA
8. **Kamaruddin, N.** and Wahab, A. *Speech Emotion Verification and Profiling*. In: Proceeding of the 21st International Conference on Computer Applications in Industry and Engineering (CAINE '08). Pp. 44-49, 12 - 14 Nov 2008, Honolulu, Hawaii, USA
9. Wahab, A, **Kamaruddin, N.** and Khalid, M. *CMAC for Driver Behavior Profiling Based on Real-Time Driving Data*. In: Proceeding of 21st International Conference on Computer Applications in Industry and Engineering (CAINE '08). Pp. 215-220, 12 - 14 Nov 2008, Honolulu, Hawaii, USA
10. **Kamaruddin, N.** and Wahab, A. *Speech Emotion Profiling for Inter and Intra Cultural Assessment* In: Proceeding of the 18th International Conference on Software Engineering and Data Engineering (SEDE '09), Pp. 275-280, 22 - 24 June 2009, Las Vegas, Nevada, USA
11. Wahab, A., **Kamaruddin, N** and Palaniappan, L. *EEG Signals*

- for Emotion Recognition* In: Proceeding of the 18th International Conference on Software Engineering and Data Engineering (SEDE '09), Pp. 289-294, 22 - 24 June 2009, Las Vegas, Nevada, USA
12. **Kamaruddin, N.**, Wahab, A. and Abut, H. *Driver Emotion Profiling from Speech* In: Proceeding of the 4th Biennial Workshop on DSP for In-Vehicle Systems and Safety, 24 - 27 Jun 2009, Dallas, Texas, USA
 13. **Kamaruddin, N.** and Wahab, A. *CMAC for Speech Emotion Profiling* In: Proceeding of the 10th Annual Conference of the International Speech Communication Association (INTERSPEECH 2009), 6 - 10 Sep 2009, Brighton, England, UK
 14. **Kamaruddin, N.** and Wahab, A. *Cultural Influence on Speech Emotion Identification* In: Proceeding of the 25th International Conference of the Computer and its Applications (CATA 2010), 24 - 26 Mac 2010, Honolulu, Hawaii, USA
 15. **Kamaruddin, N.** and Wahab, A. *Driver Behavior Analysis Through Speech Emotion Understanding* In: Proceeding of the 2010 IEEE Intelligent Vehicle Symposium (IV 2010), Pp. 238-243, 21 - 24 June 2010, San Diego, California, USA
 16. Nor, N. M., Wahab, A., **Kamaruddin, N.** and Majid, H. *Post Accident Analysis of Driver Affection* In: Proceeding of 2011 IEEE 15th International Symposium on Consumer Electronics (ISCE '2011), pp. 278 - 283, 14 - 17 June 2011, Singapore
 17. Rahnuma, K. S., Wahab, A., **Kamaruddin, N.** and Majid, H. *EEG Analysis for Understanding Stress Based on Affective Model Basis Function* In: Proceeding of 2011 IEEE 15th International Symposium on Consumer Electronics (ISCE '2011), pp. 592 - 597, 14 - 17 June 2011, Singapore
 18. Nor, N. M., Wahab, A., **Kamaruddin, N.** and Abut, H. *Valence-Arousal Analysis for Understanding Driver Behavior*, In: Proceeding of the 5th Biennial Workshop on Digital Signal Processing for In-Vehicle Systems, 4 - 7 September 2011, Kiel, Germany
 19. **Kamaruddin, N.** and Wahab, A. *Heterogeneous Driver Behavior State Recognition using Speech Signal*, In: Proceeding of The 10th WSEAS International Conference on System Science and Simulation in Engineering (ICOSSE 2011), pp. 207-212, 3 - 5 October 2011, Penang, Malaysia
 20. Nor, N. M., Wahab, A., **Kamaruddin, N.** and Majid, H. *Pre-Post Accident Analysis Relates to Pre-cursor Emotion for Driver Behavior Understanding* In: Proceeding of The 11th WSEAS International Conference on Recent Researches in Applied Informatics and Remote Sensing (ACS 2011), pp. 152-157, 3 - 5 October 2011, Penang, Malaysia
 21. **Kamaruddin, N.** and Wahab, A. *Human Behavior State Profile Mapping Based on Recalibrated Speech Affective Space Model* In: Proceeding of The 34th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC '12), pp. 2021 - 2024, 28 August - 1 September, 2012, San Diego, USA
 22. Yaacob, H., Karim, I., Wahab, A. **Kamaruddin, N.** *Two Dimensional Affective State Distribution of the Brain under*

- Emotion Stimuli*, In: Proceeding of The 34th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC '12), pp. 6052 - 6055, 28 August - 1 September, 2012, San Diego, USA
23. **Kamaruddin, N.** and Wahab, A. *Emulating Human Cognitive Approach for Speech Emotion Recognition using MLP and GenSoFNN*, In: Proceeding of The 4th International Conference on Information and Communication Technology for the Muslim World (ICT4M '13), pp. 1 - 5, 25 - 27 March, 2013, Rabat, Morocco
 34. Karim, I., Wahab, A. and **Kamaruddin, N.** *Classification of Dyslexic and Normal Children during Resting Condition using KDE and MLP*, In: Proceeding of The 4th International Conference on Information and Communication Technology for the Muslim World (ICT4M '13), pp. 1 - 5, 25 - 27 March, 2013, Rabat, Morocco
 25. Yaacob, H., Wahab, A. and **Kamaruddin, N.** *Classification of EEG Signals using MLP based on Categorical and Dimensional Perceptions of Emotions*, In: Proceeding of The 4th International Conference on Information and Communication Technology for the Muslim World (ICT4M '13), pp. 1 - 5, 25 - 27 March, 2013, Rabat, Morocco
 26. Yaacob, H., Wahab, A., Dzulkifli, M. A. and **Kamaruddin, N.** *Extracting Affective Valence using Cerebellar Model Articulation Controller (CMAC)*, In: Proceeding of 26th International Conference on Computer Applications in Industry and Engineering (CAINE 2013), pp. 135 - 140, 25 - 27 September 2013, Los Angeles, California, USA
 27. **Kamaruddin, N.** and Wahab, A. *Valence-arousal Approach for Speech Emotion Recognition System*, In: Proceeding of The 10th International Conference on Electronics, Computer and Computation (ICECCO 2013), pp. 184 - 187, 7 - 9 November, 2013, Ankara, Turkey
 28. Yaacob, H., **Kamaruddin, N.** and Wahab, A. *Brain Topographic Mapping of Emotions using Computational Cerebellum*, In: Proceeding of The 10th International Conference on Electronics, Computer and Computation (ICECCO 2013), pp. 28 - 31, 7 - 9 November, 2013, Ankara, Turkey
 29. **Kamaruddin, N.** and Wahab, A. *Measuring Customer Perceptions Index using CMAC Speech Emotion Mapping*, The 2013 International Conference on Advanced Computer Science Applications and Technologies (ACSAT 2013), pp. 352- 357, 23 - 24 December 2013, Kuching, Sarawak, Malaysia
 30. Karim, I., Qayoom, A., Wahab, A. and **Kamaruddin, N.** *Early Identification of Dyslexic Preschoolers based on Neurophysiological Signals*, The 2013 International Conference on Advanced Computer Science Applications and Technologies (ACSAT 2013), pp. 362- 366, 23 - 24 December 2013, Kuching, Sarawak, Malaysia
 31. Yaacob, H., Wahab, A. and **Kamaruddin, N.** *Extracting Features using Computational Cerebellar Model for Emotion*

- Classification*, The 2013 International Conference on Advanced Computer Science Applications and Technologies (ACSAT 2013), pp. 367 - 372, 23 - 24 December 2013, Kuching, Sarawak, Malaysia
32. **Kamaruddin, N.** and Wahab, A. *Analysis of Dyslexic Children Dynamic Emotion Trajectory during Executive Function Tasks*, In: Proceeding of The 27th International Conference on Computer Applications in Industry and Engineering (CAINE 2014), pp. 175- 180, 13 - 15 October 2014, New Orleans, Louisiana, USA
33. Alarabi, K. F., Wahab, A., Dzulkifli, M. A. and **Kamaruddin, N.** *Neuro-cognitive Correlation of Memory Effectiveness and Emotional Arousal*, In: Proceeding of The 27th International Conference on Computer Applications in Industry and Engineering (CAINE 2014), pp. 169- 174, 13 - 15 October 2014, New Orleans, Louisiana, USA
34. Qayoom, A., Wahab, A. and **Kamaruddin, N.** *Analysis of EEG Signals using Mathematical Morphology Decomposition and Kurtosis: Detection of Epileptiforms*, In: Proceeding of The 27th International Conference on Computer Applications in Industry and Engineering (CAINE 2014), pp. 125- 130, 13 - 15 October 2014, New Orleans, Louisiana, USA
35. Yaacob, H., Wahab, A. and **Kamaruddin, N.** *Subject-dependant and Subject-independent Emotional Classification of CMAC-based Features using EFuNN*, In: Proceeding of The 27th International Conference on Computer Applications in Industry and Engineering (CAINE 2013), pp. 113 - 118, 13 - 15 October 2014, New Orleans, Louisiana, USA
~ **Best Paper Award**
36. **Kamaruddin, N.**, Wahab, A. and Abdullah, N. S. *Speech Emotion Identification Analysis based on Different Spectral Feature Extraction Methods*, In: Proceeding of The 5th International Conference on Information and Communication Technology for the Muslim World (ICT4M 2014), pp. 1 -5, 17 - 19 November 2014, Kuching, Sarawak, Malaysia
37. Yaacob, H., Wahab, A., Shaikhli, I. F. and **Kamaruddin, N.**, *CMAC-based Computational Model of Affects (CCMA) for Profiling Emotion from EEG Signals*, In: Proceeding of The 5th International Conference on Information and Communication Technology for the Muslim World (ICT4M 2014), pp. 1 -6, 17 - 19 November 2014, Kuching, Sarawak, Malaysia
38. Qayoom, A., Wahab, A. and **Kamaruddin, N.** *Detection of Eye Blink from EEG Signals using Mathematical Morphology*, In: Proceeding of The 28th International Conference on Computer Applications in Industry and Engineering (CAINE 2015), pp. 251 - 255, 12 - 14 October 2015, San Diego, California, USA
39. **Kamaruddin, N.**, Wahab, A., Halim, K. I. and Noh, M. I. M. *Driver Behavior State Recognition based on Silence Removal Speech*, In: Proceeding of The 1st International Conference on Informatics and Computing (ICIC 2016), pp. 186 - 191, 28 - 29 October 2015, Mataram, Lombok, Indonesia
~ **Best Paper Award**

CHAPTER(S) in BOOK

40. Hulliyah, K., Wahab, A., **Kamaruddin, N.**, Erdogan, S. and Durachman, Y. *Analysis of Indonesian Sentiment Text Based on Affective Space Model (ASM) using Electroencephalogram (EEG) Signals*, In: Proceeding of The 1st International Conference on Informatics and Computing (ICIC 2016), pp. 325 - 328, 28 - 29 October 2015, Mataram, Lombok, Indonesia
 41. **Kamaruddin, N.**, Wahab, A. and Shah, A. N. R. *Measuring Customer Satisfaction through Speech using Valence-Arousal Approach*, In: Proceeding of The 6th International Conference on Information and Communication Technology for the Muslim World (ICT4M 2016), pp. 298 - 303, 22 - 24 November 2016, Jakarta, Indonesia.
 42. **Kamaruddin, N.**, Wahab, A. and Handayani, D. *Pornography Addiction Detection based on Neurophysiological Computational Approach*, In: Proceeding of The 5th International Conference on Advanced Computer Science Applications and Technologies (ACSAT 2017), 11 - 14 November, 2017, Kuala Lumpur, Malaysia.
~ **Best Paper Award**
1. **Kamaruddin, N.**, Wahab, A. and Abut, H. *Driver Emotion Profiling from Speech (Chapter 2)*, DSP (Digital Signal Processing) for In-Vehicle Systems and Safety, J. H. L. Hansen, P. Boyraz, K. Takeda, H. Abut (Eds.), New York: Springer Science + Business Media, 2012, pp. 21 - 29
 2. Wahab, A., Kamaruddin, N., Md. Nor, N. and Abut, H. Pre- and Post-Accident Emotion Analysis on Driving Behavior (Chapter 13), *Smart Mobile In-vehicle Systems: Next Generation Advancements*, G. Schmidt, H. Abut, K. Takeda, J. H. L. Hansen (Eds.), New York: Springer Science + Business Media, 2014, pp. 225 - 239
 3. Handayani, D., Wahab, A., **Kamaruddin, N.** and Abut, H. (2017) Correlation of Neurophysiological Measurement of Anxiety and Driving Behavior, *Vehicle Systems and Driver Modelling*, H. Abut, J. H. L. Hansen, K. Takeda, G. Schmidt and H. Ko (Eds.), Germany: Walter de Gruyter (GmbH)

GRANT

2011

- MONITORING OF THE AAIBE-FUNDED STAND ALONE PHOTOVOLTAIC POWER SYSTEMS
- Co-researcher
 - Reference: 100 - RMI/GOV 16/6/2 (21/2011)
 - Financing Institution: Kementerian Tenaga, Teknologi Hijau dan Air (KeTTHA)
 - Amount: RM 1, 976, 680.00
 - Duration : 1st August 2011 - 31st July 2013 (24 months)
 - **Status : Completed**
- INDIGENEOUS ENSEMBLE SEMANTIC MODEL FOR KNOWLEDGE-

	<p>BASED SOCIETY</p> <p>Sub Project : Theoretical and Developmental Framework for Knowledge Discovery Aggregation Engine</p> <ul style="list-style-type: none">• Co-researcher• Reference: 600 – RMI / LRGS 5/3 (8/2011)• Financing Institution: Ministry of Higher Education (KPT)• Amount: RM 6, 000, 000 (sub-project: RM 234,480.00)• Duration : 1st October 2011 – 1st March 2015 (42 months)• Co-researcher• Status : Completed
2012	<p>HYBRID FUZZY SPEECH BOUNDARIES DETECTION METHOD FOR SPONTANEOUS MALAY CORPUS DEVELOPMENT</p> <ul style="list-style-type: none">• Co-researcher• Reference: 600 – RMI/ DANA 5/3/CG (5/2012)• Financing Institution: Universiti Teknologi MARA (UiTM)• Amount: RM 50, 000• Duration : 1st August 2012 – 31st July 2014 (24 months)• Status : Completed <p>DYNAMIC BRAIN EMOTION FUNCTIONAL MODEL</p> <ul style="list-style-type: none">• Principal researcher (PI)• Reference: 600 – RMI/ DANA 5/3/RIF (769/2012)• Financing Institution: Universiti Teknologi MARA (UiTM)• Amount: RM 32, 000• Duration : 1st December 2012 – 30th November 2014 (24 months)• Status : Completed
2013	<p>FIREFLY BASED LAMPYRIDAE TECHNIQUE CONSIDERING ENHANCED ADAPTIVE AVIATION ALGORITHM</p> <ul style="list-style-type: none">• Co-researcher• Reference: 600 – RMI/RAGS 5/3 (212/2013)• Financing Institution: Ministry of Higher Education (KPT)• Amount: RM 80, 000• Duration : 15th September 2013 – 14th September 2015 (24 months)• Status : Completed <p>COMPUTATIONAL MORPHOLOGICAL MODELLING FOR ANALYZING CHAOTIC NEUROLOGICAL DISORDER</p> <ul style="list-style-type: none">• Co-researcher• Reference:• Financing Institution: Ministry of Higher Education (KPT)• Amount: RM 85, 000• Duration : 1st December 2013 – 30th November 2015 (24 months)• Status : Completed
2014	<p>CEREBELLAR COMPUTATIONAL AFFECTIVE SPEECH FOR CUSTOMER PERCEPTION INDEX</p> <ul style="list-style-type: none">• Principal researcher (PI)• Reference: 600 – RMI/RAGS 5/3 (5/2014)• Financing Institution: Ministry of Higher Education (KPT)• Amount: RM 80, 000• Duration : 1st December 2014 – 30th November 2016 (24 months)• Status : Completed

DYSPHORIA DYNAMIC COMPUTATIONAL AFFECTIVE MODELLING
BASED ON RECALIBRATED EEG AFFECTIVE SPACE MODEL

- **Principal researcher (PI)**
- Reference: 600 – RMI/FRGS 5/3 (106/2014)
- Financing Institution: Ministry of Higher Education (KPT)
- Amount: RM 92, 200
- Duration : 1st December 2014 – 30th November 2017 (36 months)
- **Status : On-going**

BRAIN INSPIRED COMPUTATIONAL MODELLING OF TUGBOAT
MASTER BASED ON USER EXPERIENCE AND SITUATION AWARENESS

- Co-researcher
- Reference: FRGS/2/2014/ICT02/UIAM/02/1
- Financing Institution: Ministry of Higher Education (KPT)
- Amount: RM 89, 200
- Duration : 1st December 2014 – 30th November 2017 (36 months)
- **Status : On-going**

NEURO-NAVIGATIONAL COMPUTATIONAL MODEL OF AFFECT FOR
PROFILING MARITIME PILOT

- Co-researcher
- Reference: FRGS/2/2014/ICT02/UIAM/03/1
- Financing Institution: Ministry of Higher Education (KPT)
- Amount: RM 84, 000
- Duration : 1st December 2014 – 30th November 2016 (24 months)
- **Status : Completed**

2016

PROFILING HIGH-FUNCTIONING CHILDREN WITH LEARNING
DISABILITIES USING THE NEURO-PSYCHOLOGICAL FRAMEWORK
FOR DIFFERENTIATED INSTRUCTIONS

Sub Project: Identifying and Profiling Children with Learning
Disabilities using Algorithmic Computational Neuro-Physiological
(CNP) Model

- Co-researcher
- Reference: TRGS 16-04-002-002
- Financing Institution: Ministry of Higher Education (KPT)
- Amount: RM 600,000 (sub project: RM 210,000)
- Duration : 1st October 2016 – 30th November 2019 (36 months)
- **Status : On-going**

DEVELOPMENT OF ENHANCED FORMULATION OF PALM
TOCOTRIENOL RICH FRACTION (ETRF) WITH PALM KERNEL OLIEN AS
CARRIER FOR DIETARY SUPPLEMENTATION

Sub Project: Interlaboratory Data Fusion Repository System
(InDFURS)

- Principal Investigator
- **Reference:**
- Financing Institution: Universiti Teknologi MARA (UiTM)
- Amount: RM 100, 000 (sub project: RM 20,000)
- Duration : 1st January 2018 – 31st December 2020 (24 months)
- **Status : On-going**

CONSULTATION

2011	PREPARING THE STUDY ON SOLAR PV HYBRID SYSTEM: THE DESIGN AND ASSESSMENT OF A SOLAR PHOTOVOLTAIC HYBRID SYSTEM (STAND ALONE PV SYSTEM) <ul style="list-style-type: none"> • <i>Gerbang Kuasa Sdn Bhd</i> • <i>Amount : RM 105, 000</i> • <i>Duration : 1st March 2011 – 30th March 2012 (12 month)</i>
2013	PENYEDIAAN GARIS PANDUAN PEMASANGAN SOLAR PHOTOVOLTAIC (PV) <ul style="list-style-type: none"> • <i>Sustainable Energy Development Ability (SEDA)</i> • <i>Amount : RM 55, 000</i> • <i>Duration : 25th February 2013 – 25th March 2013 (1 month)</i>
2014	VOICE DATA ANALYTIC: SPEECH EMOTION TAGGING AND SPEECH EMOTION DATA CORPUS <ul style="list-style-type: none"> • <i>Telekom Research and Development (TM R&D)</i> • <i>Amount : -</i> • <i>Duration : 1st January 2014 – 1st March 2014 (2 month)</i>

SUPERVISION

FYP Degree	MOHD AZIZ BIN ZAHID (2010766469) BACHELOR OF SCIENCE (INFORMATION SYSTEM ENGINEERING) (CS226) <i>Title : Development of Human Psychological Response Recognition System (HPRRS) for Stroke Patient</i> <i>Jan 2013</i>
	ANIS BINTI ABD KAMAL SAYUTI (2011440442) BACHELOR OF COMPUTER SCIENCE (CS230) <i>Title: Comparative System Performance of Speech Emotion Recognition from the Perspective of SVM and MLP</i> <i>July 2013</i>
	NOR SAKINAH BINTI ABDULLAH (2011699612) BACHELOR OF COMPUTER SCIENCE (CS230) <i>Title: Speech Emotion Recognition System using Frequency-Based Feature Extraction Methods</i> <i>July 2013</i>
	MUHAMAD JALILUDDIN BIN MAZLAN (2011766671) BACHELOR OF SCIENCE (INTELLIGENT SYSTEM) (CS223) <i>Title: Speaker-dependent Speech Emotion Recognition System</i> <i>Dec 2013</i>
	NORUL AYNY BINTI NORZILAN (2011300397) BACHELOR OF SCIENCE (INTELLIGENT SYSTEM) (CS223) <i>Title: Comparative Analysis of NTU_American and Netherland Datasets using MLP</i> <i>Dec 2013</i>
	KHAIRUL IKHWAN MOHAMAD HALIM (2012100289) BACHELOR OF COMPUTER SCIENCE (CS230) <i>Title: Driver Behavior State Detection based on Speech</i> <i>Jan 2014</i>

	<p>AINA NAJWA RAZMAN SHAH (2013306261) BACHELOR OF COMPUTER SCIENCE (CS230) <i>Title: Measuring Customer Satisfaction Through Speech Using Valence Arousal Approach</i> Feb 2016</p>
	<p>MUHAMMAD HAFIQ IQMAL MOHD NOH (2013386689) BACHELOR OF COMPUTER SCIENCE (CS230) <i>Title: Automated Pre-processing Tool for Driver Behavior State Recognition based on Speech</i> Feb 2016</p>
Master (Research)	<p>MOHD HAFIZ MOHD NASIR (2015676964) MASTER OF SCIENCE (COMPUTER SCIENCE) UNIVERSITI TEKNOLOGI MARA <i>Title: EEG Affective Modelling for Dysphoria Understanding</i> November 2015 – present</p>
Doctor of Philosophy (PhD)	<p>HAMWIRA YAACOB (G1112309) DOCTOR OF PHILOSOPHY (PHD) INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA (IIUM) <i>Title: Spatial-temporal Computational Model of Emotions: Detection and Visualization</i> Graduated on 26th June 2015 BEST PHD of Kulliyah of Information and Communication Technology 2015</p>
	<p>KHAMIS FARAJ ALARABI ALJIBRI (G1210015) DOCTOR OF PHILOSOPHY (PHD) INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA (IIUM) <i>Title: Measuring Memory Effectiveness through Affect</i> Graduated Nov 2017</p>
	<p>SYARIFFANOR HISHAM (G1235628) DOCTOR OF PHILOSOPHY (PHD) INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA (IIUM) <i>Title: Multimedia Intervention for Children with ADHD using Neuro-feedback</i> July 2014 – present</p>
	<p>ABDUL QAYOOM HAMAL (G1032719) DOCTOR OF PHILOSOPHY (PHD) INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA (IIUM) <i>Title: Computational Morphological Modelling for Analyzing Chaotic Neurological Disorder</i> July 2014 – present</p>

AWARD

2017	<p>ANUGERAH AHLI AKADEMIK HARAPAN Majlis Apresiasi Fakulti Komputer Sains dan Matematik 24 July 2017.</p>
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	<p>BEST PAPER AWARD "Pornography Addiction Detection based on Neurophysiological Computational Approach", at The 5th International Conference on Advanced Computer Science Applications and Technologies (ACSAT 2017), 11 – 14 November 2017, Kuala Lumpur, Malaysia.</p>
2016	<p>OUTSTANDING SERVICE AWARD (ANUGERAH PERKHIDMATAN CEMERLANG (APC)) 2015 Awarded by Universiti Teknologi MARA</p>
2015	<p>BEST PAPER AWARD "Driver Behavior State Recognition based on Silence Removal Speech", at The 1st International Conference on Informatics and Computing (ICIC 2016), pp. 186 - 191, 28 - 29 October 2015, Mataram, Lombok, Indonesia.</p> <p>ANUGERAH KHAS REKTOR: KARYA ILMIAH / INOVASI 2015 UiTM MELAKA Majlis Sambutan Hari Inovasi 2015 UiTM Melaka 18 Disember 2015</p> <p>MELAKA INTERNATIONAL INTELLECTUAL EXPOSITION (MIIE X 2015)</p> <ul style="list-style-type: none">• Cultural-influenced Speech Emotion Recognition System (GOLD MEDAL)• rESPITA (SILVER MEDAL) <p>ANUGERAH FASILITATOR TERBAIK PERINGKAT UiTM 2015 Konvensyen Kumpulan Inovatif dan Kreatif (KIK) Peringkat UiTM 3 – 5 November, 2015 Langkawi, Kedah, Malaysia</p> <p>ANUGERAH PROJEK: PERAK Konvensyen Kumpulan Inovatif dan Kreatif (KIK) Peringkat UiTM 3 – 5 November, 2015 Langkawi, Kedah, Malaysia</p> <p>ANUGERAH FASILITATOR TERBAIK Konvensyen Kumpulan Inovatif dan Kreatif (KIK) Peringkat UiTM Zon Selatan 25 Oktober, 2015 UiTM Johor, Cawangan Segamat, Malaysia</p> <p>ANUGERAH PROJEK: JOHAN KESELURUHAN ANUGERAH PROJEK: ANUGERAH INOVASI PROSES ANUGERAH PROJEK: ANUGERAH PENJIMATAN KOS SEBENAR TERBAIK ANUGERAH PROJEK: EMAS Konvensyen Kumpulan Inovatif dan Kreatif (KIK) Peringkat Zon Selatan UiTM 25 Oktober, 2015 UiTM Johor, Cawangan Segamat, Malaysia</p>
2014	<p>BEST PAPER AWARD "Subject-dependant and Subject-independent Emotional Classification of CMAC-based Features using EFuNN", at The 27th International Conference on Computer Applications in Industry and Engineering (CAINE 2013), 13 - 15 October 2014, New Orleans, Louisiana, USA</p>

	<p>OUTSTANDING SERVICE AWARD (ANUGERAH PERKHIDMATAN CEMERLANG (APC)) 2013 Awarded by Universiti Teknologi MARA</p> <p>ACKNOWLEDGEMENT OF THE PRINCIPAL INVESTIGATOR FOR HIGH IMPACT RESEARCH PROJECT OF RAGS: CEREBELLAR COMPUTATIONAL AFFECTIVE SPEECH FOR CUSTOMER PERCEPTION INDEX Awarded by Universiti Teknologi MARA (Melaka)</p>
2011	<p>INTERNATIONAL CONFERENCE AND EXPOSITION ON INVENTIONS OF INSTITUTIONS OF HIGHER LEARNING (PECIPTA 2011)</p> <ul style="list-style-type: none"> • Cognitive Inspired Speech Emotion Recognition System (Bronze Medal) • An Effective Computation Approach to Analyzing the Brain When Solving Mathematical Task (Silver Medal) • An Effective Computation Analysis of EEG Signals for Human under Stress (Bronze Medal)
2009	<p>INTERSPEECH 2009 Student Grant Awarded by International Speech Communication Association (ISCA)</p>
2007	<p>PhD Scholarship (2007-2010) <i>Awarded by Universiti Teknologi MARA (UiTM), Malaysia</i></p>
2002	<p>'Best Lecturer Award' <i>Awarded by students' poll of Kolej PTPL Shah Alam, Selangor, Malaysia</i></p>
1998	<p>Bachelor Degree Scholarship (1998-2001) <i>Awarded by Majlis Amanah Rakyat (MARA), Malaysia</i></p>
1996	<p>'Best Student Award' for Sijil Pelajaran Malaysia <i>Awarded by Sekolah Menengah Sultan Abdul Halim, Jitra, Kedah, Malaysia and presented by Sultana of Kedah</i></p>
1994	<p>'Best Student Award' for Penilaian Menengah Rendah (PMR) <i>Awarded by Sekolah Menengah Sultan Abdul Halim, Jitra, Kedah, Malaysia and presented by Sultana of Kedah</i></p>
1992	<p>Federal Scholarship (Basiswa Kecil Persekutuan) (1992-1996) <i>Awarded by Ministry of Education, Malaysia</i></p>
1991	<p>'Best Student Award' for Ujian Penilaian Sekolah Rendah (UPSR) <i>Awarded by District Education Office, Batang Padang, Perak, Malaysia</i></p>

REFERENCE

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