

# **CURRICULUM VITAE**

Name	:	SAYANG MOHD DENI
Phone	:	03-55435455 (019-2624345)
Email	:	sayang@tmsk.uitm.edu.my; sayan929@salam.uitm.edu.my
Location	:	B3-05
Address	:	Center for Statistics and Decision Science Studies, Faculty of Computer and Mathematical Sciences, Universiti Teknologi MARA, 40450 UiTM Shah Alam, Selangor.

### **EDUCATION**

PhD. (Statistics), 2010, Universiti Kebangsaan Malaysia, Malaysia.MSc. (Statistics), July 2001, Universiti Kebangsaan Malaysia, Malaysia.BSc. (Mathematics and Statistics), July 1995, University of Bradford, United Kingdom.

Google Scholar H-Index = 11 i10-index = 12 Citations = 314

#### **PROFESSIONAL APPOINTMENTS**

**Coordinator of Postgraduate Programme (Mathematical Sciences)** Universiti Teknologi MARA Sept 2011 – Aug 2013, Sept 2013-Aug 2016

Head of Postgraduate Programme (Master of Science in Applied Statistics)

Universiti Teknologi MARA July 2010 – July 2011

### Associate Professor

Universiti Teknologi MARA 17 Dec 2012 – present

#### **Senior Lecturer**

Universiti Teknologi MARA Dec 2007 – 16 Dec 2012

# Lecturer

Universiti Teknologi MARA 1996 – Nov 2007

# **PROFESSIONAL SOCIETIES**

- 1. Member of IEEE
- 2. Member of American Statistical Association (ASA)
- 3. Member of Malaysian Mathematical Science Society (PERSAMA)
- 4. Member of Institute of Statistics Malaysia (ISM)
- 5. Graduate member of Institute of Mathematics and Its Application (IMA)

# FIELD OF SPECIALIZATIONS

Statistical Modeling, Environmental Statistics, Computational Statistics and Applied Statistics.

# SCHOLARSHIPS/AWARDS

- 1. Academic Award UiTM 2010– Journal Article Category (11 Feb 2011)
- 2. Excellent Services Award 2010
- 3. Full PhD Scholarship Award from Universiti Teknologi MARA (Dec 2005 Dec 2009)
- 4. Excellent Services Award 2003
- 5. Full Masters Scholarship Award from Universiti Teknologi MARA (May 2000 June 2001)
- 6. Full Bachelor Scholarship Award from Majlis Amanah Rakyat (MARA) (1993 1995)
- 7. Outstanding Performance Award during final year BSc. (Mathematics and Statistics) (July 1995)

# EXTERNAL EXAMINER

- Nuhammad Fauzee bin Hamdan PhD (Statistics) (UKM) Dec 2015 Title: Analisis Amaun dan Kebarangkalian Hujan Harian Semenanjung Malaysia dengan Pendekatan Data Fungsian.
- Ibrahim Suliman Hanaish (P50025) PhD (Statistics) (UKM) Aug 2013 Title: Rainfall Modeling in Peninsular Malaysia Based on Bartlett Lewis Rectangular Pulses Models
- Wan Asma Awatif Bt Wan Daud (891013-03-5264) MSc (Mathematics) (UTM) Oct 2013 Title: Analysis on the Interaction of Parameters Affecting the Dioxin Furan Emission through Graphical Models

# **PROFESSIONAL SERVICES (in UiTM)**

- 1. Associate member of Flood Control Research Centre (with Faculty of Civil Engineering), UiTM, 2014-2016
- 2. Member of Advanced Analytics Engineering Centre (Tier 4), UiTM, Jun 2014 May 2016
- 3. Main Committee Member of Advanced Computing & Communication CoRe UiTM,
- 4. Committee member of New Program (MSc Biostatistics), 2011-present
- 5. Committee member of i-Statistics Seminar 2013, 8 June 2013
- 6. Unit Head of Special Interest Group (Environmental Statistics) Jan 2011 Jan 2012

- Committee member of Curriculum Review MSc. (Applied Statistics) CS772 Nov 2010- Oct 2011
- 8. Committee member of i-Statistics Seminar 2011, 3 Dec 2011.
- 9. Facilitator of Analyzing Rainfall Data using R and S-Plus Workshop, 23 June 2011.
- 10. Secretariat of the Regional Conference on Statistical Sciences 2010
- 11. Committee member of SIG Statistical Modeling 2010
- 12. Committee member of INTEC Quality Day 2004 & 2005
- 13. Committee member of Homecoming Alumni KPP/PPP/ITM 2005
- 14. Committee member of Quantitative Method Research Workshop 2004
- 15. Resource person for A-Level Statistics (June 2004 May 2005)
- 16. Committee member of INTEC Certificate Presentation Ceremony 2004 & 2005
- 17. Committee member of INTEC Quality Assurance (2004-2005)
- 18. Committee member of Curriculum Review for the A-Level Statistics Syllabus 2004 & 2005
- 19. Internal Auditor ISO 9001:2000 for UiTM (2004)
- 20. Lead Assessor ISO 9001:2000 (2004)
- 21. Committee member of INTEC Academic Mission (2003-2004)
- 22. Advisor of A-Level Medicine Students Society (ALMEC) (Feb 2003 Feb 2004)
- 23. Committee member of ALMEC Open Day 2003
- 24. Committee member of International Conference On Globalisation Of Education (INCUE 2003)
- 25. Committee member of International Medical University Talk for A-Level Medicine students 2002
- 26. Committee member of INTEC A-Level Parents-Lecturer's meeting 2002
- 27. Committee member of Student Development Program 2002
- 28. Committee member of Time Table 2000
- 29. Committee member of Techno Fest 1997

# **PROFESSIONAL SERVICES (outside UiTM)**

- 1. Reviewer for International Journal of Climatology, Oct 2012-Present (2016)
- 2. Reviewer for Theoretical and Applied Climatology, Jan 2011-Present (2016)
- 3. Reviewer for Journal of Flood Risk Management, 2014 Present (2016)
- 4. Reviewer for Sains Malaysiana, Jan & Apr 2012 –2014
- 5. Jugde for Invention, Innovation & Design Expo 2015 (iiDEX2015)
- 6. Jugde for Invention, Innovation & Design Expo 2014 (iiDEX2014)
- 7. Judge for International Syariah Compliant Idea, Invention, Innovation and Design (ISC III 2014)
- 8. Reviewer for Journal of Soil and Water Conservation, Oct-Nov 2011, April 2012
- 9. Reviewer for Journal of Statistical Computation and Simulation, Apr-July 2011
- 10. Reviewer for Hydrological Processes, Apr-June 2011
- 11. Reviewer for Hydrology and Earth System Sciences Discussions, Feb-Apr 2011
- 12. Judge for Seminar Kebangsaan Pasca Siswazah ISM Pertama (SKism-1) 2011, 12 May2011
- 13. Judge for ISM-SPSS Competition on Pre-World Statistics Day, ISM, UM 9 Oct 2010
- 14. Reviewer for International Journal of Climatology, July 2010
- 15. Editor for Malaysia Institute of Statistics E-Journal, Oct 2010
- 16. Editor for Conference Proceeding Regional Conference for Statistical Sciences 13-14 June 2010, Kota Bharu, Malaysia.
- 17. Reviewer for Asia-Pacific Journal of Atmospheric Sciences, April 2010
- 18. Secretariat of the Pre-World Statistics Day, ISM, 9 Oct 2010
- 19. Reviewer for Theoretical and Applied Climatology, Dec 2009

- 20. Reviewer for Conference Proceeding First IEEE International Conference on the Applications of Digital Information and Web Technologies (ICADIWT 2008)
- 21. Reviewer for Journal of Hydrology, October 2008

## **BOOK PUBLICATION**

- 1. Abdul Aziz Jemain, Wan Zawiah Wan Zin , Jamaludin Suhaila & Sayang Mohd Deni. 2015. Dewan Bahasa dan Pustaka. "Menyurih Ikhtisar Hujan Semenanjung Malaysia". ISBN 978-983-46-1929-9
- 2. S. Sarifah Radiah Shariff, Sayang Mohd Deni, Zalina Zahid. 2008. *Review on Statistics and Probability* University Publication Centre (UPENA) UiTM. ISBN 978-967-305-076-5.

# JOURNAL PUBLICATIONS

- 1. Norshahida Shaadan, Sayang Mohd Deni, Abdul Aziz Jemain, (2015). Application of Functional Data Analysis for the Treatment of Missing Air Quality Data. *Sains Malaysiana*, 44(10): 1531-1540.
- 2. Norshahida Shaadan, Abdul Aziz Jemain, Mohd Talib Latif, Sayang Mohd Deni. (2015). Anomaly Detection and Assessment of PM10 Functional Data at Several Locations in the Klang Valley Malaysia. *Atmospheric Pollution Research*, 6: 365-375.
- 3. Muhammad, M., AZ Ul-Saufie, SM Deni. (2015) Three Days Ahead Prediction of Daily 12 Hour ozone (O3) Concentrations for Urban Area in Malaysia. *Journal of Environmental Science and Technology*. ISSN 1994-7887 / DOI: 10.3923/jest.2015.
- 4. N. Mazlan, NA Rahman, SM Deni. (2015). Comparison of Missing Value Imputation Methods for Malaysian Hourly Rainfall Data. *International Journal of Applied Mathematics and Statistics*, 53(6): 209-215.
- 5. Norshahida Shaadan, Abdul Aziz Jemain, Sayang Mohd Deni. (2014). Reducing Autocorrelation Effect in the Control Chart for PM10 Curves. *International Journal of Mathematical and Computational Science*-IJMCS) 1(2):1-5.
- 6. Ahmad, N.H. & Deni, S.M. (2013). Homogeneity Test for Malaysian Daily Rainfall Series. *Matematika*, 29(1c):141-150
- Ahmad, N.H., Othman, I.R. & Deni, S.M. (2013). Hierarchical Cluster Approach for Regionalization of Peninsular Malaysia Based on the Precipitation Amount. *Journal of Physics: Conference Series* 423(1), 012018
- 8. Deni S.M. & Jemain, A.A. 2012. Comparison between Mixed Probability Models and Markov Chain Models for Weekly Dry and Wet Spells in Peninsular Malaysia. *Lecture Notes in Engineering and Computer Science* 2197(1): 318-323.
- Shaadan, N., Deni, S.M. & Jemain, A.A. 2012. Comparing the Severity of PM10 using Functional Descriptive Statistics: A Case Study in Klang Valley. *Journal of Statistical Modeling and Analytics* 3(1): 1-10. (ISBN 978-967-363-157-5)

- Shaadan, N., Deni, S.M. & Jemain, A.A. 2012. Assessing and Comparing PM10 Pollutant Behaviour using Functional Data Approach. *Sains Malaysiana* 41(11): 1335-1344 (UKM, ISSN: 0126-6039, SCOPUS, ISI Thomson Reuters) Impact Factor (2012):0.408
- 11. Mahmud, N., Jemain, A.A., Deni, S.M. 2011 Probability Models to Describe the Distribution of Weekly Dry and Wet Spells in Sabah and Sarawak. *Journal of Statistical Modeling and Analytics* 2(1): 34-44. (ISBN 978-967-363-157-5)
- Deni, S.M., Suhaila, J., Wan Zin, W.Z. & Jemain, A.A. 2010. Spatial trends of dry spells over Peninsular Malaysia during monsoon seasons. *Theoretical and Applied Climatology* 99(3-4): 357-372. (Springer, ISSN: 1434-4483) Impact Factor (2012):1.759.
- Deni, S.M., Jemain, A.A. & Ibrahim, K. 2010. The best probability models for dry and wet spells in Peninsular Malaysia during monsoon seasons. *International Journal of Climatology* 30: 1194-1205. (Wiley InterScience, ISSN: 1097-0088) Impact Factor (2014):2.886
- Suhaila, J., Deni, S.M., Wan Zin, W.Z. & Jemain, A.A. 2010. Spatial patterns and trends of daily rainfall regime in Peninsular Malaysia during the Southwest and Northeast monsoons: 1975-2004. *Meteorology and Atmospheric Physics*. 110: 1-18. (Springer, ISSN: 1436-5065) ) Impact Factor (2012):1.327
- Wan Zin, W.Z., Suhaila, J., Deni, S.M., Jemain, A.A., 2010. Recent changes in extreme rainfall events in Peninsular Malaysia: 1971-2005. *Theoretical and Applied Climatology*, 99(3-4): 303-314. (Springer, ISSN: 1434-4483) Impact Factor (2012):1.759.
- Suhaila, J., Deni, S.M., Wan Zin, W.Z. & Jemain, A.A. 2010. Trends in Peninsular Malaysia rainfall data during the Southwest monsoon and Northeast monsoon seasons: 1975-2004. *Sains Malaysiana* 39(4): 533-542. (UKM, ISSN: 0126-6039, SCOPUS, ISI Thomson Reuters) Impact Factor (2012):0.408
- Wan Zin, W.Z., Jemain, A.A., Ibrahim, K., Suhaila, J., Deni, S.M., 2009. A Comparative Study of Extreme Rainfall in Peninsular Malaysia with Reference to Partial Duration and Annual Extreme Series. *Sains Malaysiana* 38(5): 751-760. (UKM, ISSN: 0126-6039, SCOPUS, ISI Thomson Reuters) Impact Factor (2012):0.408
- Deni, S.M. & Jemain, A.A. 2009. Mixed log series geometric distribution for sequences of dry days. *Atmospheric Research* 92: 236-243. (Elsevier, ISSN: 0169-8095) Impact Factor (2012):2.364
- Deni, S.M. & Jemain, A.A. 2009. Fitting the distribution of dry and wet spells with alternative probability models. *Meteorology and Atmospheric Physics* 104(1-2): 13-27. (Springer, ISSN: 1436-5065) Impact Factor (2012):1.327
- 20. Deni, S.M., Jemain, A.A. & Ibrahim, K. 2009. Mixed probability models for dry and wet spells. *Statistical Methodology* 6: 290-303. (Elsevier, ISSN: 1572-3127, SCOPUS)
- Deni, S.M., Jemain, A.A. & Ibrahim, K. 2009. Fitting optimum order of Markov chain models for daily rainfall occurrences in Peninsular Malaysia. *Theoretical and Applied Climatology* 97: 109-121. (Springer, ISSN: 1434-4483) Impact Factor (2012):1.759
- Deni, S.M., Suhaila, J., Wan Zin, W.Z. & Jemain, A.A. 2009. Trends of wet spells over Peninsular Malaysia during monsoon seasons. *Sains Malaysiana* 38(2): 133-142.(UKM, ISSN: 0126-6039, SCOPUS, ISI Thomson Reuters) Impact Factor (2012):0.408
- Deni, S.M. & Jemain, A.A. 2008. Probability models for dry spells in Peninsular Malaysia. Asia-Pacific Journal of Atmospheric Sciences 44: 37-47. (Korean Meteorological Society, ISSN: 1976-7951, SCOPUS, SCI-E) Impact Factor (2012):0.869

- Deni, S.M. & Jemain, A.A. 2008. Mixed geometric truncated Poisson model for sequences of wet days. *Journal of Applied Sciences* 8: 3975-3980. (ANSInet, ISSN: 1812-5662, SCOPUS, Asian Science Citation Index ASCI)
- Deni, S.M., Jemain, A.A. & Ibrahim, K. 2008. The spatial distribution of wet and dry spells over Peninsular Malaysia. *Theoretical and Applied Climatology* 94: 163-173. (Springer, ISSN: 1434-4483) Impact Factor (2012):1.759
- Deni, S.M., Suhaila, J. & Jemain, A.A. 2008. Probability models for wet spells in Peninsular Malaysia during the periods of 1940s - 1976 & 1977 – 2004. *Journal of Quality Measurement and Analysis* 4: 167-178. (UKM, ISSN: 1823-5670)
- 27. Deni, S.M., Suhaila, J., Wan Zin, W.Z. & Jemain, A.A. 2008. Tracing trends in the sequences of dry and wet spells over Peninsular Malaysia. *Journal of Environmental Science and Technology* 1: 97-110. (ANSInet, ISSN: 1994-7887, Asian Science Citation Index ASCI)
- Suhaila, J., Deni, S.M. & Jemain, A.A. 2008. Revised spatial weighting methods for estimation of missing rainfall data. *Asia-Pacific Journal of Atmospheric Sciences* 44(2): 93-104. (Korean Meteorological Society, ISSN: 1976-7951, SCOPUS, ISI, SCI-E) Impact Factor (2012):0.869
- Suhaila, J., Deni, S.M. & Jemain, A.A. 2008. Detecting inhomogeneity in Peninsular Malaysian rainfall series. Asia-Pacific Asia-Pacific Journal of Atmospheric Sciences 44(4): 369-380. (Korean Meteorological Society, ISSN: 1976-7951, SCOPUS, SCI-E) Impact Factor (2012):0.869
- Suhaila, J., Deni, S.M. & Jemain, A.A. 2008. The modified spatial interpolation methods for missing rainfall data treatment. *Matematika* Special Edition, Part II: 605-619.(UTM, ISSN: 0127-8274, SCOPUS)

### **PROCEEDINGS AND PRESENTATIONS**

- SNZA Burhanuddin, SM Deni, NM Ramli. (2015). Combination of Normal Ratio and Geographical Coordinate Methods for Imputation of Missing Rainfall Data (CSSR2015). 5-6 October 2015. Grand Blue Wave, Shah Alam, Selangor.
- Noridayu Mah Hashim, Sayang Mohd Deni, S. Sarifah Radiah Shariff, Wardah Tahir, Janmaizatul Jani. (2015). Identification of Seasonal Rainfall Peaks at Kelantan using Fourier Series (ISFRAM 2015). 5-6 October 2015. Grand Blue Wave, Shah Alam, Selangor.
- SNZA Burhanuddin, SM Deni, NM Ramli. (2015). Imputation of Missing Rainfall Data Using The Revised Normal Ratio Method (APORS 2015). 5-6 Ogos 2015, Kuching, Sarawak.
- Norsalwani Mohamad, Sayang Mohd Deni, AZ Ul-Saufie. (2015). First Order of Markov Chain Model in Describing the Occurrence of Polluted and Nonpolluted Days Affected by PM10 Concentrations in Shah Alam and Jerantut, Malaysia (ICSSBE 2015). 2-3 Sept 2015, Putrajaya Selangor.

- 5. Ainur Amira Kamaruddin, Yap Bee Wah, Sayang Mohd Deni (2015). The Effect of Sample Size and Nonnormality on Goodness of Fit Measures in Structural Equation Model. (ICSSBE 2015). 2-3 Sept 2015, Putrajaya Selangor.
- 6. Norshahida Shaadan, Abdul Aziz Jemain, Sayang Mohd Deni. (2015). Investigating the Randomness and Duration of PM10 Pollution Using Functional Data Analysis. (ICSSBE 2015). 2-3 Sept 2015, Putrajaya Selangor.
- SNZA Burhanuddin, SM Deni, NM Ramli. (2015). Geometric Median for Missing Rainfall Data Imputation. The 2<sup>nd</sup> ISM International Statistical Conference 2014 (ISM-II): Empowering the Applications of Statistical and Mathematical Sciences, 1643:113-119.
- 8. Norshahida Shaadan, Abdul Aziz Jemain, Sayang Mohd Deni. (2015). Investigating the capability of a control chart based on functional data for daily PM10 monitoring. The 2<sup>nd</sup> ISM International Statistical Conference 2014 (ISM-II): Empowering the Applications of Statistical and Mathematical Sciences, 1643:58-64.
- Norshahida Shaadan, Abdul Aziz Jemain, Sayang Mohd Deni. (2014). Data Preparation for Functional Data Analysis of PM10 in Peninsular Malaysia. AIP Conference Proceedings 1605, 850 (2014). Doi:10.1063/1.4887701. 6-8 November 2013, Penang, Malaysia.
- Norshahida Shaadan, Abdul Aziz Jemain, Sayang Mohd Deni. The Construction of Control Chart for PM10 Functional Data. AIP Conference Proceedings 1602, 1161 (2014). 17-19 December 2013, Kuala Lumpur, Malaysia.
- 11. Ahmad, N.H., Deni, S.M. and Othman, I.R. Hierarchical Cluster Approach for Regionalization of Peninsular Malaysia based on the Precipitation Amount. *Proceedings of the* Scie. Tech. 2013, Jakarta, Indonesia.
- 12. Shaadan N., Deni S.M., Jemain AA. Monitoring air quality (PM10) using adjusted score of functional data depth. In: EEE-explore data base (scopus): *The proceedings for International conference; Symposium, Humanities, Science and Engineering (SHUSER)* 2013.
- 13. Shaadan N., Jemain AA., Deni S.M.. Data preparation for functional data analysis of PM10 in Peninsular Malaysia. In: AIP data base (scopus): *The proceedings of National Symposium on Mathematical Sciences (21st) organized by USM and PERSAMA* 2013.
- 14. Shaadan N., Jemain AA., Deni S.M. The construction of control chart for PM10 Functional data. In AIP data base (scopus): *The proceedings of The 3rd International Conference on Mathematical Sciences organized by UKM Bangi* 2013.
- 15. Ahmad, N.H. & Deni, S.M. Homogeneity Test for Malaysian Daily Rainfall Series. *Proceedings of the 1<sup>st</sup> ISM International Statistical Conference 2012, Sept 4-6, 2012, Persada Johor.*
- 16. Kairan, O & Deni, S.M. Pattern and Trend Analysis of Rainfall in Peninsular Malaysia. *Proceedings of the Universiti Malaysia Terengganu 11<sup>th</sup> International Annual Symposium on Sustainability Science and Management 2012, July 9-11, 2012, Kuala Terengganu*, e-ISBN 978-967-5366-93-2.

- 17. Deni S.M. & Jemain, A.A. Comparison between Mixed Probability Models and Markov Chain Models for Weekly Dry and Wet Spells in Peninsular Malaysia. *Proceedings of the World Congress on Engineering 2012 (WCE 2012), July 4-6, 2012, London, United Kingdom,* ISBN:978-988-19251-3-8.
- 18. Yahya, S.N.H.S.<sup>a</sup>, Tahir, W.<sup>a</sup>, Ramli, S.<sup>a</sup>, Deni, S.M.<sup>b</sup>, Arof, H.<sup>c</sup>, Saaid, M.F.M.<sup>c</sup> Improved estimation of radar rainfall bias over Klang River Basin using a Kalman Filtering approach. ISBEIA 2012 IEEE Symposium on Business, Engineering and Industrial Applications, ISBELA 2012; Bandung; Indonesia; 23 September 2012 through 26 September 2012; Article number 6422906, Pages 368-373.
- Wardah, T., Sharifah Nurul Huda, S. Y., Deni, S.M. & Nur Azwa, B. Radar Estimates Comparison with Kriging Interpolation of Gauged Rain. 2011 IEEE Colloqium on Humanities, Science and Engineering Research (CHUSER 2011), Dec 5-6 2011, Penang, Malaysia, page 93-97, ISBN 978-1-4673-0021-6, Digital Object Identifier : 10.1109/CHUSER.2011.6163877
- Norshahida Shaadan, Sayang Mohd Deni & Abdul Aziz Jemain. An Alternative Statistical Approach in Assessing and Comparing PM10 Behaviour During the Two Extreme Haze Years (1997 and 2005). *Proceeding of the Seminar on Science of Tropical Climate Change System*, 29-30 June 2011, Puri Pujangga, Unversiti Kebangsaan Malaysia, Bangi, Selangor, pg. 121-129.
- 21. Norwaziah Mahmud & Sayang Mohd Deni. Probability Models To Describe The Distribution Of Weekly Dry And Wet Spells In Sabah And Sarawak. *Proceeding of the Regional Conference On Statistical Sciences 2010 (RCSS'10)*, 13-14 June 2010, Kota Bharu, Kelantan, pg. 184-194, ISBN 978-967-363-157-5.
- 22. Sayang Mohd Deni & Abdul Aziz Jemain. Modeling dry spells with mixed log series geometric distribution. *Australian Statistical Conference 2008*, 30 June 3 July 2008. Melbourne, Australia.
- 23. Sayang Mohd Deni & Abdul Aziz Jemain. Tracing changes in dry and wet spells over Peninsular Malaysia. *Proceeding of the International Seminar on Climate Variability, Change and Extreme Weather Events*, 26-27 February 2008, Danau Golf Club, UKM.
- 24. Sayang Mohd Deni, Suhaila Jamaludin & Abdul Aziz Jemain. Probability Models for Wet Spells in Peninsular Malaysia. *Proceeding of the International Conference on Mathematical Sciences*, 28-29 November 2007, Equatorial Hotel Bangi.
- 25. Suhaila Jamaludin, Sayang Mohd Deni & Abdul Aziz Jemain. The impacts of adjoining wet days on the distribution of daily rainfall amount for Malaysian rainfall data. *Proceeding of the* 9<sup>th</sup> Islamic Countries Conference on Statistical Sciences, 12-14 December 2007, Concorde Hotel, Shah Alam, Selangor.
- 26. Fredolin T. Tangang, Liew Juneng, Abdul Aziz Jemain, Wan Zawiah Wan Zin, Suhaila Jamaludin & Sayang Mohd Deni. Climate variability, change and extreme weather events in Malaysia. Proceeding of the National Seminar on Socio-Economic Impacts of Extreme Weather and Climate Change. 21 22 June 2007, Putrajaya.

- 27. Sayang Mohd Deni & Abdul Aziz Jemain. Peringkat Optimum Model Markov bagi Hujan Harian di Semenanjung Malaysia (1971-2000). *Prosiding Kolokium Siswazah Ke-6, Pusat Pengajian Sains Matematik*, Fakulti Sains Teknologi/UKM, 2006.
- 28. Sayang Mohd Deni & S. Sarifah Radiah Shariff. Gender Differences in the Level of Awareness and Perception towards IT among IT Educators in Lembah Klang. *Proceeding of the Conference on Scientific and Social Research 2005*, Kuala Terengganu.
- 29. Sayang Mohd Deni, Sanizah Ahmad & Mariyani Mohd Shahrani. Attitudes and Achievement in Mathematics among Students at International Preparatory Programs. *Proceeding of the Conference on Scientific and Social Research 2004*, Kuching, Sarawak.
- 30. Sayang Mohd Deni & S. Sarifah Radiah Shariff. An Exploratory Study on Attitudes and Achievement of Mathematics of INTEC Students. *Proceeding of the INTEC Academic Conference 2004*, Shah Alam, Selangor.
- 31. S. Sarifah Radiah Shariff & Sayang Mohd Deni The Level of Awareness and Perception toward Computer Ethics among the IT Educators of Institutes of Higher Learning in Lembah Klang. *Proceeding of the INTEC Academic Conference 2004*, Shah Alam, Selangor.

# **RESEARCH GRANTS**

- Spatial and Temporal Analysis of Rainfall Variability at Kelantan River Basin (Ref: 600-RMI/TRGS DIS 5/3 (1/2015) Researchers: Sayang Mohd Deni, S. Sarifah Radiah Shariff, Wardah Tahir, Janmaizatulriah Jani Status: On-going (1 April 2015 – 31 Mar 2016)
- Enhancement of Spatial Estimation Method for Imputing Missing Data. (Ref: 600-RMI/FRGS 5/3 (58/2014) Researchers: Sayang Mohd Deni, Norazan Mohamed Ramli and Noorizam Daud Status: On-going (1 July 2014 – 30 June 2016)
- Development PM10 Concentrations Prediction Models. (Ref: 600-RMI/FRGS 5/3 (40/2014) Researchers: Ahmad Zia Ul Saufie Mohamad Japeri, Sayang Mohd Deni, Nor Azam Ramli Status: On-going (1 July 2014 – 30 June 2017)
- Advanced Analytics and Engineering (REI) Researchers: Yap Bee Wah, Azlinah Mohamed, Zainab Abu Bakar, Siti Zaleha Zainal Abidin, Sayang Mohd Deni, Saiful Farik Mohd Yatin Status: On-going (2015 – 2017)
- Towards Achieving the targets of Mybrain 15 (VCSP) Researchers: S. Sarifah Radiah Shariff, Sayang Mohd Deni, Kahartini Abdul Rahman, Siti Halijjah Shariff. Status: On-going (2014 – 2016)

- Effects of Climate Change on the Adequacy of the Existing Water Supply System in Meeting Future Water Demands for Selangor Basin (ref: 100-RMI/INT 16/6/2) Researchers: Nurul Nadiah Mohd Firdaus Hum, Junaidah Ariffin, Sayang Mohd Deni, Mohd Syazwan Faisal Mohd Status: On-going (1 May 2013 – 30 April 2015)
- Spatial and Temporal analysis of Rainfall amounts using Sum Correlated Gamma Model and Poisson-Gamma Model" (Ref:UMP.05/26.12/04/01/01(2) Researchers: Roslinazairimah Zakaria, Abdul Aziz Jemain, Sayang Mohd Deni, Nor Hafizah Moslim, Tay Joo Hui. Status: Completed (1 May 2012 – 30 April 2014)
- Probabilistic Models for Generating the Spatial Pattern of Dry and Wet Spells (Ref: 600-RMI/ST/FRGS 5/3/FST (192/2010) Researchers: Sayang Mohd Deni, Abdul Aziz Jemain and Norshahida Shaadan Status: Completed on June 2013
- Attitudes and Achievements in Mathematics among Students at International Preparatory Programs (Ref. 600-BRC/ SKK.5/3/673) – IRDC-UiTM Researchers: Sayang Mohd Deni, Sanizah Ahmad and Maryani Mohd Shahrani Status: Completed on February 2004
- An Exploratory Study of Level of Awareness and Perception towards Computer Ethics among IT Educators of Institutes of Higher Learning in Lembah Klang (Ref. 600-IRDC/ SSP 5/3/1032) – IRDC-UiTM Researchers: S.Sarifah Radiah Shariff and Sayang Mohd Deni Status: Completed on March 2005

SUPERVISIONS
--------------

Student (University)	Title	Supervision	Level	Year	Status
Nurul Aishah Rahman (2014682232)	Spatial and Spatio-Temporal Estimation Methods for Missing Rainfall Data	Main Supervisor	Msc (Research) (Statistics) CS753	2014- present	In progress
Noridayu binti Mah Hashim (2013524707)	Multiobjective Location Inventory Problem (LIP) for Disaster Response in Malaysia Location Allocation Problem for Humanitarian Relief Centre (co dgn PM Dr Sayang)	Co- Supervisor	PhD (Decision Science) CS953	2013- present	In progress

Norsalwani Binti Mohamad	Development of a New PM10 Predictive Tool in Malaysia	Main Supervisor	Msc (Research) (Statistics) CS753	2014- present	In progress
Muqlisah Binti Muhamad	Robust Regression Approach for Predicting Ozone Concentrations Level in Malaysia	Co Supervisor	Msc (Research) (Statistics) CS753	2014- present	In progress
Ainur Amira Binti Kamarudin (2013305787)	Improving Goodness of Fit and Missing Data Imputation Methods in Structural Equation Modeling	Co Supervisor	PhD (Statistics)	2013- present	In progress
Siti Nur Zahrah bt Amin Burhanuddin (2012678162)	Modified Robust Spatial Interpolation Methods for Missing Rainfall Data	Main Supervisor	PhD (Statistics)	2012- present	In progress
Norshahida Shaadan (P57330) (Universiti Kebangsaan Malaysia)	Assessing Air Quality Using Functional Data Analysis (FDA)	Co- Supervisor	PhD (Statistics)	2011- 2014	Completed
Aini Fazana Zainal Abidin (2013132497)	Modeling PM10 Concentration using Extreme Value Distribution in Urban Areas	Main Supervisor	Master of Science (Applied Statistics) CS702	2015	Completed
Noorhafizah Binti Mazlan ( 2012697134)	Comparison of Missing Value Imputation Methods of Malaysian Hourly Rainfall Data	Main Supervisor	Master of Science (Applied Statistics) CS772	2013	Completed
Nur Zaharina Binti Zakaria (2012413442)	The Optimum Order of A Markov Chain Model for hourly Malaysian Rainfall	Main Supervisor	Master of Science (Applied Statistics) CS772	2013	Completed
Norlee Hainie Ahmad (2011665174) (UiTM)	Identification of Wet and Drought Proneness in Malaysia Using a Probabilistic Approach	Main Supervisor	Master of Science (Statistics) CS780	2011- 2015	Withdraw

Muhammad Jaffri bin Mohd Nasir (2011891354)	Comparison of Ordinary and Robust Harmonic analysis in Fitting Daily Mean Sea Tidal of West and East Peninsular Malaysia	Main Supervisor	Master of Science (Applied Statistics) CS772	2012	Completed
Aszila Asmat (2010413024) (UiTM)	A Comparison Of The Rainfall Patterns In Sabah And Sarawak Using The Smoothing Model	Main Supervisor	Master of Science (Applied Statistics) CS772	2011	Completed
Fazlina Waris (2010617272) (UiTM)	Monitoring The Level Of Drought In Peninsular Malaysia By Using Standardized Precipitation Index (SPI)	Main Supervisor	Master of Science (Applied Statistics) CS772	2011	Completed
Syarifah Huda Syed Yahya (2009595643) (UiTM)	Application Of Weather Radar For Rainfall Estimation	Co- Supervisor	Master of Civil Engineering EC780	2010	In progress
Khazainani Salleh (2009467478) (UiTM)	Fitting Various Order of Markov Chain Models For Distributions of Dry and Wet Spells in Peninsular Malaysia	Main Supervisor	Master of Science (Applied Statistics) CS772	2010	Completed
Omar Kairan (2007131109) (UiTM)	The Spatial Variablility And Trend Detection On Monthly Rainfall In Peninsular Malaysia	Main Supervisor	Master of Science (Applied Statistics) CS772	2010	Completed
Norwaziah Mahmud (2008792863) (UiTM)	Probability Models To Describe The Distribution Of Weekly Dry And Wet Spells In Sabah And Sarawak	Main Supervisor	Master of Science (Applied Statistics) CS772	2010	Completed
Nur Azwa Muhamad Bashar (2009604104) (UiTM)	Error Reduction in Radar Rainfall Estimation using Spatial Kriging Interpolation and Regression Method	Co-Supervisor	Master of Civil Engineering EC773	2010	Completed
Yusmaredza Helmi Mohamed Ali (2009242734)	Industrial Training Report at Meterorological Department Malaysia Kuantan	Main Supervisor	BSc. (Hons.) (Statistics) CS221	2011	Completed

(UiTM)					
Nora Aslinda Mohd Amin (2007285654) (UiTM)	Industrial Training Report At National Institute Of Occupational Safety And Health (NIOSH)	Main Supervisor	BSc. (Hons.) (Statistics) CS221	2010	Completed
Ruslina Mohd Jazar (2007285696) (UiTM)	Industrial Training Report At National Institute Of Occupational Safety And Health (NIOSH)	Main Supervisor	BSc. (Hons.) (Statistics) CS221	2010	Completed
Siti Nurul Aini Saedan (2008789125) (UiTM)	Industrial Training Report At Curriculum Development Unit Academic Affairs Department UiTM Malaysia	Main Supervisor	BSc. (Hons.) (Statistics) CS221	2010	Completed