1. CURRICULUM VITAE

1. NAME   :   HABSHAH BINTI MIDI

2. POSITION AND ADDRESS

Position: lecturer since 1981
Assoc Prof (Dr.)2002-2010
Prof (Dr): 2011-17 August 2016.
Contract Prof; Aug 18, 2016-2022
Contract Prof-Consultant fellow, inspem:2023-2025
Contract Prof-2026-
Head of Laboratory of Statistics, inspem:2004-2010.
Deputy dean:2010-2016.
First Coordinator, Master of Applied Statistics: 1998-2004.
INSPEM Affiliates: Interdisciplinary Computing and Statistical Laboratory,
Institut for Mathematical Research (INSPEM), Universiti Putra Malaysia,
43400 UPM Serdang Selangor Darul Ehsan Malaysia.

Address: Department of Mathematics & Statistics
Faculty of Science, Universiti Putra Malaysia
Universiti Putra Malaysia, 43400 UPM Serdang Selangor Darul Ehsan
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Email: habshah@upm.edu.my; habshahmidi@gmail.com

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Home Address: No 31, Jalan Jujur 1/3, Taman Bakti, 68000, Ampang,
Selangor.

3. ACADEMIC QUALIFICATION

➲   PhD degree in Statistics, 1995, Universiti Kebangsaan Malysia

➲   MSc degree (Statistics), 1981, The Ohio State University, Columbus
     Ohio, USA.

➲   Bsc degree (Mathematics), 1979, Drew University, USA

➲   Malaysian Certificate of Education, 1974, (First Class), Sekolah
     Menengah Sains Selangor (boarding school)

4. **FIELD OF SPECIALIZATION:** Diagnostics, Computational and Applied Robust Statistics and Outlier Detection in low and high dimensional data.

5. **RESEARCH INTEREST**

Robust Statistics and Outlier Detection, Regression Diagnostics, Linear, Nonlinear and Logistic Regression Models, Support Vector Regression, Experimental Designs, Econometrics, Business Statistics, Environmental Statistics, Statistical Quality Control, Statistical Modelling, Pattern Recognition, Variables Selection, Non-Parametric Statistics, Simulation and Bootstrapping techniques, and the Application of Statistical Methods to Real Life Problems for low and high dimensional data.

6. **RESEARCH GRANTS**

   a) COMPLETED RESEARCH

   (Title of Research Projects, Fund, Amount, Date, Role, Project No, Status)

   1. Robust Regression with both Continuous and Categorical Variables with Heteroscedastic Non-Normal Errors (MOSTI Science Fund, RM 139,680.00; 2005 - 2006; **Principal Investigator**; Project No. 09-02-04-0749 EA-001),
   Status: completed.

   2. A Maximum Robust Likelihood Estimator based on Box-Cox Transformation for Multiple Linear Regression. (Fundamental grant, RM 36,000.00; 2005 - 2006;**Principal Investigator;** Co-researcher: Azmi Jaafar; Project No. 01-11-03-029 K)
   Status: completed.

   3. Robust Logistic Regression Estimation in the Presence of Outliers (FRGS , RM48,000; 2008-2009: ; **Principal Investigator ;** Co-researcher: Syaiba Balqish Ariffin, Pusat Kos 5523157. **Status: completed.**

   4. Robust and Nonparametric Inference in Heteroscedastic Regression (FRGS grant, RM 96,600.00; 2009–2010; ; **Principal Investigator;** Co-researcher: Prof. A.H.M.R. Imon; Dr. Bakri Adam(Project no. 03-11-08-669FR).
   Status: completed

   5. Robust Bootstrap Algorithm for Linear Regression in the presence of Outliers. (RUGS grant, RM 54,000.00; 2009 –2011; ; **Principal**

Investigator;   Project   No.   05-01-09-0730RU)
Status: Completed

6. Quality Control Application to Industry (Short Term, RM10,000; 1999, ; **Principal Investigator .** Status : Completed.

7. Robust Estimation and outlier detection in response surface methodology (FRGS grant, RM 48,800.00; 2010 –2012; ; **Principal Investigator ;** Co-researcher: Dr Norazan Mohamed Ramli Project No. 01-04-10-889FR). *Status: Completed.*

8. Robust Diagnostic and Robust Estimation of Garch Model in the presence of outliers. (FRGS 2010 Fasa 2, RM 68,000; 2011 –2012; ; **Principal Investigator ;** Co-researcher: Prof Madya Dr Mahendran Shitan, Project No. 02-12-10-998FR, Pusat Kos: 5524075. *Status: Completed*

9. Application of Efficient Multivariate Quality Control Charts for Service Sectors in Malaysia. (RUGS grant, RM 30,000.00; 2008 –2009; Project leader: En Mohd Nooh Hassan; **Co-Investigators: Habshah Midi** and Mohd. Shafie Mustafa Project No. 05-03-08-0476 RU) *Status: completed.*

10. Optimized Crossover Genetic Algorithms for Combinatorials Optimization Problems (FRGS grant, RM 79,000.00; 2007 –2009; Project leader: Lee Lai Soon; **Co-Investigator Habshah Midi and,** Noor Hasnah Moin and Mohd bin Omar, Pusat Kos 5523320. *Status; Completed.*

11. A Bivariate Survival Model of the Paired Organ Systems with Repeated Dependent Failures and Multiple Covariates. (FRGS grant, RM 45,000.00; 2008 –2009; Project leader: Dr Jayanthi Arasan. **Co-Investigator Habshah Midi ,** Isa Daud and Dr Noor Akma Ibrahim., Pusat Kos 5523446). *Status: completed.*

12. Modelling of Malaysia's Election Votes with Extreme Value Theory. (FRGS grant, RM 60,000.00; 2009 –2010; Project leader: Mohd Bakri Adam, **Co-Investigator Habshah Midi** and Akma Ibrahim, Pusat Kos 5523632). *Status: Completed*

13. A New Robust Diagnostic Algorithm to Detect Outlier in Logistic Regression. (FRGS, RM 39,200.00; 2010-2012; Project leader, Dr Norazan Mohamed, UiTM ; **Co-Investigator : Habshah Midi** and Sanizah Ahmad (UiTM), Project No. 600-RM1/ST/FRGS 5/3/Fst (29/2010)). *Status: Completed*

14. *Alternative Goodness of fit tests for Extreme value distribution (RUGS Sesi 1(2011), RM30,000, 15 April 2011-14 April 2013; Project leader: Nahdiya Zainal Abidin,* **Co-Investigator : Habshah Midi,**
    Status: Completed

15. *An Analytical Hierarchy Process Decision Model for Broadband Providers Selection of Serdang Residents (RUGS Initiative 5), RM30,000, 18 Jun 2011-17 Jun 2013: Project leader: Iszuanie Syafidza Che llias, Co-***Investigator Habshah Midi.** *Status: Completed*

16. *Robust Mediation Models with categorical variables in the presence of outliers.(RUGS), RM30,000, 15 April 2011-28 April 2013: Project leader: Anwar Fitrianto,* **Co-Investigator: Habshah Midi.** *. Status: Completed*

17. *On errors of Measurements in Regression Analysis in the presence of outliers. (RUGS), RM17,000, 14 Oct 2011-14 Oct 2014; Principal Investigator: Sohel Rana,* **Co-Investigator**: *Habshah Midi. . Status: Completed.*

18. *Robust Variable Selection Techniques in Linear Regression in the presence of outliers, ERGS, RM68,000, 1 Ogos-Ogos 214;* **Principal Investigator.** *Status: Completed*

19. *High Leverage Collinearity Influential Observations and New Robust Ridge Estimator for Logistic Regression,FRGS RM88,850 1 Dec 2013-30 Nov 2015:* **Principal Investigator**. *Status: completed*

20. *Robust Diagnostic Measures and Robust Parameter Estimation Techniques for Linear Regression Having Multicollinearity and Outliers, Science Fund 1 April 2014- 31 Mac 2016, RM74,200,* **Principal Investigator.** *Status: completed*

21. *A New Optimization Approach and New Robust Methods in Dual Response Surface Model with Heteroscedastic Conditions in the Presence of Outliers, FRGS, 2 November 2015-1 November 2017, RM69,800,* **Principal Investigator.** *Status: Completed*

22. *Alternative Construction Methods of Symmetrical Uniform Designs, FRGS, 2 November 2015- 1 Decemebr 2017, RM80,600, Project leader: Dr. Anwar Fitrianto,* **Co-Investigator Habshah Midi,** *Dr Leong Wah June*

The grant was given to me after Dr Anwar left UPM in March. Status: Completed

23. Teaching of Trainers For Future Noble Laureates, Knowledge Transfer Grant Scheme, RU-UPM, 2015-2016, RM35,000. **Principal Investigator**, *Co-Researchers : Prof Zainal Abidin Talib, Assoc Prof Dr Siti Hasanah Sapar. Status: Completed*

24. Statistical Downscaling Climate Information for Projecting Risks of Cardiovascular and Respiratory Disease. FRGS, 1.1.2019-31.12.2020, extended due to COVID- 30 Mei 2022. RM59,200 ***Project leader. Dr. Syafrina Abdul Halim. I am Co-Researcher as Mentor to New Lecturer***

25. Comparison of Two Statistical Downscaling Methods in Projecting of Extreme Rainfall Events in Malaysia. GP-IPM, 15.2.2018-14.2.2020, extended -30 Mei 2022. RM33,000..***Principal Investigator Dr. Syafrina Abdul Halim. I am Co-Investigator as Mentor to New Lecturer***

26. Multiple Seasonal Autoregressive Model for Air Pollutant Forecasting. GP-IPM, 15.12.2017-15.12.2019, Extended-30 Mei 2022. RM39,500..***Project leader. Dr. Nur Haizum Abd rahman. I am Co-Investigator as Mentor to New Lecturer .***

27. Copula-based Multivariate Hydrological Frequency Analysis. GP-IPM, 15 Dis 2017-15.12.2019, Extended-30 Mei 2022.RM36,000. 00.***Project leader. Dr Wendy Ling Shin. I am Co-Investigator as Mentor to New Lecturer***

28. The Performance of Robust Location and Scale in Dual Response Design with heteroscedastic errors. GP-IPM, 15 Dis 2017-15.12.2019, RM53,000. Extended-30 Mei 2022.***Project leader. Dr Mohd Shafie Mustafa.I am Co-Investigator as Mentor to New Lecturer.***

29. Support Vector Regression-based Variable Selection for High Dimensional Data in the Presence of Outliers. Geran Putra Berimpak. 1.1.2018-31.12.2019, get extention til 31 September, 2020. RM100.000. 00. Extended-30 Mei 2022. **Principal Investigator.** *Members: Jayanthi Arasan and Leong Wah June.*

30. Robust Heteroscedasticity Consistent Covariance Matrix Estimator for Linear and Panel Data Regression Models in the presence of High Leverage

Points. Geran IPS **(Postgraduate Student Grant)** . 2. April 2018- 2 April 2020. **Principal Investigator.** Members: Jayanthi Arasan.

31. Handling outliers and Heteroscedasticity in Big Panel Data Using Robust Statistical Method for Efficient Prediction. MOE. FRGS, RM 94,000, two years, 1 Sept 2019 to 31 Sept 2021. Extended-30 Mei 2022.**Principal Investigator.** Members: Jayanthi Arasan, Nur Haizum Abd Rahman.

b) 2 NEW GRANTS RECEIVED- As Mentor .

- "New Robust Composite Model for Modeling Income Distribution in Malaysia". FRGS-2024. Project leader: Dr Muhammad Aslam bin Mohd Safari (UPM), Members**: Prof Habshah Midi (UPM),** PM Dr Nurulkamal Masseran (UKM) dan Dr Farid (UPM).
- "Enhancing bias correction techniques for extreme rainfall indices and addressing non-stationarity bias in future climate change projections".FRGS 2024. Project leader: Dr Syafrina Abdul Halim (UPM) Members: Prof **Habshah Midi (UPM)**, Liew Ju Neng (UKM) dan Dr Noraslinda Ali (UPM).

7.   **PUBLICATIONS. H-index: Google Scholar (24), citation-3984, i10-69**
                             Scopus   (17), citation-2066

↻ **A) Journal Article (listed as student first name (me second name) or student second name (me first name) except Arasan, J, my colleague)**

1. **Midi, H** , Jaaz Suhaiza , Mohd Aslam, Hani Syahida & Emi Amielda (2025). Improved Robust Principal Component Analysis based on Minimum Regularized Covariance Determinant for the Detection of High Leverage Points in High Dimensional Data. *Sains Malaysiana*. 54(8), pp 2087-2097. Web of Science (WOS) Publication-Q3.
2. Arasan, J. and **Midi, H.** (2025). Modified outlier diagnostics for the extended exponential regression model with interval and right-censored data. *Communication in Statistics-Theory and Methods*,54(7), pp 1991-2004. Web of Science (WOS) Publication-Q4.
3. Zahariah, S., **Midi, H** and Nazri, A.S. (2025). Determnation of the Optimal Number of PLS Components based on the Cpmbination of Cross-Validation and RMD-MRCD-PCA Weighting Function. Sains Malaysiana. 54(11), pp 2773-2783. Web of Science (WOS) Publication-Q3.

4. Baba, I.A., **Midi, H.**, Leong, W.J. and Ibragimov, G. (2024). A Modified Reweighted Fast Consistent and High-Breakdown Estimator for High-Dimensional Datasets. *Decision Analytics Journal.* 10 (2024). Elsevier, Scopus. Pp 1-11.

5. Ismaeel, S.S., **Midi, H.,** Taher, O and Arasan, J. **(**2024). A Remedial Measure of Multicollinearity in Multiple Linear Regression in the Presence of High Leverage Points. *Sains Malaysiana.* 53(4), pp 907-920. Web of Science (WOS) Publication-Q3.

6. Rashid, A.M and **Midi, H**.(2023). Improved nu-Support Vector Regression Algorithm based on the Principal Component Analysis. *Economic Computation and Economic Cybernetics Studies and Research,* Issue2, Vol 57. pp 41- 56. Web of Science (WOS) Publication-Q4.

7. Zahariah, S. and **Midi, H**.(2023). Minimum Regularized Covariance Determinant and Principal Component Analysis –based method for the Identification of High Leverage Points in High Dimensional Sparse Data. *Journal of Applied Statistics.* 50 (13), 2817-2835. Web of Science (WOS) Publication-Q2

8. Arasan, J. and **Midi, H.** (2023). Bootstrap based Diagnostics for survival regression model with interval and right censored data. *Austrian Journal of Statistics*, 52(2). Pp 66-85. Web of Science (WOS) Publication-Q4.

9. Ali, D.A., Dahir, A.M. and M**idi, H**.(2023). On the interactions Among Environmental degradation, energy consumption and economic growth: a time-frequency analysis Using Wavelets. International Journal of Environmental Studies. Vol 80 (6). pp 1790-1807. Scopus.

10. **Midi, H.,** Talib, H.,Arasan, J., and Uraibi, H.S. (2023). An Efficient method of identification of influential observations in multiple linear regression model and its application to real data. *Sains Malaysiana.* 52(12)(2023): 3589-3602 Web of Science (WOS) Publication-Q3.

11. Baba, A.M, **Midi, H.** and Rahman, N.H. (2022). Spatial Outlier Accommodation using Spatial Variance Shift Outlier Model. *Mathematics*. Pp 1-22, Web of Science (WOS) Publication-Q1.

12. Aziz, N.A. and **Midi, H**. **(2022).** Penalty Function Optimization in Dual Response Surfaces based on Decision Maker's Preference and its Application to Real Data. *Symmetry.* Vol (14), 601. Pp 1-22. Web of Science (WOS) Publication-Q2.

13. Rashid, A.M., **Midi, H**., Dhnn, W. and Arasan, J. **(2022).** Detection of Outliers in High-Dimensional Data Using Nu-Support Vector Regression. *Journal of Applied Statistics*. 49(10), pp 2550-2569. Web of Science (WOS) Publication-Q2.

14. Baba, I. **Midi, H**., Ibragimov, G. and Rana, S. (2022). A New Optimization Scheme for Robust Design Modeling with Unbalanced Data. *Sains Malaysiana.*Vol 51(5), pp 1577-1586. Web of Science (WOS) Publication-Q3.

15. Ali, D.A., Mohamed, J. and M**idi, H**.(2022). Modelling the determinants of Unemployment exit duration among graduates in a fragile state: A case of Somalia. Vol 9(2). pp 39-57. Scopus.

16. Rashid, A.M., **Midi, H.,** Dhnn, W. and Arasan, J. (**2021).** An Efficient Estimation and Classification Methods for High Dimensional Data Using Robust Iteratively Reweighted SIMPLS Algorithm based on Nu-Support Vector Regression. *IEEE Access*. Vol. 9. pp 1-22. Web of Science (WOS) Publication-Q1

17. Zaharaiah, S., **Midi, H.,** Mustafa, M.S..(**2021).** An Improvised SIMPLS Estimator based on MRCD-PCA Weighting Function and its Application to Real Data. Symmetry. Vol (13). Pp 1-22. Web of Science (WOS) Publication-Q2.

18. Baba, A.M., **Midi, H**. and Rahman, N.H. (2**021).** A Spatial Outlier Detection Method for Big Data based on Adjacency Weighted Residuals and its Application to Covid-19 Data. *Economic Computation and Economic Cybernetics Studies and Research,* Issue 3, pp 87-102. Web of Science (WOS) Publication-Q4.

19. Silahi, D.D., **Midi, H.,** Arasan, J, Mustafa, M.S. and Caliman, J.P.(**2021).** Kernel Partial Least Squares Regression with High Resistance to Multiple Outliers and Bad Leverage Points on Near-Infrared Spectral Data Analysis. *Symmetry.* Vol (13), 547. Pp 1-22. Web of Science (WOS) Publication-Q2.

20. Baba, A.M., **Midi, H.,** Arasan, Adam, M.A. and Rahman, H.A.(**2021).** Detection of Influential Observations in Spatial Regression Model Based on Outliers and Bad Leverage Classification. Symmetry. Vol (13), 2030. Pp 1-20. Web of Science (WOS) Publication-Q2.

21. Saupi, A.A. and **Midi, H.(**2021). Outlier Detection Method in Crossed Gage Repeatability and Reproducibility (R&R), Random Effect Model. *Malaysian Journal of Mathematical Sciences*. 15 (3). Pp 333-345. *Scopus.*

22. Ismaeel, S.S., **Midi, H.** and Sani, M**. (**2021). Robust Multicollinearity Diagnostic Measure for Fixed Effect Panel Data Model. *Malaysian Journal of Fundamental and Applied Sciences.* Vol. 17. Pp 636-646. *Scopus.*

23. Baba, I.A., **Midi, H.,** Leong, W.J. and Ibragimov, G. (2021). Penalized LAD-SCAD Estimator based on Robust Wrapped Correlation Screening Method for High Dimensional Models**.** *Journal of Science and Technology.* 29 (2). Pp 1053-1070. Scopus.

24. **Midi, H.,** Sani, M., Ismaeel, S and Arasn, J. (2021). Fast Improvised Influential Distance for the Identification of Influential Observations in Multiple Linear Regression. *Sains Malaysiana.*Vol 50(7), pp 2085-2094. Web of Science (WOS) Publication-Q4.

25. **Midi, H.,** Ismaeel, S, Arasn, J. and Mohammed, M. (2021). Simple and Fast Generalized M (GM) Estimator and Its Application to Real Data. *Sains Malaysiana.*Vol 50(3), pp 859-867. Web of Science (WOS) Publication-Q4.

26. **Midi, H.,** Alshaybawee, T. and Alguraibawi, M (2020).Modified Least Trimmed Quantile Regression to Overcome Effects of Leverage Points.

*Mathematical Problems in Engineering.Volume.*Volume 2020. Doi:10.1155/2020/1243583. Web of Science (WOS) Publication-Q3.

27. Silahi, D.D., **Midi, H.**, Arasan, J, Mustafa, M.S. and Caliman, J.P.(**2020).** Robust Wavelength Selection Using Filter-Wrapper Method and Input Scaling on Near Infrared Spectral Data. *Sensors.* Vol (20). Pp 1-22. Web of Science (WOS) Publication-Q1.

28. Sani, M, **Midi, H.**, Suleiman, S. (2020). GM-FIID Estimator as a Measure of Heteroscedasticity Caused by Outlying Observations in Multiple Linear Regression. *International Journal of Advanced Science and Technology.* 29(2). Pp 1353-1361. Scopus.

29. Silahi, D.D., **Midi, H.**., Arasan, J, Mustafa, M.S. and Caliman, J.P.(**2020).** Automated Fitting Process Using Robust Reliable Weoghted Average on Near Infrared Spectral Data Analysis. Symmetry. Vol (12). Pp 1-22. Web of Science (WOS) Publication-Q2.

30. **Midi,H**. and Mohamed, J. (2020).A Modified Robust Support Vector Regression Approach for Data Containing Leverage Points and Outliers in the Y-direction. *Mathematics and Statistics.* 8(5). pp.493-505. Cited Index Scopus.

31. Dalatu, P and **Midi, H.** (2020). New Approach to Normalization Techniques to Enhance K-Means Clustering Algorithm. *Malaysian Journal of Mathematical Sciences.* 14(1).pp 41-62. Cited Index Scopus.

32. Manoharan,T., Arasan, J. **Midi, H.** and Adam, M.B. **(**2020). Influential Measures on Log-Normal Model for Left-Truncated and Case-k Interval Censored Data with Time-Dependent Covariate. *Communication in Statistics: Simulation and Computation.* Vol 49(6). Pp 1445-1466. Web of Science (WOS) Publication-Q4.

33. Dalatu, P and **Midi, H.** (2020). Modified Statistical Approach for Data Pre-Processing to Improve Heterogenous Distance Function. *Malaysian Journal of Mathematical Sciences.* 14(2).pp 249-271. Cited Index Scopus.

34. Silahi, D.D., **Midi, H.**, Arasan, J, Mustafa, M.S. and Caliman, J.P.(**2020).** Kernel Partial Diagnostic Robust Potential to Handle High Dimensional and irregular Data Space on Near Infrared Spectral Dat. *Heliyon.* Vol (6). Web of Science (WOS) Publication-Q2.

35. Uraibi, H and **Midi, H.** (**2020).** Robust Variable Selection Method based on Huberized Lars-Lasso Regression. *Economic Computation and Economic Cybernetics Studies and Research,* Web of Science (WOS) Publication-Q4.

36. **Midi, H.,**Talib, H.,Arasan, J. and Uraibi, H.S. (2020). Fast and Robust Diagnostic Technique for the Detection of High Leverage Points. *Journal of Science and Technology.* 28 (4). Pp 1203-1220.Cited Index Scopus.

37. Ali, D.A. and **Midi, H.(2020)**. Robust Parameter Estimation Method for Linear Model with Autocorrelated Errors in the Presence of High Leverage

Points and Outliers in the Y-Direction. *Malaysian Journal of Mathematical Sciences*. 14 (3). Pp 505-517. Cited Index Scopus.

38. Silahi, D.D., **Midi, H.**, Arasan, J, Mustafa, M.S. and Caliman, J.P.(**2020).** Nonlinear Partial Robust MM and GM6 Rgression Using Kernel Space on Near Infrared Spectral Data. *Thai Journal of Mathematics. (Accepted for Publication on 9th January, 2020)*. Cited Index Scopus.

39. Uraibi, H and **Midi, H.**(2019), On Robust Bivariate and Multivariate Correlation Coefficient.. *Economic Computation and Economic Cybernetics Studies and Research,* Vol.53, Issue 2. Web of Science (WOS) Publication-Q4.

40. Sani, M, and **Midi, H. (**2019). The Performance of Robust Heteroscedasticity Consistent Covariance Matrix Estimator. *Malaysian Journal of Mathematical Sciences*. April. Pp 71-88.*Citation Index- Scopus.*

41. Abduljaleel,M., **Habshah, M**. and Karimi, Mostafa (2019). Outlier Detection in the Analysis of Nested Gage R&R, Random Effect Model. *Statistics in Transition new Series.* Vol 20(3), pp 31-56. *Citation Index- Scopus.*

42. Sani, M, **Midi, H.** and Arasan,J **(**2019). Robust Parameter Estimation for Fixed Effect Panel Data Model in the Presence of Heteroscedasticity and High Leverage Points. *ASM Sc. J.* Special Issue 1, pp 227-238. *Citation Index- Scopus.*

43. **Midi, H.** and Nasuhar,A.A. (2019). High Breakdown Estimator for Dual Response Optimization in the Presence of Outliers. *Sains Malaysiana.*Vol 48(8), pp 1771-1776. Web of Science (WOS) Publication-Q4.

44. Sani, **M., Midi, H.**, and Babura, B.I. (2019). Robust White Test for Heteroscedasticity Detection in Linear Regression. *Fudma Journal of Sciences.* Vol 3 (2).pp 173-178. Refereed Journal.

45. Ehab, A, Rana, S, **Midi, H.** and Ghapor (2019). The Comparison between Maximum Weighted and Trimmed Likelihood Estimator of the Simple Circular Regression Model. *Journal of Modern Applied Statistical Model. Vol 18 (2).Citation Index- Scopus*.

46. Mustafa,M.S. and **Midi, H. (**2019). The TSR-MM based on robust location and scales measures in dual response optimization in the presence of outliers and heteroscedastic errors. *ASM Sc. J.* Special Issue 1, Volume 12. pp 310-319. *Citation Index- Scopus.*

47. Ismaeel, S. S. and **Midi, H.** (2018). Robust Within Group Estimator for Fixed Effect Panel Data. Pak. J. Statist. Vol 34(4), pp 297-310. *Citation Index- Scopus.*

48. Taha, A, Alhamzawi, R and **Midi, H.** (2018), (ex-student added his colleague as co-author) Bayesian variable selection and coefficient estimation in

heteroscedastic linear regression models. *Journal of Applied Statistics,* Web of Science (WOS) Publication-Q3.

49. Muhammad, S and **Midi, H.** (2018). Robust Estimation for Fixed and Random Effects Panel Data Models with Different Centering Methods. *Journal of Engineering and Applied Sciences*. Vol 13(17), pp 7156-7161. *Citation Index-Scopus.*

50. Silahi, D.D., **Midi, H.,** Arasan, J and Mustafa, M.S. (2018). Robust Generalized Multiplicative Scatter Correction Algorithms on Pretreatment of Near Infrared Spectral Data. *Vibrational Technology. 97.pp 55-65.* Web of Science (WOS) Publication-Q2.

51. Sani, M, **Midi, H.** and Jayanthi, A. (2018). Robust Heteroscedasticity Consistent Covariance Matrix Estimator, based on Robust Mahalanobia Distance and Diagnostic Robust generalized Potential Weighting Methods in Linear Regression. *Journal of Modern Applied Statistical Method. Vol 17 (1) pp 6-29. Citation Index- Scopus.*

52. Kadom, A., **Midi, H. a**nd Rana, S. (2018). The Performance of k-means Clustering Method based on Robust Principal Components. *Far East Journal of Mathematical Sciences. Vol 103(11) pp 1757-1767. Citation Index- Other Indexing bodies, not Scopus.*

53. Shelan, S. I. and **Midi, H.** (2018). On the performance of Fast Robust Variance Inflation factor based on Index Set Equality. *Journal of Engineering and Applied Sciences. Vol 13(16). Pp 6634-6638. Citation Index- Scopus*

54. Dalatu, P and **Midi, H.** (2018). Statistical Estimators as an Alternative to Standard Deviation in Weighted Euclidean Distance Cluster Analysis, *Perrtanika Journal of Science and Technology*. 26(4).pp 1823-1836. Cited Scopus.

55. Ehab, A, , **Midi, H.,** Rana, S and Ghapor, A .(2018). Robust Trimmed Mean Direction to Estimate Circular Location Parameter in the Presence of Outliers. *Journal of Engineering and Applied Sciences. 13 (16), pp 6612-6615. Citation Index- Scopus.*

56. Syaiba Balqish, A. and **Midi, H.** (2018). Weigted High Leverage Collinear Robust   Ridge Estimator in Logistic Regression Model. Pak. J. Statist. Vol 34(1), pp 55-75. Web of Science (WOS) Publication-Q3.

57. Shelan, S. I. and **Midi, H.** (2018). Fast Improvised Diagnostic Robust Measure for the Identification of High Leverage Points in Multiple Linear Regression. *Journal of Statistics & Management Sciences. 21(6), Citation Index- Other Indexing bodies, not Scopus*

58. Nasuhar, A. and **Midi, H.** (2018). Augmented Desirability Function for Multiple Responses with Contaminated Data. *Journal of Engineering and Applied Sciences. 13(16). Pp 6626-6633. Citation Index- Scopus.*

59. Waleed, D, Sohel, R, Taha, A and **Midi, H.** (2018), Fixed Parameters Support Vector Regression for Outlier Detection. *Economic Computation and Economic Cybernetics Studies and Research, Vol 52(2),* Web of Science (WOS) Publication-Q3.

60. Ng. K.H**., Midi, H.** and Ng. K.H. (2017). Change Point Detection of Robust Individuals Control Chart. *International Journal of Industrial Engineering.* 24(5).526-541. Web of Science (WOS) Publication-Q4.

61. Uraibi, H, **Midi, H**. and Rana, S. (2017), Selective Overview of Forward Selection in terms of Robust Correlations, *Communications in Statistics-Simulation and Computation,* Web of Science (WOS) Publication-Q3.

62. Waleed, D, Sohel, R, Taha, A and **Midi, H.** (2017), Elastic Net For Single Index Support Vector Regression Model. *Economic Computation and Economic Cybernetics Studies and Research, Issue 2,* Web of Science (WOS) Publication-Q4..

63. Waleed, D, Sohel, R, Taha, A and **Midi, H.**(2017), The Single Index Support Vector Regression Model to Address the Problem of High Dimensionality. *Communications in Statistics-Simulation and Computation,* Published online first on 8th August, 2017, Web of Science (WOS) Publication-Q4.

64. Uraibi, H, **Midi, H.** And Rana, S. (2017), Robust Multivariate Least Angle Regression, *Scienceasia,* Vol 43, Web of Science (WOS) Publication-Q4.

65. Nasuhar, A.,**Midi, H. a**nd Mohd, S.M. (2017). Improvised Desirability Function for Dual Response Surface. *Advanced Science Letter. Vol 23, pp 4323-4326. Citation Index- Scopus.*

66. Loh, Y.F., Arasan, J., **Midi, H.** And Abu Bakar, M.R. (2017). Inferential Procedures for Log Logistic Distribution with Doubly Interval Censored Data. *Journal of Modern Applied Statistical Methods, 16*(2). *Citation index-Scopus..*

67. Waleed, D, **Habshah, M.** and Thaera, A. (2017), Robust Support Vector Regression Model in the Presence of Outliers and Leverage Points. *Modern Applied Sciences,* Vol 11 No. 8., *Citation Index- Scopus.*

68. Ehab, A, Rana, S, **Habshah, M** and Ghapor, A (2017). Adjusting Outliers in Univariate Circular data. *Journal of Science and Technology. Citation Index-Scopus.*

69. Ehab, A, , **Habshah, M,** Rana, S and Ghapor, A (2017). Robust Circular Distance and its Application in the Identification of Outliers in the Simple Circular Regression Model. *Asian Journal of Applied Science. DOI: 10.3923/ajaps.2017.126.133.logy. Citation Index- Scopus.*

70. Orooba,M, **Habshah, M,** and Rana, S. (2017). Diagnostic Robust Generalised Potentials based on GM6 to Identify High Leverage Points in Sumultaneous Regression Model. *Far East Journal of Mathematical Science. Citation Index-Scopus.*

71. Loh, Y.F., Arasan, J., **Habshah, M.** And Abu Bakar, M.R. (2017). A Parametric Model for Doubly Interval Censored Lifetime. *Journal of Science and Technology, 9*(2). *Non- Citation Index.*

72. Yoke, C.C., Muzaffar, S.H., Zubaidi, B.A., and **Habshah, M.**. (2017). Structural Convergence Among Asean Economies. *Advanced Science Letter*. 23(9). *Citation Index-Scopus.*

73. Lim, H.A. and **Midi, H** (2016). Diagnostic Robust Generalized Potential based on Index Set Equality (DRGP ISE) for the Identification of High Leverage Points in Linear Model. *Computational Statistics.* Web of Science(WOS) Publication-Q3.

74. Taha,A, **Habshah, M** and Rahim, A (2016). Bayesian Elastic Net Single Index Quantile Regression. *Journal of Applied Statistics*. Web of Science(WOS) Publication-Q3.

75. Waleed, D, Sohel, R and **Habshah, M**. (2016), A high breakdown, high efficiency and bounded influence modified GM estimator based on Support Vector Regression. *Journal of Applied Statistics*, Web of Science(WOS) Publication-Q3.

76. Waleed, D, Sohel, R and **Habshah, M**. (2016), Non-sparse e-insensitive support vector regression for outlier detection. *Journal of Applied Statistics*, 42(8). Web of Science(WOS) Publication-Q3.

77. Waleed, D, Sohel, R and **Habshah, M**. (2016), Hybrid technique for selecting support vector regression parameter based on a practical selection method and grid search procedure. *Economic Computational and economic cybernetics studies and research*. 50(2) . Web of Science(WOS) Publication-Q3.

78. Riazosham, H **and Midi, H.** (2016). The performance of robust multistage estimator in nonlinear regression with heteroscedastic errors. *Journal of Communication in Statistics, Simulation and Computation.* Web of Science(WOS) Publication-Q4.

79. Loo, Y.P, **Habshah, M**, Rana, S and Anwar, F (2016). Identification of Multiple outliersin Generalized Linear Model with continuous variables. *Mathematical Problems in Engineering.* vol. 2016,. doi:10.1155/2016/5840523, pp 1-9, Web of Science(WOS) Publication-Q3.

80. Ehab, A, Rana, S, **Habshah, M** and Ghapor, A (2016). Robust detection of outliers in both response and explanatory variable of simple circular regression model. *Malaysian Journal of Mathematical Science. 10(3), Citation Index-Scopus.*

81. Ehab, A, **Habshah, M** and Ghapor, A (2016). Robust estimation of circular parameters. *Research Journal of Applied Science. 10(3), Citation Index-Scopus.*

82. **Habshah, M**, Arifin, S.B. and Imon, A.H.M.R. (2016). Robust Bootstrap Procedure for Estimation of Binary Logistic Regression Model in the Presence

of High Leverage Points with Medical Applications. *International Journal of Applied Mathematics and Statistics*, 54(1), pp 10-32, Citation Index-Scopus.

83. Lilli, A.I, Lekhraj, R., Hejar, A.R. Nazri, O., **Habshah, M** and Azrin, E.A. (2016). Risk factors associated with contact lens related microbial keratitis. *Malaysian Journal of Medicine and Health Sciences.12(1), ISSN 1675-8544. Citation Index-Scopus.*

84. Manoharan, T., Arasan, J., **Habshah, M.** And Adam, M.B. (2016). Simulation of Left-truncated and Case-k Interval Censored Survival Data with Time-Varying Covariates. *Malaysian Journal of Mathematical Sciences, 10*(S). *Citation Index-Scopus.*

85. Abu Bakar, N.M. **and Midi, H.** (2015). The performance of Robust-Diagnostic F in the identification of multiple high leverage points. *Pak J. Statist.*.Vol 31 (5) pp 461-472, Web of Science(WOS) Publication-Q4.

86. Bagheri, A **and Midi, H** (2015). Diagnostic Plot for the Identification of High Leverage Collinearity-Influential Observations. *Statistics and Operation Research Transaction Journal*.39(1).pp 51-70,   Web of Science(WOS) Publication-Q3.

87. Uraibi, H, **Habshah, M.** And Rana, S. (2015), Robust Stability Best Subset Selection for Autocorrelated Data based on Robust Location and Dispersion Estimator, *Journal of Probability and Statistics,*Vol 2015, Article ID 432986, DOI 10.1155/2015/432986, Web of Science(WOS) Publication-Q3.

88. Rana, S, Fitrianto, A, Khor, W.J. and **Habshah, M.** (2015). Robust feasible Generalized Least Squares: A Remidial Measures of Heteroscedasticity, *International Journal of Applied Mathematics and Statistics.*53(5),pp 192-199. *Citation Index- Scopus.*

89. Mohamed, A.M., **Midi, H,**   Rana, S.(2015). Robust Jackknife Ridge Regression to Combat Multicollinearity and High Leverage Points. *Economics Computation and Economic Cybernatics Studies and Research,* Vol 49(4).pp 305-322, Web of Science(WOS) Publication-Q3.

90. Fang, L.Y. Arasan, J, **Midi, H** and Bakar, R. A. (2015). Inferential Procedures based on the Double Bootstrap for Log Logistic Regression Model for Censored Data. *Malaysian Journal of Sciences*. 34(2).199-207. Citation Index-Scopus.

91. Jiin, R.L.T.Rana, S, Fitrianto, Rana, S. and **Habshah, M.** (2015). An Alternative Identification of Influential Points in Cox-Proportional Hazards Model. *International Journal of Applied Mathematics and Statistics.*53(5) *Citation Index- Scopus.*

92. Baba. I , **Midi, H**, , Rana, S and Ibragimov, G (2015). An alternative approach of dual response surface optimizationn based on penalty function method. *Mathematical Problems in Engineering.* vol. 2015,. doi:10.1155/2015/450131, pp 1-6, Web of Science(WOS) Publication-Q3.

93. Rana, S., John, H.A., **Midi, H** and Imon, A.H.M.R. (2015). Robust Regression Imputation for missing data in the presence of outliers. *Far East Journal of Mathematical Sciences,* Vol 97(2). Pp 183-195. *Citation Index- Scopus.*

94. Jiin, R.L.T., Fitrianto, A, Rana, S and **Habshah, M.** (2015). An Alternative Identification of Influential Points in Cox Proportional Hazards Model, *International Journal of Applied Mathematics and Statistics.* 53(5),pp 187-191. *Citation Index- Scopus.*

95. Sleabi, W.D., Rana, S. and **Habshah, M** (2015). Non-Sparse E-insensitive Support Vector Regression for Outlier Detection, *Journal of Applied Statistics,* Volume 42(8), 1723-1739. Web of Science(WOS) Publication-Q3.

96. Abu Bakar, N.M. **and Midi, H.** (2015). Robust Centering in the fixed effect panel data model. *Pak. J. Statist.* Vol 31 (1).pp 33-48. ISI-Cited Publication.

97. Mohamed, M.A., **Habshah,M** and Imon, A.H.M.R.(2015). A New Robust Diagnostic Plot for Classifying Good and Bad High Levergae Points in a Multiple Linear Regression Model. *Mathematical Problems in Engineering.* Vol 2015, Article ID 279472. DOI 10.1155/2015. 12 Pages. ISI-Cited Publication.

98. Thirunanthini, M, Arasan, J,.**Midi, H** and Adam, M.B (2015). Simulation of left truncated and case interval censored survival data with time varying covariates. *Malaysian Journal of Mathematical Sciences.* Citation Index-Scopus.

99. Fitrianto, A, Ting, G.L.C., Leong, W.J. and **Habshah, M.** (2015). Finding Minimum Centered L2 Discrepancy Values to Construct Uniform Design Tables in GLP Method with Generating Vector. *International Journal of Applied Mathematics and Statistics.* 53(5),pp 192-199. *Citation Index- Scopus.*

100. Mohamed, M.A., and **Midi, H** (2014). The performance of robust latent root regression based on MM and modified GM estimators. *Wseas Transactions on mathematics.* Vol 13. Pp 916-924, *Citation Index- Scopus.*

101. **Midi, H,** Rana, S., and Imon, A.H.M.R. (2014). Two-step robust estimator in heteroscedastic regression model in the presence of outliers. *Economics Computation and Economic Cybernatics Studies and Research,* Vol 48(3). ISI-Cited Publication.

102. Siraj-Ud-Doulah, Rana, S and **Midi,** H (2014). Model Recognition by using principal Analysis (PCA) Approach. *Chiang Mai J. Sci.* Vol 41(1). Pp 224-230. IF 0.473. ISI-Cited Publication.

103. N.Z. Abidin, M.B. Adam and **Midi, H** (2014). Hypothesis tests of goodness of fit for Frechet distribution. *Pertanika J. Sci. & Technol.* 22(2). Pp 41-54. Citation Index-Scopus

104. Riazosham, H and **Midi, H.** (2014). Robust nonlinear regression: case study for modelling the greenhouse gases, methane and carbon dioxide

concentration in atmosphere. *Malaysian Journal of Mathematical Sciences.* Vol 8(S). Pp175-186.Citation Index-Scopus

105.   Lim, H.A. and **Midi, H** (2014). The performance of robust modification of Breush-Godfrey test in the presence of outliers. *Pertanika J. Sci. & Technol.* 22(1). Pp 81-93. *Citation Index- Scopus.*

106.   Rana, S., **Midi, H** and Fitrianto A. (2013). Statistical Significance of Rank Regression. *Applied Mathematical Science*, Vol. 7(82), 4067 - 4072. *Citation Index- Scopus*

107.   **Midi, H,** and Bagheri, A. (2013). Robust multicollinearity diagnostic measures based on minimum covariance determination approach. *Economics Computation and Economic Cybernatics Studies and Research,* Vol 47(4). ISI-Cited Publication.

108.   Siraj-Ud-Doulah M., Rana, S. and **Midi, H** (2013). Model Recognition by using Principal Component analysis (PCA) approach. *Chiang Mai Journal of Science*, pted, ISI-Cited Publication.

109.   Sohel Rana, **Midi, H.** and S.K. Sarkar (2013) Determinants of Desire for Children: A Multinomial Logistic Regression Approach, *Life Science Journal,* Volume 10(2),pp 1460-1467. ISI-Cited Publication.

110.   **Midi, H.** Ann, H. L. and Rana, S. (2013). On the Robust Parameter Estimation for Linear Model with Autocorrelated Errors. *Advanced Science Letters*, Volume 19 (8), pp. 2494 – 2496. **Citation Index-Scopus**

111.   Fitrianto, A. and **H. Midi.,** 2013. Standardized simple mediation model; A numerical example. *World Applied Science Journal*. 22 (8): 1135-1139.Citation Index- *Scopus*

112.   Fitrianto, A. and **H. Midi,** 2013. A Comparison between classical and robust method in a factorial design in the presence of outlier. *J. Math. Stat.*, 9(3): 193-197. Citation Index- *Scopus*

113.   **Midi, H**. And Ariffin, S.B. (2013). Modified Standardized Pearson Residual for the Identification of Outliers in Logistic Regression Model. *Journal of Applied Science,* 13(6), 828-836.Citation Index-Scopus

114.   Bagheri, A, **Midi, H.** And Imon, A.H.M.R. (2012).   A Novel Collinearity-Influential Observation Diagnostic Measure Based on a Group Deletion Approach. *Journal of Communication in Statistics, Simulation and Computation .* pp 1379-1396, ISI-Cited Publication.

115.   Rana, S, **Midi, H** and Imon, A.H.M.R. (2012). Robust Wild Bootstrap for Stabilising the Variance of Parameter Estimates in Heteroscedastic Regression in the Presence of Outliers.   *Mathematical Problems in Engineering,*vol. 2012,. doi:10.1155/2012/730328, pp 1-14, ISI-Cited Publication.

116. Kiani, K, Arasan, J and **Midi, H** (2012). Interval Estimations for parameter of Gompertz model with time dependent covariate and right censored data. Sains Malaysiana. 41(4). Pp 471-480, ISI-Cited Publication.

117. Shabbak, A. And **Midi, H** (2012). An Improvement of the Hotelling T Squares in Monitoring Multivariate Quality Characteristics. *Mathematical Problems in Engineering*, doi 10.1155/2012/531864, pp 1-15, ISI-Cited Publication.

118. Rana, S., Doulah, M.D. U., **Midi, H** and Imon, A.H.M.R. (2012). A New Robust Measure of Central Tendency. *Chiangmai Journal of Science,* 39(3), pp 478-485, ISI-Cited Publication.

119. Lim, H.A and **Midi, H** (2012). Robust Auto correlatoion Testing in Multiple Linear Regression. *International Journal of Mathematics and Computers in Simulation.* Issue 1, Vol 6.pp 119-126.Scopus

120. Rana, S., Doulah, M.D. U., **Midi, H** and Imon, A.H.M.R. (2012). A New Robust Tests for the detection of Arc effect. *Economics Computation and Economic Cybernatics Studies and Research,*. ISI-Cited Publication.

121. **Midi, H,** Mustafa, M.S. and Fitrianto, A.(2012). The performance of Optimum Response Surface Methodology based on MM-estimator. *International Journal of Mathematical Models and Methods in Applied Sciences*, Vol 6 (6).pp 757-764. Citation Index-Scopus

122. **Midi, H,** and Ariffin, S. B. (2012). The performance of Classical and Robust Logistic Regression Estimators in the Presence of Outliers. *Pertanika Journal Science and Technology*, Vol 19 (2).pp 757-764, Citation Index-Scopus

123. Fitrianto, A and **Midi, H** (2012). Multi Response Optimization via Desirability Function for Black Liquor Data.. *Journal of Science and Technology.* pp 91-102.Citation Index-Scopus

124. Abidin, N.Z., Adam, M.B. and **Midi, H** (2012). Hybrid Conditional Plot of Goodness of fit for Gumbel Distribution. *Journal of Quality Measurement and Analysis.* 8(1). Non-Citation Index

125. Ismail,L.A., Rampal,L., Abdul Rahman,H.,**Midi,H**., Omar,N. And Ariffin, A.E. (2012).Non-Compliance to Lens Care Procedures in Patients with Contact Lens Related Microbial Keratis. Segi Review. 5(1). Non-Cited

126. Bagheri, **A and Midi, H.** (2011). On the performance of Robust Variance Inflation Factors. *International Journal of Agricultural and Statistical Sciences,* Vol.7,No.1,June 2011. ISI-Cited Publication.

127. **Midi, H** and Shabbak, A. (2011). Robust Multivariate Control Charts to Detect Small Shifts in Mean. *Mathematical Problems in Engineering*, Volume 2011, doi: 10.1155/2011/923463,pp 1-19. ISI-Cited Publication.

128. Aljawadi, B.A.I, Bakar, M.R.A, Ibrahim, N.A. and **Midi, H** (2011). Parametric Estimation of the Immunes Proportion based on BCH model and

Exponential Distribution using left censored data. *Journal of Applied Sciences.* 11(15).pp 2861-2865. Citation Index-Scopus

129.   Lili Asma, I., Lehraj, R., Hejar, A.R., Nazri, O., **Habshah, M** and Azrin Esmady, A.(2011). Risk factors for contact lens related microbial keratis**..** *Journal of Medical and Health.* Vol 6(1) pp. 270.Citation Index-Scopus

130.   Huat, N.K. **and Midi, H.** (2011). The performance of Robust Control Chart for Change in Variance. *Trends in Applied Sciences Research*, 6(10). Pp 1172-1184.Citation Index-Scopus

131.   Ariffin, S.B. and **Midi, H.** (2011). Estimating Parameters using Robust Logistic Regression Estimators in the Presence of Outliers. *Pertanika Journal of Science and Technology.* Citation Index-Scopus

132.   Aljawadi, B.A.I., Bakar, M.R.A.,Ibrahim, N.A. and **Midi, H** (2011). Parametric Estimation of the Cure Fraction based on BCH Model Using Left-Censored Data with Covariates. Modern Applied Science. Citation Index-Scopus.

133.   Ahmad, S, **Midi, H** and Ramli, N.M (2011). Diagnostics for residual Outliers using Deviance Component in Binary Logistic Regression. *World Applied Sciences Journal.* 14(8). Pp 1125-1130, Citation Index-Scopus

134.   **Midi, H.,** Sarkar, S.K. and Rana, S. (2011). Adequacy of Multinomial Logit Model with Nominal Responses over Binary Logit Model. *Trends in Applied Sciences Research*, 6(8), PP 900-909. Citation Index-Scopus

135.   Huat, N.K. and **Midi, H.** (2011). Change Point Detection with Robust Control Chart. *Mathematical Problems in Engineering*, Volume 2011, doi: 10.1155/2011/275686,pp 1-20. ISI-Cited Publication.

136.   Sarkar, S.K, **Midi, H** and Rana, S. (2011). Detection of Outliers and Influential Observations in Binary Logistic Regression: An Empirical Study. *Journal of Applied Sciences,* 11(1), pp. 26-35.Citation Index-Scopus

137.   Bagheri, A.**Midi, H.** and Imon, A.H.M.R (2011). High Leverage Collinearity-Enhancing Observation and its Effect on Multicollinearity Pattern: Monte Carlo Simulation Study. *Sains Malaysiana,* 40(12), pp 1437-1447. ISI-Cited Publication.

138.   Liew, V.K.S., Baharumshah, A.Z., Habibullah, M.S. and Midi, H.(2011). Asean -5 Exchange Rate Determination in the Presence of Nonlinearity. *Journal of International Economic Review*. 4(1). Citation Index-Scopus

139.   Shabbak, A., **Midi, H.** and Hassan, M.N. (2011). The Performance of Robust Multivariate Statistical Control Charts based on Different Cutoff-points with Sustained Shifts in Mean. *Journal of Applied Sciences,* 11(1), pp. 56-65.Citation Index-Scopus

140.   **Midi, H.,** Rana, S. and Mat Said, N.A. (2011). The Application of Two Stage Robust Weighted Least Squares and Robust Bootstrapping Procedure on

Food Expenditure Data. *International Journal of Applied Mathematics and Statistics,* 20(11), pp. 26-35.Citation Index-Scopus

141.   Suthar, V., **Midi, H.** and Qureshi, N.A. (2011). Logistic Regression Analysis of Employment Behavior Data Using Randomized Response Technique. *US-China Education Review,* 8(1), pp. 25-32.Citation Index-Scopus

142.   Mohammadi, M., **Midi, H.,** Arasan, J. and Al-Talib, B. (2011). High Breakdown Estimators to Robustify Phase II Multivariate Control Charts. *Journal of Applied Sciences,* 11(1), pp. 26-35.Citation Index-Scopus

143.   Fitrianto, A and **Midi, H**(2011). Procedures of Generating a True Clean Data in Simple Mediation Analaysis. World Applied Sciences Journal. 15(7) pp 1046-1053.Citation Index-Scopus

144.   Riazoshams, H., M**idi, H.** and Sharipov, O.S. (2010). The Performance of Robust Two Stage Estimator in Nonlinear Regression with Autocorrelated Error. *Communications in Statistics - Simulation and Computation*, 39, pp. 1251-1268. ISI-Cited Publication.

145.   Majid, A., Haron, K. and **Midi, H.** (2010). Holdges Lehmann Estimator for Robust Design Using Response Surface Approach. *Australian Journal of Basic and Applied Sciences*, 4(8), pp. 3418-3423. Citation Index-Scopus

146.   Huat, N.K and **Midi, H.** (2010). Robust Individuals Control Chart for Change Point Model. *WSEAS Transactions on Mathematics,* 9(7), pp. 499-508.Citation Index-Scopus

147.   Sarkar, S.K., **Midi, H.** and Rana, S. (2010). Model Selection in Logistic Regression and Performance of its Predictive Ability. *Australian Journal of Basic and Applied Sciences*, 4(12), pp. 5813-5822.Citation Index-Scopus

148.   Ahmad, S., **Midi, H.** and Ramli, N.M (2010). Robust Estimators in Logistic Regression: *A Comparative Simulation Study. Journal Modern Applied Statistics and Mathematics,* 9(2), pp. 507-516.Citation Index-Scopus

149.   **Midi, H** and Zamzuri, Z.H (2010). The performance of Bootstrapping Autoregressive AR(9) Process on the Malaysian Opening Price for Second Board. *Journal of Applied Sciences,* 10(18), 2101-2107.Citation Index-Scopus

150.   Bagheri, A., **Midi, H.,** Ganjali, M and Eftekhari (2010). A Comparison of Various Influential Points Diagnostic Methods and Robust Regression Approaches: Reanalysis of Interstitial Lung Disease Data. *Applied Mathematical Sciences*, 4(28), pp. 1367-1386.Citation Index-Scopus

151.   Ariffin, S.B. and **Midi, H.** (2010). Robust Logistic Diagnostic for the Identification of High Leverage Points in Logistic Regression. *Journal of Applied Sciences,* 10(23), pp. 3042-3050.Citation Index-Scopus

152.   **Midi, H.** Rana, S. and Sarkar, S.K. (2010). Binary Response Modelling and Validation of its Predictive Ability. *WSEAS Transaction on Mathematics*, 9(6), pp. 438-447.Citation Index-Scopus

153. Bagheri, A., **Midi, H.** and Imon, A.H.M.R. (2010). The Effect of Collinearity Influential Observations on Collinear Data Set: A Monte Carlo Simulation Study. *Journal of Applied Sciences,* 10(18), pp. 2086-2093.Citation Index-Scopus

154. Sarkar, S.K and **Midi, H** (2010). Diagnostics of Fitted Binary Logistic Regression Model Based on Individual Subjects and Covariate Patterns. *International Journal of Applied Mathematics,* 23(1), pp. 63-81.Citation Index-Scopus

155. **Midi, H.** and Bagheri, A. (2010). The Application of Robust Multicollinearity Diagnostic Method Based on Robust Coefficient Determination to a Non-Collinear Data. *Journal of Applied Sciences*, 10(1), pp. 611-619.Citation Index-Scopus

156. Fitrianto, A. and **Midi, H**. (2010). Diagnostic-Robust Generalized Potentials for Identifying High Leverage Points in Mediation Analaysis. *World Applied Science Journal*, 11(8), pp. 979-987.Citation Index-Scopus

157. **Midi, H.,** Sarkar, S.K. and Rana, S. (2010). Collinearity Diagnostics of Binary Logistic Regression Model. *Journal of Interdisciplinary Mathematics,* 13(3) pp. 253-267.Citation Index-Scopus

158. Fitrianto, A. **and Midi, H.** (2010). Estimating Bias and RMSE of Indirect Effects Using Rescaled Residual Bootstrap in Mediation Analysis. *WSEAS Transaction on Mathematics,* 9(6), pp. 397-406.Citation Index-Scopus

159. Dadkhah, K., **Midi, H.** and Sharipov, O.S. (2010). The Performance of Mutual Information for Mixture of Bivariate Normal Distribution based on Robust Kernel Estimation. *Applied Mathematical Sciences*, 4(29), pp. 1417-1436.Citation Index-Scopus

160. Sarkar, S.K. and **Midi, H.** (2010). Importance of Assessing the Model Adequacy of Binary Logistic Regression. *Journal of Applied Sciences*, 10(6), pp. 479-486. Citation Index-Scopus

161. Rana, S., **Midi, H.** and Imon, A.H.M.R. (2009). A Robust Rescaled Moment Test for Normality in Regression. *Journal of Mathematics and Statistics*, 5(1), pp. 54-62.Citation Index-Scopus

162. Uraibi, H.S., **Midi, H.,** Al-Talib, B. and Yousif, J.H. (2009). Linear Regression Model Selection Based on Robust Bootstrapping Technique. *American Journal of Applied Sciences*, 6(6), pp.1191-1198.Citation Index-Scopus

163. **Midi, H.**, Rana, S. and Imon, A.H.M.R (2009). Estimation of Parameters in Heteroscedastic Multiple Regression Model using Leverage Based Near-Neighbors. *Journal of Applied Sciences*, 9(22), pp. 4013-4019.Citation Index-Scopus

164. Bagheri, A. and **Midi, H.** (2009). Robust Estimations as a Remedy for Multicollinearity Caused by Multiple High Leverage Points. *Journal of Mathematics and Statistics*, 5(4), pp. 311-321.Citation Index-Scopus

165. Saidon, M.N., Shariff, M.K.M, Abdullah, R. and **Midi, H.** (2009). Reliability of the Visual Resource Assessment Procedure in Assessing Malaysian Visual Lanscape Quality. *International Journal on Sustainable Tropical Design Research and Practice*, 4, pp 51-61.Citation Index-Scopus

166. Bagheri, A., **Midi, H.** and Imon, A.H.M.R. (2009). Two-Step Robust Diagnostic Method for Identification of Multiple High Leverage Points. *Journal of Mathematics and Statistics*, 5(2), pp. 97-106.Citation Index-Scopus

167. Sarkar, S.K. and **Midi, H. (**2009). A Comparative Study of Logistic Regression Approach and Stratified Classical Analysis on Desire for Children in Bangladesh. *European Journal of Scientific Research*, 35(4), pp. 623-632.Citation Index-Scopus

168. Ramli, N.M., **Midi, H.**, and Imon, A.H.M.R. (2009). Estimating Regression Coefficients using Weighted Bootstrap with Probability. *WSEAS Transactions on Mathematics*, 8(7), pp. 362-371.Citation Index-Scopus

169. Riazoshams, H and **Midi, H.** (2009). A Nonlinear Regression Model for Chickens Growth Data. *European Journal of Scientific Research*, 35(3), pp. 393-404.Citation Index-Scopus

170. Dadkhah, K. and **Midi, H. (**2009). Relative Mutual Information. *IJCSS*, 2(1), pp. 1803-8336.Citation Index-Scopus

171. Sarkar, S.K., **Midi, H.** and Imon, A.H.M.R. (2009). Binary Response Model of Desire for Children in Bangladesh. *Journal of Social Sciences*, 10(3), pp. 364-373. Citation Index-Scopus

172. **Midi, H.**, Rana, S. and Imon, A.H.M.R. (2009). The Performance of Robust Weighted Least Squares in the Presence of Outliers and Heteroscedastic Errors. *WSEAS Transactions on Mathematics*, 8(7), pp. 351-361.Citation Index-Scopus

173. **Midi, H.**, Ramli, N.M. and Imon, A.H.M.R. (2009). The Performance of Diagnostic-Robust Generalized Potentials for Identification of Multiple High Leverage Points in Linear Regression. *Journal of Applied Statistics*, 36(5), pp. 507-520. IF 0.689.ISI- Cited Publication.

174. Sarkar, S.K. and **Midi, H**. (2009). Optimization Techniques for Variable Selection in Binary Logistic Regression Model Applied to Desire for Children Data. *Journal of Mathematics and Statistics*, 5(4), pp. 1549-3644.Citation Index-Scopus

175. **Midi, H.**, Shabbak, A., Al-Talib, B. and Hassan, M.N. (2009). Multivariate Control Chart Based on Robust Estimator. *Journal of Quality Management and Analysis*, 5(1), pp. 17-33.

176.   Al-Talib, B. and **Midi, H.** (2009). Robust Estimator to Deal with Regression Models Having both Continuous and Categorical Regressors: A Simulation Study. *Malaysian Journal of Mathematical Sciences*, 3(2), pp. 161-181.Citation Index-Scopus

177.   **Midi, H**., Uraibi, H.S. and Al-Talib, B. (2009). Dynamic Robust Bootstrap Method based on LTS Estimators. *European Journal of Scientific Research*, 32(3), pp. 277-287.Citation Index-Scopus

178.   **Midi, H**. and Hua, L.U. (2009). The Performance of Latent Root-M based Regression. *Journal of mathematics and Statistics*, 5(2), pp. 97-106.Citation Index-Scopus

179.   **Midi, H.** and Mohamed, N.R. (2009). The Performance of Robust Weighted Maximum Median Likelihood Estimation in Multiple Regression. *International Journal of Applied Mathematics*, 22(7), pp. 1153-1168.Citation Index-Scopus

180.   Rana, S., **Midi, H.** and Imon, A.H.M.R. (2008). A Robust Modification of the Goldfeld-Quandt Test for the Detection of Heteroscedasticity in the Presence of Outliers, *Journal of Mathematics and Statistics,* 4(4), pp. 277-283.Citation Index-Scopus

181.   Huat, N.K. and **Midi, H.** (2008). Robust Individuals Control Chart for Shifts in Process Mean. Jurnal Karya Asli Lorekan Ahli Matematik. 1, pp 43-54.

182.   **Midi, H.** and Al-Talib, B. (2008). The Performance of Robust Estimator on Linear Regression Model Having Both Continuous and Categorical Variables with Heteroscedastic Errors. *Malaysian Journal of Mathematical Sciences,* 2(1), pp25-48.Citation Index-Scopus

183.   **Midi, H.** and Fitrianto, A. (2008). The Performance of Mediation Analysis Based on Robust Estimator. *Journal of Quality Measurement and Analysis*, 1(2), pp. 71-80.

184.   Fitrianto, A. **and H.Midi** (2008). The Performance of MM-Estimator on Simple Mediation Analysis. *Matematika*, 2, pp 495-523.

185.   **Midi, H**., and Zahari, M. (2007). A Simulation Study on Ridge Regression Estimators in the Presence of Outliers. *Journal of Technology*, 47(C), pp 59-74.

186.   Kasmiran, K.A, Ghani, A.A, Sulaiman, M.N. and **Midi, H.** (2007). A Layout Language Using Combinators as an Alternative to the Layout Manager Approach in Jaya. *Jour. Inst. Maths & Computer Sciences,* 18 (2), pp. 121-137.

187.   **Midi, H.**, Imon, A.H.M.R. and Jaafar, A (2007). The Misconception of Some Statistical Techniques in Research. *Journal of Technology*, 47(C), pp 21-36.

188.   Ibrahim Sheikh A.K., Radin Umar**, R.S. Midi, H.** (2006). Mode Choice Model for Vulnerable Motorcyclists in Malaysia. *Traffic Injury Preventions*, 7, pp.1-5.ISI-Cited Publication

189.   Nurulhuda, F.M.A., **Midi, H.** and Noranita F.I. (2006). The Performance of Clustering Approach with Robust MM-Estimator for Multiple Outlier Detection in Linear Regression. *Journal of Technology*. 45(C), pp 15-28.

190.   **Midi**, **H,** Jaafar, A. and Ann, L.H. (2004). The Comparison of the Standard and the Trimmed Mean CUSUM Chart. *Matematika*, 20(1),

191.   **Midi, H.** and A. Jaafar (2004). The Residual Plot for a Non-Linear Regression Model with the Presence of Outliers and Heteroscedastic Errors. *Jurnal Teknologi,* 41(C), 11-26.

192.   Ramli, N.M. **and Midi, H.** (2001). Penilaian Tingkah Taklinear Menggunakan Kaedah Empirik. *Jurnal Teknologi Maklumat Dan Sains Kuantitatif*, 3(1), pp.19-35.

193.   Cheong, C.W., Idrees, M and **Midi, H. (**2001). A Parametric Bootstrap Simulation Study in Egarch Model. *Pertanika Journal of Sciences and Technology,* 9(2),Citation Index-Scopus

194.   **Midi, H. Midi, H.** (2000). Bootstrap Methods in a Class of Nonlinear Regression Models. *Pertanika Journal of Sciences and Technology,* 8(2), pp. 175-189.Citation Index-Scopus

195.   **Midi, H**. (1999). Heteroscedastic Nonlinear Regression by Using Tanh Psi Function. *Sains Malaysiana,* 29, pp 103-118.ISI-Cited Publication

196.   **Midi**, **H.** (1999). Preliminary Estimators for Robust Nonlinear Regression Estimation. *Journal of Applied Statistics,* 26(5), pp. 591-600. IF 0.689. Citation Index-Scopus

197.   **Midi**, **H.** (1999). Robust Nonlinear Regression Estimator with Heteroscedastic Errors. *International Sc.* 11(4). Citation Index-Scopus

198.   **Midi**, **H.** (1999). The Mean Control Chart by Using Bootstrap Method. *Jurnal Sains.* 17(1).

199.   **Midi**, **H.** (1998). Robust Estimation of a Linearized Nonlinear Regression Model with Heteroscedastic Errors: A Simulation Study. *Pertanika Journal of Sciences and Technology, 6*(1), pp. 23-25.Citation Index-Scopus

200.   **Midi**, **H.** (1997). MM Estimator for a Linear Model with High Breakdown Point and High Efficiency. *Sains Malaysiana,* 26(1). pp. 111-123.ISI-Cited Publication.

201.   **Midi**, **H.** and Abdullah, M. (1994). Bootstrap Methods on the Nonlinear Regressions. *Sains Malaysiana,* 23(4), pp. 89-103.ISI-Cited Publication

202.   **Midi**, **H.** and Abdullah, M. (1991). Simulation Study on the Robustness of the Weighted Least Squares Estimates Based on The Median Least Square Methods. *Matematika,* 7(2), pp. 83-99.

203.   Radin Sohadi, R.U., **Midi, H.** and Salleh, M. (1991). The Distribution of Service Time at Bangi, Kajang, Sungai Besi and UPM Closed Toll plaza. *Pertanika.* 14(3), pp.301- 309.ISI-Cited Publication

204.   **Midi, H.** and Jaafar, A. (1990). Modelling The Data on the Export Sawn Timber of the Peninsula Malaysia by using Box and Jenkins Techniques. *Matematika*, 6(2), pp. 107-123.

➲ **Conference Proceedings (not fully updated)**

1. Silahi, D.D., **Habshah, M.**, Arasan, J, Mustafa, M.S. and Caliman, J.P.(**2019).** Robust Wavelength Selection Using Input Scaling of Filter-Wrapper Method on Near Infrared Data of Oil Palm Fruit Mesocorp. *The Proceedings of the 62nd International Statistics Institute (ISI) World Statistics Congress.* 18-23 August, 2019. Kuala Lumpur Convention Centre, Kuala Lumpur.

2. Rashid, A.B., **Habshah, M.**, Dhhn., W. and Arasan, J.(**2019).** Nu-Support Vector Regression for the Identification of Outliers in High Dimensional Data. *The Proceedings of the 62nd International Statistics Institute (ISI) World Statistics Congress.* 18-23 August, 2019. Kuala Lumpur Convention Centre, Kuala Lumpur. .

3. **Habshah, M.** and Mazlina, A.B**. (2019).** The Robustness of Two Steps Method Against Outliers and Heteroskedasticity in Panel Data.. *The Proceedings of the 62nd International Statistics Institute (ISI) World Statistics Congress.* 18-23 August, 2019. Kuala Lumpur Convention Centre, Kuala Lumpur. .

4. Silahi, D.D., **Habshah, M.**, Arasan, J, Mustafa, M.S. and Caliman, J.P.(**2019).** Robust Reliable Weighted Average Partial Least Square Regression on Near Infrared Spectral Data of Oil Palm Fruit Mesocorp. *The Proceedings of the Near Infrared Spectral, 2019,* Gold Coast, Australia, 15-20 September, 2019.

5. **Habshah, M.** , Mahmood, E.A., Hussin, A.G. and Arasn, J.(2018). Robust Parameter Estimation Method of the Simple Circular Regression Model when the Response Variable is contaminated. *The Proceedings of the 3rd International Conference on Mathematical Sciences and Statistics, ICMSS2018, 6-8th February, Putrajaya.*

6. **Habshah, M** and Nor Mazlina, A.B. (2017). Robust Weights of Generalized M-Estimator for Panel Data. *AIP Conference Proceedings of 13th IMT-GT International Conference on Mathematics, Statistics and their Applications.* doi org/10.1063/1.5012229.

7. Silalahi, D.V. **and Habshah, M.** (2017). **Considering A Non-Polynomial Basis for Local Kernel Regression Problem.**Robust Weights of Generalized M-Estimator for Panel Data. *AIP Conference Proceedings of ICWOMA, Langkawi.*

8. **Habshah, M** and Nasuhar, A.A.(2017). Simultaneous Optimizing Multiple Responses with Contaminated Data. *The Proceedings of the 4th International Conference on Mathematical Sciences and Computer Engineering*.

9. **Habshah, M** and Sani, M.(2017). On the Assessment of Robust Parameter Estimation with Different Centering Methods for Fixed and Random Effects Panel Data Models. *The Proceedings of the 4th International Conference on Mathematical Sciences and Computer Engineering*.

10. **Habshah, M** and Ismaeel, S.S. and Arasan, J.(2017). The Performance of Fast Robust Variance Inflation Factor in the Presence of High Leverage Points. *The Proceedings of the 4th International Conference on Mathematical Sciences and Computer Engineering*. Langkawi

11. Mahmood, E.A., Habshah, M., Hussin, A.G. and Arasn, J.(2017). Trimmed Mean Direction of Univariate Circular Data. *The Proceedings of the 4th International Conference on Mathematical Sciences and Computer Engineerings. Langkawi.*

12. **Midi,H** and Mohammed, M.A. (2015). The identification of Good and Bad High Leverage Points in Multiple Linear Regression Model. *Proceedings of 6th European Conference on Applied Mathematics and Informatics (Amathi '15),pp. 147-153.*

13. Ariffin, S.B**, Midi**, M., Arasan, J. and **Rana, S**. (2015). The effect of high leverage points on the maximum estimated likelihood for separation in logistic regression, The 2nd ISM International Statistical Conference (ISM -II), *AIP Conference Proceedings 1643*, 402 (2015); doi: 10.1063/1.4907472

14. Fitrianto, A., Rana**, S., Midi, H**., and Hydara, K. (2015). Effects of a Single Outlier on the Coefficient of Determination: An Empirical Study, The 2nd ISM International Statistical Conference (ISM-II), *AIP Conference Proceedings 1643*, 409 (2015); doi: 10.1063/1.4907473.

15. Rana, S., **Midi, H**. and A.H.M.R Imon (2014). Variables Selection Procedure based on Robust Approach, *Proceedings of the 3rd International Conference on Computer Engineering and Mathematical Sciences (ICCEMS 2014),* pp. 672-678.

16. Ariffin,S.B**, Midi,H** Rana, S. and Arasan, J (2014). Robust Logistic Regression Multivariate High Leverage Points Diagnostic in Computer Engineering, *Proceedings of the 3rd International Conference on Computer Engineering and Mathematical Sciences (ICCEMS 2014),* pp. 672-678.

17. Rana, **S., Midi, H**. and Imon, A.H.M.R (2014). Detection of Outliers in Multivariate Data Based on COMEDIANMAD Approach, *Fundamental Science Congress 2014*, pp. 270-272.

18. Yee Peng, L., **Midi, H**, Fitrianto, A. and Rana, S (2014). Generalized Linear Model Procedure based on Robust Estimator for Designed Experiment with

Poisson Distributed Response Variable, *Fundamental Science Congress 2014*, pp. 347-349.

19. Mustafa, M.S., **Midi, H.** , Rana, S. and Fitrianto, A. (2014). Robust Design in the Dual Response Approach, *Fundamental Science Congress 2014*, pp. 335-337.

20. Ariffin, S.B, **Midi, H.**, Arasan, J. and Rana, S. (2014). The Effect of High Leverage Point and Separated Data in the Hidden Logistic Regression Model, *Fundamental Science Congress 2014*, pp. 341-343.

21. **Midi, H.**, Baba, I., Rana, S., and Gafurjan, I. (2014).An Improve Dual Response Surface Optimization, , *Fundamental Science Congress 2014*, pp. 344-346.

22. Mustafa, M.S., **Midi, H**. and Rana, S. (2013) Heteroscedastic regression model in the response surface design, *Fundamental Science Congress 2013*, pp. 482-485.

23. **Midi, H.,** Rana, S. and Imon, A.H.M.R (2013). On a Robust Estimator in Heteroscedastic Regression Model in the Presence of Outliers, *Proceedings of the World Congress on Engineering,* London 2013, Vol I, pp. 6 pages, ISSN: 2078-0966 (Online).

24. Ariffin,S. B. and **Midi, H. (2013**). The effect of high leverage points on the logistic ridge regression estimator having multicollinearity. *International Conference on Mathematical Science (ICMS3), 17-19 December, 2013. Kuala Lumpur, AIP Conference Proceedings, Volume 1602, Issue 1, pp 1105-1111.*

25. Rana, **S. Midi, H**. and Siraj-Ud-Doulah M. (2013). An alternative model selection criterion based on principal component analysis, *Fundamental Science Congress 2013*, pp. 478-481.

26. Ariffin, S.B**, Midi, H.** , Arasan, J. and Rana, S. (2013). Performance of Ridge regression estimator for logistic regression model with application on cancer remission multicollinear data, *Fundamental Science Congress 2013*, pp. 490-494.

27. Rana, S., John, A.H. and **Midi, H. (2012**). Robust Regression Imputation for Analyzing Missing Data. *Proceedings of the International conference on Statistics in Science, Business and Engineering 2012 (ICSSBE2012)*, IEEE Xplore (Conference proceedings), pp(s). 1-4. DOI: 10.1109/ICSSBE.2012.6396621

28. Ariffin, S.B. and **Midi, H. (2012**). Robust bootstrap method in logistic regression model. *Proceedings of the International conference on Statistics in Science, Business and Engineering 2012 (ICSSBE2012)*, IEEE Xplore (Conference proceedings), pp(s). 489-494, DOI: 10.1109/ICSSBE.2012.6396613

29. <u>Mohammadi, M.,</u> **Midi, H.,** Rana, S. and <u>Arasan, J. A/P</u> (2012). The application of simple errors in variables model on real data. *Proceedings of the International conference on Statistics in Science, Business and Engineering 2012 (ICSSBE2012)*, IEEE Xplore (Conference proceedings), pp (s). 1-4. DOI: <u>10.1109/ICSSBE.2012.6396544</u>

30. Rana, S**., Midi, H**. and Siraj-Ud-Doulah, M. (2012). Robust Chi-Square Base ARCH Test. *Fundamental Science Congress,* pp.29-30.

31. Lim,H.A and **Midi, H.** (2011). The effect of high leverage points on the robust autocorrelation test in multiple lenear regressionl. *Proceedings of the WSEAS International Conference on Recent Research in Applied Informatics and Remote Sensing*, pp. 185-188.

32. **Midi, H** and Mustafa, M.S and Fitrianto, A (2011). A robust optimum response surface methodology based on MM estimator. *Proceedings of the WSEAS International Conference on Recent Research in Applied Informatics and Remote Sensing*, pp. 166-171.c

33. Fitianto, A **and Midi, H** (2011). Multi response optimization via desirability function for the black liquor data. *Proceedings of the International Seminar on the application of Science and Mathematics.* pp. 1-9.

34. Abu Bakar, N.M. **and Midi, H. (**2011). M-centering in robust estimation of fixed panel data*. Proceeding of the Challenges in Statistics and Operation Research.* pp 27.Kuwait

35. Zainal Abidin, N., Adam, M.B. and **Midi, H (2011**). Hypothesis tests of goodness of fit for Frechet distribution: A Comparative study**.** *Proceedings of the 5th International Conference on Research and Education in Mathematics.* pp. 25.

36. Fitianto, S. and **Midi, H.** (2011). Some Reviews of mediation analysis in categorical data. *Proceedings of Fundamental Science Congress 2011*, pp. 363-364.

37. **Midi, H** and Mustafa, M.S and Fitrianto, A (2011). The performance of MM-based estimator for determining the optimum response of response surface methodology. *Proceedings of Fundamental Science Congress 2011*, pp. 369-370.

38. Hock Ann, L and **Midi, H.** (2011). Robust linear model estimation for autocorrelated data in the presence of high leverage points. *Proceedings of Fundamental Science Congress 2011*, pp. 399-400.

39. Huat, N.K and **Midi, H.** (2011). A control chart based on robust estimator for shifts in process variance. *Proceedings of Fundamental Science Congress 2011*, pp. 403-404.

40. Abu Bakar, N.M. **and Midi, H**. (2011). Identification of high leverage points in the fixed effect panel data model. *Proceedings of Fundamental Science Congress 2011*, pp. 417-418.

41. Rana, S and **Midi, H.** (2011). A bootstrapping approach of the significance of rank regression. *Proceedings of Fundamental Science Congress 2011*, pp. 419-420.

42. **Rana, S., Midi, H**. and S. K. Sarkar (2010). Validation and Performance Analysis of Binary Logistic Regression Model, *Proceedings of the WSEAS International Conference on Environment, Medicine and Health Sciences (EMEH'10)*, pp. 51-55, 23-25 March, Penang, Malaysia. ISSN: 1790-5125, ISBN: 978-960-474-170-0.

43. Hasan, N, Adam, M.B., **Midi, H.** and Mustapha, N. (2010). Students' Background and Academic Achievement in Higher Educational Institution. *Procedia Social and Behavioral Sciences*, Vol.8, pp. 79-84.

44. Suthar, V., Tarmizi, R.A., **Midi, H.** and Adam, M.B. (2010). Students' Beliefs on Mathematics and Achievement of Universiti-Logistics Regression Analysis. *Procedia Social and Behavioral Sciences*, Vol.8, pp. 525-531.

45. Shabbak, A. and **Midi, H**. (2010). The Robustness of the Phase I Multivariate Control Charts for Detecting Small or Moderate Shifts in the Mean. *Proceeding of the 3th International Conference on Mathematics and Natural Sciences,*

46. Rana, **S., Midi, H**. and Imon, A.H.M.R (2010). Performance of Heteroscedasticity Consistence Covariance Matrix on Food Expenditure Data, *Fundamental Science Congress*, pp. 72-73, ISBN: 978-983-2519-07-2.

47. Sarkar, S.K., **Midi, H.** (2010). Residual Analysis of Binary Logistic Regression. *Fundamental Science Congress*, pp. 70-71.

48. Ahmad, S., **Midi, H.** and Ramli, N. M. (2010). Detection of Residual Outliers in Logistic Regression. *Fundamental Science Congress*, pp. 48-50.

49. Huat, N.K. and **Midi, H.** (2010). Robust individual Control Chart Based on Change Point Model. *Fundamental Science Congress,* pp. 64-65.

50. Kiani, K., Arasan, J. and **Midi, H.** (2010). Confidence Interval Estimations for Parameters of Gompertz Survival. *Fundamental Science Congress,* pp. 108-110.

51. Fitrianto, A. and **Midi, H.** (2010) Weighted Studentized Residual Bootstrap of Indirect Effects in Mediation Analysis. *Fundamental Science Congress,* pp. 74-75.

52. Ariffin, S.B. and **Midi, H.** (2010) Application of Robust Estimators in Logistic Regression on Erythrocyte Sedimentation Rate Data. Fundamental *Science Congress,* pp. 98-99.

53. Mohammadi, M., **Midi, H.** and Arasan, J. (2010). Re-weighted Robust Control Charts for Individual Observations. *Proceedings of the 6th IMT-GT conference on Mathematics, Statistics and its Applications (ICMSA2010),* pp. 426-435.

54. Huat, N.K. and **Midi, H**. (2010). Robust Individual Control Chart for Shifts in Process Mean and Variance. *Proceedings of the 9th WSEAS International Conference on APPLICATIONS of COMPUTER ENGINEERING,* pp.270-275.

55. Fitrianto, A. and **Midi, H**. (2010) Robust Bootstrap Approach to Estimate Bias and RMSE of Indirect Effects in Mediation Analysis. *Proceeding of the WSEAS International Conference on SOCIOLOGY, PSYCHOLOGY, PHILOSOPHY,* pp.82-87.

56. Ahmad, S., **Midi, H.** and Ramli, N. M. (2010).A Comparative Study of Outliers Detection Procedures in Logistic Regression, Prosiding Seminar Kebangsaan Aplikasi Sains dan Mathematik 2010 (SKSM 2010), pp. 141-146.

57. Abidin, N.Z., Adam, M.B. and **Midi, H.** (2010). An Alternative Plot of Goodness-of-Fit for Gumbel Model. *Prosiding Seminar Kebangsaan Aplikasi Sains dan Mathematik 2010 (SKASM 2010),* pp. 81-86.

58. Riazoshams, H., **Midi, H.,** Adam, and M.B. (2009). On the Outlier Detection in Nonlinear Regression. *Proceeding of World Academy of Science, Engineering and Technology,* pp.274-281.

59. Dadkhah, K. and **Midi, H.** (2009). Kernel Estimation of Mutual Information for Mixture of Bivariate Normal Distributions. *Proceeding of the 4th International Conference on Research and Education in Mathematics (ICREM 4),*pp. 234-240.

60. Bagheri, A. and **Midi, H.** (2009). High Leverage Collinearity-Enhancing Observations. *Proceeding of the 4th International Conference on Research and Education in Mathematics (ICREM 4),* pp. 241-246.

61. Shabbak, A. **Midi, H.** and Hassan, M.N. (2009) Comparison Between Three Cut-Off Points Techniques of the Robust Multivariate T^2 Control Chart. *Proceeding of the 4th International Conference of Research and Education in Mathematics (ICREM 4),* pp.255-263.

62. Rana, S., **Midi, H**. and Imon, A.H.M.R. (2009). Robust Estimation of Parameters in Heteroscedastic Multiple Regression Model in the Presence of Outliers, *Proceedings of the 4th International Conference on Research and Education in Mathematics(ICREM4),* pp. 264-271, 21-23 October, Kuala Lumpur, Malaysia, ISBN 978-967-344-092-4.

63. Huat, N.K. and **Midi, H.** (2009). Robust Individuals Control Chart for Shifts in Process Mean Using A Change Point Formulation. *Proceeding of the 4th International Conference of Research and Education in Mathematics (ICREM 4),* pp.310-317.

64. Sarkar, S.K. and **Midi, H.** (2009). Quantifying the Predictive Ability of Binary Logistic Regression Model. *Proceeding of the 4th International Conference of Research and Education in Mathematics (ICREM 4),* pp.318-323.

65. Bagheri, A and **Midi, H.** (2009). A Robust Estimation of Linear Model with Multiple High Leverage Points. *Fundamental Science Congress,* pp. 348-349.

66. Majid, A, Haron, K. And **Midi, H.** (2009). Incorporating Some Resistant Estimators into Robust Design. *Fundamental Science Congress,* pp.358-359.

67. Shabbak, A., **Midi, H.** and Al- Talib, B. (2009). Robust Multivariate Control Chart. *Fundamental Science Congress,* pp.360-361.

68. Al-Talib, B. and **Midi, H.** (2009). Visual Simulation Approach in Robust Regression for Models Having Both Continuous and Categorical Variables in the Presence of Outliers and Heteroscedasticity Problems. *Fundamental Science Congress,* pp.362-363.

69. **Midi, H.,** Rana, S. and Imon, A.H.M.R. (2009). Robust Estimation of Regression Parameters with Heteroscedastic Errors in the Presence of Outliers. *Fundamental Science Congress,* pp.382-383.

70. Dadkhah, K. and **Midi, H**. (2009). Measure of Association based on Relative Mutual Information. *Fundamental Science Congress,* pp.393-394.

71. Rana, S., **Midi, H.** and Imon, A.H.M.R. (2009). Estimation of Regression Parameters in the Presence of Heteroscedasticity with Unknown Form. *Fundamental Science Congress,* pp.403-404.

72. Sarkar, S. K. and **Midi, H.** (2009). Best subsets, an Alternative to the Stepwise Logistic Regression Applied to Desire for Children in Bangladesh, *Simposium Kebangsaan Sains Matematik ke-17* (SKSM KE-17), pp. 741-748.

73. Midi, H., **Rana, S.,** and Imon, A.H.M.R. (2009). Robust Estimation of Regression Parameters with Heteroscedastic Errors in the Presence of Outliers, *Proceedings of the 8th WSEAS International Conference on Applied Computer and Applied Computational Science (ACACOS'09),* pp. 128-134, 20-22 May, Hangzhou, China. ISSN: 1790-5117, ISBN: 978-960-474-075-8.

74. Ramli, N.M., **Midi, H.** and Imon, A.H.M.R. (2009). Weighted Bootstrap with Probability in Regression. *Proceedings of the 8th WSEAS International Conference on Applied Computer and Applied Computational Science, 2009,* pp.135-141.

75. **Rana, S.,** Midi, H. and Imon, A.H.M.R. (2009). Two Stage Estimation of Regression Parameters in the Presence of Heteroscedasticity, *Proceedings of the 5th Asian Mathematical Conference*, pp 318-324, 22-26 June, World Trade Centre, Kuala Lumpur, Malaysia.

76. Shabbak, A. and **Midi, H**. (2009). Using Bootstrap Method for Constructing Confidence Intervals with Fuzzy Data. *Proceeding of the 5ᵗʰ Asian Mathematical Conference,* pp.400-407.

77. **Midi, H.**, Shabbak, A. Al-Talib, B. and Hassan, M.N. (2009). Multivariate Control Chart based on Robust Mahalanobis Distance. *Proceeding of the 5ᵗʰ Asian Mathematical Conference,* pp.287-294.

78. Bagheri, A., **Midi, A.** and Imon, A.H.M.R. (2009). A Robust Approach to Deal with Multicollinearity due to Multiple High Leverage Points. *Proceeding of the 5ᵗʰ Asian Mathematical Conference,* pp.295-303.

79. Hassan, N., Adam, M.B., Mustapha, N. and **Midi, H.** (2009). Mining Students' Academic Performance from Background Data Using Regression Tree. *The Proceeding of the 17ᵗʰ National Mathematical Science Symposium,* pp.1066-1070.

80. Manaf, N.A., Bakar, M.R.A., Ibragimov, G. and **Midi, H**. (2009). Reproducing Kernel Method for Estimating the Hazard Functions of Survival Data. *The Proceeding of the 17ᵗʰ National Mathematical Science Symposium,* pp.729-733

81. Ahmad, S., **Midi, H.** and Ramli, N.M. (2009). A Comparative Analysis on the Performance of Robust Estimators in Logistic Regression. *The Proceeding of the 17ᵗʰ National Mathematical Science Symposium,* pp.701-705.

82. Suthar, V., Tarmizi, R.A., **Midi, H.** and Adam, M.B. (2009). Mathematical Beliefs of Mathematics Undergrade Students. *Proceeding of the 4ᵗʰ International Conference on Research and Education in Mathematics,* pp.171-178.

83. Dadkhah, K., **Midi, H.** (2009). Mutual Information as a Measure of Dependency of Variables in Nonlinear Model, *The Proceeding of the 17ᵗʰ National Mathematical Science Symposium,* Vol. 2, pp. 659-663.

84. Rana, S., **Midi, H**. and Imon, A.H.M.R (2009). Correcting for Heteroscedasticity with Heteroscedasticity Consistent Standard Errors in the Presence of Outliers and High Leverage Points, *The Proceeding of the 17ᵗʰ National Mathematical Science Symposium*, Vol. 2, pp. 687-693. 15-17 December, Melaka, Malaysia, ISBN 978-967-960-256-2.

85. Midi, H., **Rana, S.,** and Nur Afzan Mat Said (2009). Analysing Food Expenditure Data Using Robust Weighted Least Squares, *The Proceeding of the 17ᵗʰ National Mathematical Science Symposium*, Vol. 2, pp. 694-700. 15-17 December, Melaka, Malaysia, ISBN 978-967-960-256-2.

86. Shabbak, A., **Midi, H.**, Hassan, M.N. and Al-Talib,B. (2009). The Emperical Cutoff Points Techniques of the Robust Multivariate T^2 Control Charts, *The Proceeding of the 17ᵗʰ National Mathematical Science Symposium,* Vol. 2, pp. 721-728.

87. Rana, S., Imon, A.H.M.R and **Midi, H.** (2008). Detection of Heteroscedasticity in the Presence of Outliers, *The Proceeding of the 16th National Mathematical Science Symposium,* Vol. 2, pp. 262-269.

88. Riazoshams, H., M**idi, H.** (2008). A Nonlinear Regression Model for Chickens Growth Data. *The Proceeding of the 16th National Mathematical Science Symposium,* Vol. 2, pp. 1-15.

89. Ariffin, S.B., **Midi, H.** and Imon, A.H.M.R (2008). The Performance of Bootstrap Method on Logistic Regression Model. *The Proceeding of the 16th National Mathematical Science Symposium,* Vol. 2, pp. 335-346.

90. Oseman, K, Omar, N and **Midi, H** (2008), The Performance of Exponential Weighted Moving Control Chart between Classical, Robust and Bootstrap Method, *The 3rd International Conference on Mathematics and Statistics (ICoMS-3).*

91. Bagheri, A., **Midi, H.** and Imon, A.H.M. R. (2008). Identification of Multiple High Leverage Points by Robust Diagnostic Mahalanobis Distance. *3rd International Conference on Postgraduate Education (ICPE-3),* pp. 499-507.

92. Shabbak, A., **Midi, H.,** Hassan, M.N. and Khakestari (2008). Robust Multivariate Control Charts with High Breakdown Estimation. *3rd International Conference on Postgraduate Education (ICPE-3),* pp. 761-771.

93. Uraibi, H.S., **Midi, H.,** **Al- Talib, B. and Yousif, J.H.** (2008). Robust Bootstrap for Linear Regression Model Selection. *3rd International Conference on Postgraduate Education (ICPE-3),* pp. 742-748.

94. Fitrianto, A. and **Midi, H.** (2007). The Comparison between S and MM estimators in mediation analysis. *Proceedings of the 9th Islamic Countries Conference on Statistical Sciences 2007 (ICCS-IX),* pp 1636-1645.

95. Ramli, N.M. and **Midi, H.** (2007). The Weighted Maximum Median Likelihood Estimator for multiple linear regression. *Proceedings of the 9th Islamic Countries Conference on Statistical Sciences 2007 (ICCS-IX),* pp. 1299-1315.

96. **H. Midi**, N.M. Ramli and A.H.M.R Imon (2007). A New Version of Robust Bootstrap Method for Multiple Linear Regression Model. *Proceedings of the 9th Islamic Countries Conference on Statistical Sciences 2007 (ICCS-IX).*

97. Fitrianto, A. and **Midi, H.** (2007). The Comparison Between the M and the MM Estimators in Simple Mediation Model on a Single Unusual Observation. *Proceedings of the Integrating Mathematical Sciences Within Society (ICMS'07),* pp. 818-827.

98. Fitrianto, A. and **Midi, H.** (2007). The Performance of the LTS Estimators in Simple Mediation Model on a Single Unusual Observation. *Proceeding of the*

3ʳᵈ IMT-GT 2007 Regional Conference on Mathematics, Statistics and Applications. (IMT-GT & RCMSA 07). 774-781.

99. Fitrianto, A. and **Midi, H.** (2007). The Performance of Mediation Analysis based on Reweighted Least Squares. *Proceeding of the International Conference on Research and Education in Mathematics (ICREM3)*

100. Ramli, N.M., **Midi, H.** and A.H.M.R Imon (2007). Diagnostic Robust Approach for the Identification of Multiple High Leverage Point in Linear Regression. *Proceeding of the International Conference on Research and Education in Mathematics (ICREM3),*

101. Fitrianto, A. and **Midi, H.** (2006). Some Reviews of Mediating Approach in Mediation Analysis. *Proceedings of the National Conference on Mathematics and Statistics Modelling.* pp.74-86.

102. Al-Talib, B. and **Midi, H.** (2006). Bootstrapping Mehods in a Class of Models with both Continuous and Categorical Variables. *Proceedings of the National Conference on Mathematics and Statistics Modelling.* pp. 139-148.

103. **Midi, H.** and Imon, A.H.M.R.(2006). The Use and Abuse of Statistics. *Proceedings of the National Statistics Conference,* pp. 1-18.

104. Fitrianto, A and **Midi, H.** (2006). The Effect of a single Unusual Observation in Simple Mediation Model. *Proceedings of the National Seminar on Quantitative Science.*

105. **Midi, H.** and Jaafar, A. (2006). The Misuse of Statistical Techniques in Research: An Observation and Experiences. *Proceedings of the National Seminar on Quantitative Science.*

106. Ramli, N.M. and **Midi, H.** (2006). Robust Bootstrapping Weighted Maximum Median Likelihood Estimator for multiple Linear Regression. *Proceedings of the National Seminar on Quantitative Science.*

107. **Midi, H.** and Al-Talib, B. (2005), Robust Estimation of Multiple Linear Regression Model with both continuous and categorical variables with heteroscedastic errors. *The proceeding of International Statistics Conferenc,*

108. Ramli, N.M. and **Midi, H**. (2005). Robust Regression of Multiple Linear Regression with Heteroscedastic Errors. *The proceeding of International Statistics Conference*

109. Al-Talib, B. and **Midi, H.** (2005). The Comparisons of Robust Estimators based on Residual Plots. *The proceeding of the second International Conference on Research and Education in Mathematics,* pp. 716-736.

110. Ramli, N.M. **and Midi, H**. (2005). The Comparision betWeen the Maximum Likelihood Estimator and the Maximum Median Likelihood Estimator with Concentration Algorithm in Multiple Linear Regression, *The*
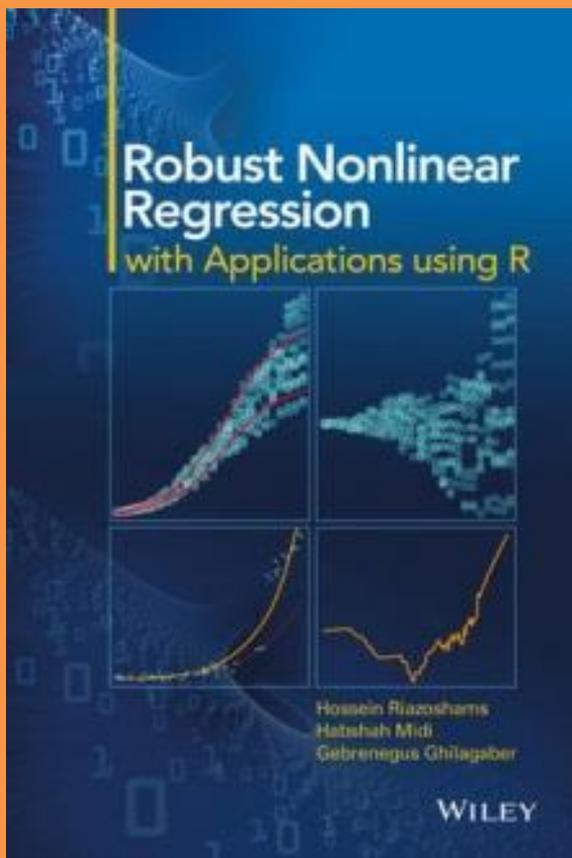
proceeding of Second International Conference on Research and Education in Mathematics, pp. 686-704.

111. Zaini, Z., Ghani, A.A.A. and **Midi, H**. (2005). Empirical Study on Maintability Metrics. *The proceeding of the Malaysian Software Engineering Conference (mySEC '05),*

112. **Midi, H.** and Al-Talib, B. (2004). The Performance of Reweighted Least Squares based on robust distance S/M estimator. *The proceeding of 12th Mathematical Sciences National Symposium.*

113. **Midi, H.** and Al-Talib, B. (2004). The performance of Reweighted Least Squares based on robust distance S/M estimator. *The proceeding of 12th Mathematical Sciences National Symposium in UIA,*

114. **Midi, H.** and Ramli, N.M. (2004). Identifying Multiple Outliers Using Maximum Trimmed Likelihood Estimator IN Multiple Linear Regression. *The proceeding of 12th Mathematical Sciences National Symposium in UIA ,*

115. **Midi, H.**, Al-Talib, B., Jaafar, A and Ibrahim, N.A. (2003). Robust RDLS Regression Method for Dealing with High Leverage Points. *Prosiding Seminar Sains Aktuari dan Matematik Kewangan* 2003. pp. 213-219.

116. **Midi, H.** and Hua, L.U. (2003). The Performance of Robust Latent Root Regression. *Prosiding Seminar Sains Aktuari dan Mathematik Kewangan,* pp. 228-235.

117. **Midi, H.** and Ali, Z. (2003). Estimation of a Popoulation Mean Based on the MM-Estimator. *Prosiding Seminar Sains Aktuari dan Matematik Kewangan* 2003. pp. 204-212.

118. Midi, H and Muda, N (2003). The Performance of M-based Generalized Linear Model with non-normal errors. *Proceedings of the International Conference on Research and Education in Mathematics.* 2-4 April 2003, Equatorial Hotel Bangi.

119. Azmi, N.F.B.M. and **Midi, H.** (2002). Identifying Multiple Outliers in Linear Regression by Clustering Methodology Using MM Estimator. *Simposium Kebangsaan Sains Matematik ke 10,* pp. 414-420.

120. **Midi, H**. (1998). Analysing the Relationship between Respirable Particulates (PM10) and Asthma Attacks Using a Robust Reweighted Least Square Method. *Proceedings of the Malaysian Science & Technology Congress '98,*

121. **Midi, H.** and Hamzah, N.A. (1997). Robust Two Groups Discrimination by Bounded Influence Regression. *Proceedings of the Institut Statistic Malaysia.* pp. 26-34

122. **Midi, H.** and Hagi, I.S.A.K (1997). The Construction of Robust X Bar Chart. *Proceedings of the Institut Statistic Malaysia.* pp. 93-102.

123.   **Midi, H.** and Abdullah, M. (1990). *Proceedings of the 4th national symposium on mathematical sciences*

124.   Suhadi, R.U.R., Salleh, M. an**d Midi, H.** (1989). Service characteristics for a closed toll expressway. *Proceedings on the international conference on engineering and tourism*.

➲ **Other Publications (Book, Chapter in Book, Teaching Modules and others)**

1. Arezoo Bagheri (Iran), **Midi, H** and Imon, A.H.M.R(USA) (2025). Chapter in Statistical outliers and Related Topics Book, entitled "*Robust Remedies for Multiple Regression Model in the Presence of High Leverage Collinearity Influential Observations*". ISBN: 9781003379881. **Scopus CRC Press. Taylor & Francis Group.Pp 221-258.**

2. Siti Zahariah and **Midi, H.** (2025). Chapter in Statistical outliers and Related Topics Book "*Identification of High Leverage Point in High Dimensional Sparse and Non-Sparse Data*". ISBN: 9781003379881. **Scopus. CRC Press-Taylor & Francis Grp. Pp 414-440.**

Robust Nonlinear Regression
with Applications using R

Hossein Riazoshams
Habshah Midi
Gebrenegus Ghilagaber

WILEY

About the Author
Hossein Riazoshams, PhD, is full-time Faculty member at the Department of Mathematics and Statistics, Lamerd Islamic Azad University of Iran.

Habshah Midi, PhD, is Professor at the Department of Mathematics, Faculty of Science and Institute for Mathematical Research, Universiti Putra Malaysia.

Gebrengus Ghilagaber, PhD, is Professor and Head of the Department of Statistics, Stockholm University.

3. Hossein Riazoshams, **Habshah Midi,** Gebrenegus Ghilagaber. Robust Nonlinear Regression: with Applications using R First Ed. 2019., 264 pages. ISBN: 978-1-118-73806-**John Wiley & Sons.**

4. Dalatu, P.I**., Habshah, M,** Arasan, J and Gafurjan, I. (2019). *Fundamental Science Congress E-book,* 2019. New Approach to Normalisation Technique in K-Means Clustering Algorithm.

5. Alsattari, O. and **Habshah, M.** (2019). *Fundamental Science Congress E-book,* 2019. On the Performance of Wild Bootstrap based on GM6 Estimator in the Presence of Heteroscedastic Errors and High Leverage Points.

6. **Habshah, M.,** Sani, M., Mustafa, M.S. and Arasan, J. (2019). *Fundamental Science Congress E-book,* 2019). New Weighting Method for Robust Heteroscedasticity Consistent Covariance Matrix Estimator in Linear Regression.

7. Mahmood, E.A., **Habshah, M.,** Hussin, A.G. and Arasan, J**.** (2019). *Fundamental Science Congress E-book,* 2019. Detection of Outliers in a Simple Circular Regression Model.

8. Ariffin, S.B., **Habshah, M.,** and Arasan, J**.** (*Fundamental Science Congress E-book,* 2019. The Effect of High Leverage Points on Collinearity Diagnostic in Logistic Regression Model.

9. **Habshah, M** (2018). Identification of High Leverage Collinearity Influential Observations and How to Remedy Them. *Book of Abstract Simposium Kebangsaan Institut Statistik Malaysia ke-12.*

10. Nor Mazlina, A.B. **and Habshah, M** (2018). Robust Weighted Bootstrap for the Fixed Effect Panel Data Model. *Book of Abstract Simposium Kebangsaan Institut Statistik Malaysiake-12, UPM 29 March 2018.*

11. Sani, M. **and Habshah, M** (2018). Robust Hausman Pretest for Panel Data Model in the Presence of High Leverage Points and Heteroscedasticity. *Book of Abstract Simposium Kebangsaan Institut Statistik Malaysiake-12.*

12. **Habshah, M,** and Leng, S.M.,K.(2018). The Performance of Two-Steps Robust Weighted Least Squares in thr Presence of Heteroscedasticity and High Leverage Points. *Book of Abstract Simposium Kebangsaan Institut Statistik Malaysiake-12.*

13. Nasuhar, A.A.,**Habshah, M.** and Mustafa, M (2018). Robust Breusch Pagan Test for the Detection of Heteroscedasticity in Response Surface Models. *Book of Abstract Simposium Kebangsaan Institut Statistik Malaysiake-12.*

14. Syaiba, B.A., **Habshah, M** and Arasan, J. (2018). Robust Logistic Ridge for Multicollinearity in the Presence of High Leverage Points. *Book of Abstract Simposium Kebangsaan Institut Statistik Malaysiake-12.*

15. Ali, D.A., **Habshah, M** and Arasan, J. (2018). On the Robust Parameter Estimation for Linear Model with Autocorrelated Errors in the Presence of High Leverage Points and Outliers in the Y-Direction. *Book of Abstract Simposium Kebangsaan Institut Statistik Malaysiake-12.*

16. **Habshah, M.** (2018). Fast GM Estimator to Reduce the Effect of Bad Leverage Points. *Book of Abstract the 3rd International Conference on Mathematical Sciences and Statistics, ICMSS2018, 6-8th February, Putrajaya.*

17. Rana, S. and **Habshah, M.** (2018). On Eigenfunction based Outlier Detection Method in High-Dimensional Data. *Book of Abstract the 3rd International Conference on Mathematical Sciences and Statistics.ICMSS2018.*

18. **Habshah, M.,** Mahmood, E.A., Hussin, A.G. and Arasan, J. (2018). Robust Parameter Estimation Method of Simple Circular Regression Model When the Response Variable is Contaminated. *Book of Abstract the 3rd International Conference on Mathematical Sciences and Statistics.ICMSS2018.*

19. Sani, M. **and Habshah, M.** (2018). The Performance of Robust Heteroscedasticity Consistent Covariance Matrix Estimator. *Book of Abstract the 3rd International Conference on Mathematical Sciences and Statistics.ICMSS2018.*

20. Dalatu, P.I**. , Habshah, M,** Arasan, J and Gafurjan, I.(2017). New Approach to Normalisation Technique in K-Means Clustering Algorithm. *Abstract book Fundamental Science Congress (FSC 2017).*

21. Alsattari, O. and **Habshah, M.** (2017). On the Performance of Wild Bootstrap based on GM6 Estimator in the Presence of Heteroscedastic Errors and High Leverage Points. *Abstract book Fundamental Science Congress (FSC 2017).*

22. **Habshah, M.,** Sani, M., Mustafa, M.S. and Arasan, J. (2017). New Weighting Method for Robust Heteroscedasticity Consistent Covariance Matrix Estimator in Linear Regression. *Abstract book Fundamental Science Congress (FSC 2017).*

23. Mahmood, E.A., **Habshah, M.,** Hussin, A.G. and Arasan, J**.** (2017). Detection of Outliers in a Simple Circular Regression Model. *Abstract book Fundamental Science Congress (FSC 2017).*

24. Ariffin, S.B., **Habshah, M.,** and Arasan, J**.** (2017). The Effect of High Leverage Points on Collinearity Diagnostic in Logistic Regression Model. *Abstract book Fundamental Science Congress (FSC 2017).*

25. **Habshah, M.** (2017). Some Multicollinearity Issues and How to Remedy this Problems. *Abstract book Fundamental Science Congress (FSC 2017).*

26. **Habshah, M.** (2017). Robust Augmented Desirability Function Optimisation Approach for Multiple Responses. *Abstract book. The 8th International*

*Conference on Numerical Optimization and Operational Research. ICNOOR-VIII*

27. Nor Mazlina **and Habshah, M.** (2017). Robust Estimation for the Fixed Effect Panel data Model. *Abstract book. The 8th International Conference on Numerical Optimization and Operational Research. ICNOOR-VIII*

28. Syaiba, B.A. and **Habshah, M.** (2017). The Effect of High Leverage Collinearity Influential Observations on Logistic Regression Analysis. *Abstract book. The 8th International Conference on Numerical Optimization and Operational Research. ICNOOR-VIII.*

29. **Habshah, M** (2016). The Detection of High Leverage Collinearity Enhancing Observations Using Robust Variance Inflation Factor. *Abstract book of Simposium Kebangsaan Institut Statistik Malaysia ke-10, UPM 18Feb, 2016.*

30. **Habshah, M** (2016). The Improvised Generalized M-Estimator to Remedy Multicollinearity Caused by High Leverage Points. *Book of Abstract the 7th European Congress of Mathematics, Berlin, Germany, 18-22 July, 2016.*

31. **Habshah, M** (2016). The Performance of Variable Selection Techniques based on Robust Least Angle Regression. B*ook of Abstract the the International Conference and Workshop on Mathematical Analysis, Langkawi, 2-4 August, 2016.*

32. **Habshah, M** (2016). Robust Within Group Estimator based on Improvised GM Estimator for Fixed Effect Panel data Model. *Book of Abstract the 7th International Conference on Numerical Optimisation and Operation Research, Hanoi, Vietnam, 31-2 Nov., 2016.*

33. **Habshah, M** (2016). On the Performance of Robust Variables Selection Techniques based on Robust Least Angle Regression. *Book of Abstract the 3rd International Conference of Malaysia Institute of Statistics, University of Malaya, 9-11 August, 2016.*

34. **Habshah, M** (2016). On the Performance of Improvised Generalized M-Estimator in the Presence of High Leverage Collinearity Enhancing Observations. *Book of Abstract the 18th International Conference on High Performance Computer, Computing and Statistics, Zurich, Switzerland, 15-16 Sept, 2016.*

35. John, A.H., R, Sohel and **Midi, H.**(2015). *Robust Random Regression Imputation for Missing Data*. Lamberd Academic Publication, Germany. (ISBN 978-3-659-11196-9)

36. Uraibi, H.S. and **Habshah, M** (2016). Robust Variable Selection methods for Large Scale Data in the Presence of Multicollinearity, Autocorrelated Errors and Outliers. Lamberd Academic Publication, Germany.

37. **Habshah Midi**. Teaching Modules for *MTH3003: Statistics for Applied sciences.*

38. Fauziah Maarof, Noor Akma Ibrahim and **Habshah Midi.** Teaching Modules for *MTH3401*: *Probability and Statistics I .*

39. **Habshah Midi.** Teaching Modules for *MTH3403: Experimental Design.*

40. **Habshah Midi.** Teaching Modules for *MTK3406; Quality Control Techniques*

41. **Habshah Midi** and Kassim Haron. (1995). Kertaskerja Pencapaian Graduan UPM: Satu analisis.Kertaskerja yang dibuat atas arahan Prof. Mohammed Suleiman, Timbalan Naib Canselor UPM. *Dibentangkan semasa mesyuarat Senat, UPM.*

42. **Habshah Midi**, Azmi Jaafar and Ismail Mohammad (1991). L-1 Norm. *Mathematics Department Technical Report.*

43. **Habshah Midi (**1988). Sepintas lalu Mengenai Matapelajaran Statistik *Exponent Magazine*. Serdang: Jabatan Matematik, UPM.

44. **Habshah Midi** (1989).Probability and it's application. *Exponent Magazine*. Serdang: Jabatan Matematik.

45. **Habshah Midi** (1986). Regression and correlation. *Workshop Manuscript on statistics for STPM Teachers.* Universiti Kebangsaan, Bangi.

46. **Habshah Midi** and Foo Lee Kian, (2008), Bootstrap Confidence Interval for Robust Cpk Index, *Math Digest, INSPEM.*

47. **Habshah Midi** and Nahdiyah (2009), The Performance of Least Trimmed of Squares in the presence of outliers, *Math Digest, INSPEM.*

48. **Habshah Midi** and Iszuani (2009), The Performance of Bootstrap Estimates for the Coefficient of Variations in the presence of outliers, *Math Digest, INSPEM.*

49. **Habshah Midi,** and Sham, N.M. (2008). A Robust EWMA Control Chart. *Science Putra Research Bulletin,* 16, pp. 58-69.

50. **Habshah Midi** (2009), Written Report in 2009, on *Laporan Kajian Pencapaian Malaysia University English Test (MUET) 2002-2006*, ISBN 978-983-2321-39-2.

8. **TEACHING EXPERIENCES**

   1. MTH 6983, Recent Development in Statistical Technique in Research, (3 credits), PhD.
   2. MTH 5401, Mathematical Statistics (3 credits), Master.
   3. MTH 5403, Design and Analysis of Experiment (3 credits), Master.
   4. MTH 5404, Regression Analysis (3 credits), Master.

5. MTH 5412, Robust Statistics (3 credits), Master.

6. MTH 4403, Nonparametric Statistics (3 credits), Bachelor.

7. MTH 4402, Special Topics in Statistics (3 credits), Bachelor.

8. MTH 3406, Statistical Quality Control (3 credits), Bachelor.

9. MTH 3403, Experimental Design (3 credits), Bachelor.

10. MTH 3402, Probability and Statistics II (3 credits), Bachelor.

11. MTH 3401, Probability and Statistics I (3 credits), Bachelor.

12. MTH 3200, Algebra (3 credits), Bachelor.

13. MTH 3100, Advanced Calculus (3 credits), Bachelor.

14. MTH3100, Calculus (3 credits), Bachelor.

15. MTH 3003, Statistics for Applied Sciences (3 credits), Bachelor.

16. MTH 3002, Introduction to Calculus (3 credits), Bachelor.

17. MTH 1401, Elementary Statistics (3 credits), Diploma.

18. MTH 1101, Basic Calculus (3 credits), Diploma.

19. MTH 1002, Matematics II (3 credits), Diploma.

20. MTH 1001, Mathematics I (3 credits), Diploma.

21. Taught undergraduate service courses, 1980-1981 (Business Statistics and Statistics for Engineers) at the Department of Statistics, the Ohio State University , Columbus Ohio, USA (**as teaching assistant**).

Me and my students at The Ohio State University,Columbus, Ohio, USA
(My first Teaching Experience,as teching assistant in 1980-1981)
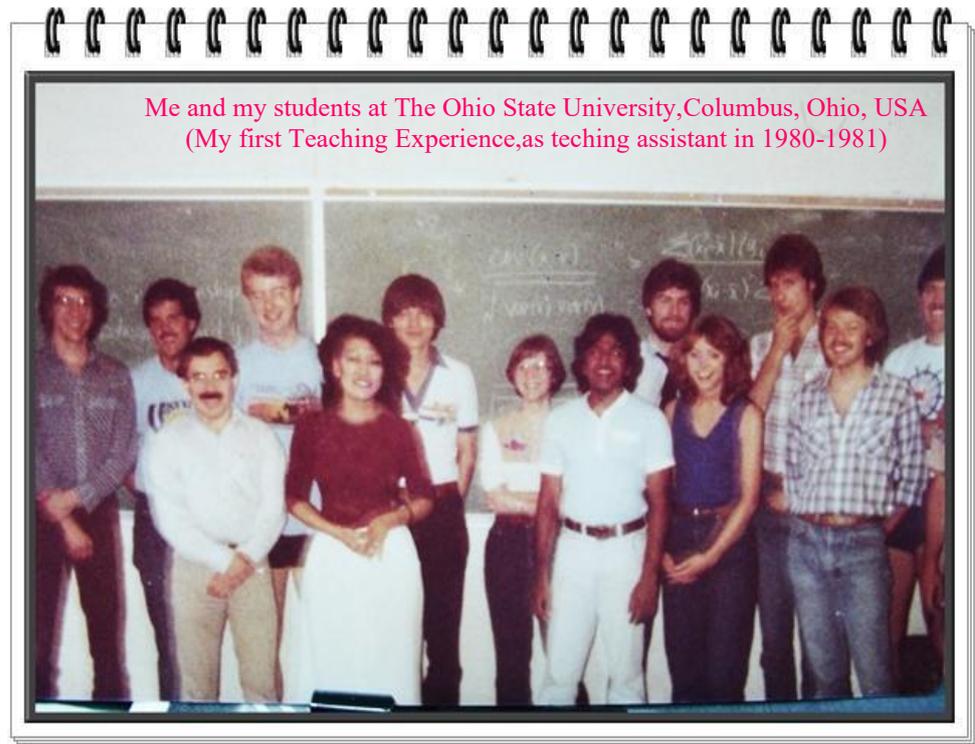
9. STUDENTS SUPERVISION (BACHELOR, MASTER AND PHD)

Me and five of my PhD students, 2008

(i)

GRADUATED (PHD)-MAIN SUPERVISOR

1. Bashar A. Talib, **Iraq** (PhD/GS 18987, 2006). Robust Regression with Continuous and Categorical Variables Having Heteroscedastic Non-normal Errors. **Main supervisor.**

2. Norazan Binti Mohamed Rami**, Malaysian** (PhD/GS 13542, 2008). Weighted Maximum Median Likelihood Estimators. **Main supervisor-.**

3. Md Sohel Rana, **Bangladesh** (PhD/GS 18987,2010). **Submit thesis in 3 years. Graduate on Time (GOT).** Robust Diagnostics and Estimation in Heteroscedastic Regression Model in the Presence of Outliers. **Main supervisor.**

4. Arezoo Bagheri , **Iran** (PhD/ GS20453, 2010). **Submit thesis in 3 years. Graduate on Time (GOT).** Robust Collinearity Influential Diagnostic Measures in the Presence of High Leverage Points**. Main Supervisor**

5. Anwar Fitrianto, **Indonesia** (PhD/GS 16121, 2010). Robust Estimation Methods and Outlier Detections in Mediation Models. **Main supervisor.**

6. Hosein Riazosham, **Iran** (PhD/GS 17634, 2011). Robust Estimation Methods and Outlier Detections for Nonlinear Regressions Model Having Autocorrelated and Heteroscedastic Errors.**Main Supervisor**

7. Kourosh Dadkhah, **Iran** (PhD/GS 19761, 2011). Robust Kernel Density Function Estimation. **Main supervisor.**

8. Ashkan Shabbak, **Iran** (PhD/ GS20563, 2011). Improvised Multivariate Control Chart with robust methods.. **Main Supervisor.**

9. Ng Kooi Huat, **Malaysia** (PhD/ GS17987, 2012). Robust Control Charts for change point detections in the presence of outliers. **Main Supervisor.**

10. Lim Hock Ann, **Malaysia** (Phd/ GS26978, 2014) Robust Estimation Technique and Robust Autocorrelation Diagnostic for Multiple Linear Regression Model With Autocorrelated Errors. **Main Supervisor**

11. Mohamed Abdulhussein, **Iraq** (Phd/GS 35192, 2015) Robust Diagnostics Measures and Robust Parameter Estimation Techniques for Linear Regression Model Having Multicollinearity Problem and Outliers. **Main Supervisor.**

12. Mohd Shafie Mustafa, **Malaysia** (Phd/GS23514, 2015). Robust Outlier Detection and Estimation in Response Surface Methodology. **Main Supervisor.**

13. Hassan S Uraibi, **Iraq** (PhD/ 2016). Robust Variable Selection Technique for Large Scale Data in the Presence of Multicollinearity, Autocorrelated Errors and Outliers. **Main Supervisor.**

14. Taha Hussein Ali, **Iraq** (PhD/GS 37670, **2017).   Graduate on Time (GOT).** Robust Estimation Method for Single Index Quantile Regression and Bayesian Variable Selection Approach in the Presence of High Leverage Point. **Main Supervisor**

15. Paul Inuwa Dalatu, **Nigeria** (PhD/GS 38183, 2017).Statistical Data Preprocessing Methods in Distance Functions to Enhance K-Means Clustering Algorithm. **Main Supervisor.**

16. Shelan Saied Ismaeel**, Iraq** (PhD/ GS 42235, 2017). **Graduate on Time GOT** .Robust Estimation Method and Influential Observation Measure for Fixed Effect Panel data model having heteroscedasticity and multicollinearity Problems. **Main Supervisor.**

17. Ehab Abdulsalam Mahmood, **Iraq** (PhD/GS 40619, 2017). **Graduate on Time (GOT)**.Robust Estimation method and Outlier Detection in Circular Data Model. **Main Supervisor**

18. Muhammad Sani, **Nigeria** (PhD/GS 40619, 2018). **Graduate on Time GOT).** Robust Diagnostic and Parameter Estimation for Multiple Linear and Panel Data Regression Models. **Main Supervisor**

19. Syaiba Balqish binti Ariffin@Mat Zain, **Malaysi**a(PhD/GS, 2019). Robust Diagnostics and Robust Estimation Method for Logistic Regression Model in the Presence of Multicollinearity and High Leverage Points. **Main supervisor.**

20. Nor Mazlina Abu Bakar, **Malaysia** (PhD/ GS26111, 2019). Robust Estimation For the Fixed Effect Model in the presence of block high leverage points.**. Main supervisor.**

21. Divo Dharma Silalahi, **Indonesia** (2021) . Development of Robust Procedures for Partial Least Squares Regression with Application to Near Infrared Specral Data. **Main supervisor.**

22. Ishaq Abdulahi Baba, **Nigeria** (2021). Robust Diagnostics and Variable Selection Procedure based on Modified Reweighted Fast Consistent and High Breakdown Estimator for High Dimensional Data. **Main Supervisor.**

23. Ali Mohammed Baba, **Nigeria** (2022). Robust Spatial Diagnostic Method and Parameter Estimation for Spatial Big Data Regression Model.. **Main Supervisor.**

24. Abdullah Mohammad Rashid, **Iraq** (2022). Support Vector Regression for High Dimensional Data in the Presence of Multicollinearity and High Leverage Points. **Main Supervisor**.

25. Nasuhar Abdul Aziz, **Malaysia**(PhD/GS 41268, 2022). Robust Diagnostic and Estimation Method in Response Surface Model with Heteroscedastic Errors and Outliers. **Main Supervisor**

26. Siti Zahariah Abdul Wahab (PhD, 2023). Robust Diagnostics and Parameter Estimation in Linear Regression for High Dimensional Data. **Main Supervisor.**

27. HassanTalib Hendi, **Iraq** (PhD, 2023).Robust Statistical Procedures for Multiple Linear Regression Model in the Presence of Multicollinearity and Outliers. **Main Supervisor.**

GRADUATED (PHD)-CO- SUPERVISOR

1. Maiyastri. **Indonesia** (PhD/ 2004). Modelling and Forecasting KLCI rate of Return Using GARCH Model. **Co-supervisor,** Main : Dr Kassim Haron, Faculty of Science.

2. Ibrahim Sheikh Abdul Kadir Al-Hagi, **Somalia** (PhD/ 2006). Model Shift of Transportation Mode From Motorcycle to cars Using statistical Modelling. **Co-Supervisor.** Main: Ex-Vice Chanselor of UPM, Dato' Ir Dr Radin Umar Radin Sohadi, Faculty of Engineering.

3. Liew Khim Sen. (PhD/2008). Non-Linearity in Monetary Models of Exchange Rate in Five Asean Countries. **Co-supervisor,** Main: Prof Zubaidi, faculty of Economics.

4. Kaveh Kiani, **Iran** (PhD/ GS 23046, 2012). Robust Estimations in Regression Modelling of Survival data. **Co-supervisor,** Main: Dr Jayanthi Arasan, faculty of Sciences.

5. Velo Suthar, **Pakitan** (PhD/GS 19688, 2010). Logistic Regression Analysis of Self-Regulated Learning and Student's Belief on Mathematics Achievement of University Students. **Co-Supervisor**, Main Supervisor- Assoc Prof Dr Rohani Termizi, Laboratory Of Mathematics Education, INSPEM, UPM

6. Lili Asma Ismail, Malaysia (PhD/GS 18987, 2010). Risk Factors for Contact Lens Related Microbial Keratis. **Co-Supervisor**, Main supervisor, Prof Dr lekhraj Rampal Medical faculty, UPM

7. Ali-Reza**, Iran** (PhD/ GS 20116, 2013). Spatial Modelling in Time Series. **Co-supervisor,** Main: Assoc Prof Dr Mahendran Shitan, Faculty of Sciences.

8. Saidatulnisa Abdullah, Malaysia (PhD/ 2013). Correlation Structure of Spatial Model. **Co-supervisor,** Main: Assoc Prof Dr Mahendran Shitan, Faculty of Sciences.

9. Chong Choy Yoke, Malaysia (PhD / GS 23670, 2016). Outliers and Levels Shifts in Forcasting Volatility of Financial data Using Garch Model. **Co-supervisor,** Main: Prof Muzaffar, faculty of Economy.

10. Nur'azah Abdul Manaf, Malaysia (PhD/ GS 19184, 2016). Reproducing Hilbert Space Method for Cox Proportional Hazard Model. **Co-supervisor,** Main: Assoc. Prof Dr Mohd Rizam Abu Bakar, Faculty of Science, UPM

11. Waleed Dhhan Sleabi, **Iraq** (PhD/GS3742, 2017). Support Vector Machine and its application in Regression and Time Series Analysis. **Co-supervisor,** Main: Assoc. Dr Sohel Rana. Faculty of Science, UPM

12. Loh Yue Fang, **Malaysia** (PhD/GS40619, 2018). Modelling Doubly Interval Censored Survival Data via the Log Logistic Distribution with Covariate. Co-Supervisor, Main: Assoc Dr Jayanthi Arasan, Faculty of Science, UPM.

13. Manoharan Thirunanthini, **Malaysia** (PhD/GS40619, 2018). Inferential Procedures on Log-Normal Model for Left-Truncated and Case-K Interval Censored Data With Covariates. Co-supervisor, Main: Assoc. Prof Dr Jayanthi Arasan, Faculty of Science, UPM.

IN PROGRESS (PHD MAIN SUPERVISOR)

1. Jaaz Suhaiza Jaafar, **Malaysia** (PhD). Pattern Recognition: Feature Reduction in High-Dimensional Space Using Robust Principal Component Analysis in the Presence of Outliers. **Main Supervisor.**

2. Ahmad Azizi bin Saupi, **Malaysia.** (2024). Statistical Procedure in High Dimensional Data Using AI and Support Vector Regression. **Main Supervisor**.

Me and my PhD students in the Statistics Laboratory

(ii) GRADUATED (MASTER-MAIN SUPERVISOR)

1. Norazan Mohamed Ramli (MS/ 2000). Measure of Nonlinearity in Nonlinear Model. **Main Supervisor.**

2. Ibrahim Sheikh Abdul Kadir Al-Hagi, **Somalia** (MS/ 2000). Statistical Process Control Analysis.**Main Supervisor.**

3. Hassan Sami Uraibi, **Iraq**. (MS/GS 15061, 2009). Dynamic Robust Bootstrap Algorithm for Linear Model Selection using Least Trimmed Squares. **Main supervisor**.

4. Syaiba Balqish. **Malaysia** (MS/GS GS19425, 2010), Robust Diagnostic and Robust Bootstrap in Logistic Regression Model. **Main supervisor**

5. Mandana Mohamad, **Iran** (MS/GS19285, 2011). *Phase II robust multivariate control charts.* **Main supervisor.**

6. Ishaq Abdullahi Baba, **Nigeria** (MS/ GS 35627, 2015). Response Surface Methodology based on penalty function. **Main-Supervisor**

7. Orooba Mohsin Mahdi, **Iraq** (GS1685, 2017. Robust Estimation and Outlier Detection Method in Simultaneous Equation Model. **Main-Supervisor.**

8. Mohammed Abduljaleel Gatea, **Iraq** (GS41276, 2017). Outlier Detection and Robust Estimation Methods in the Analysis of Nested Gage R&R, Random Effect Model. **Main Supervisor.**

9. Ahmad Azizi bin Saupi, **Malaysia.** (2021) Outliers Identification and Robust Estimation Method in Analysi of Crossed Gage Repeatability and Reproducibilty, Random Effect Model. **Main Supervisor**.

GRADUATED (MASTER-CO SUPERVISOR)

1. Law Teik Hwa (MS/ 1996-1998). Evaluation of the "Belia di Jalan Raya and Road Safety Program. **Co-supervisor,** Main: Dato Ir. Dr. Radin Umar Radin Suhadi-ex UPM Vice Chancelor, Faculty of Engineering.

2. Zaida Zaini (MS/ 2005-2006). Maintainability Evaluation of Web Applications. **Co-supervisor,** Main: Prof Azim, faculty of Computer Sciences.

3. Lily Wong (MS/GS14396, 2007-2009). Heuristic Placement Routines for Two-Dimensional Rectangu lar Bin Packing Problems. **Co-supervisor,** Main: Dr Lee Lai Soon, Institute for Mathematical Research

4. Syarifah (MS/ 2007-2008). Modelling and forecasting the number of pedestrian accidents in Malaysia. **Co-supervisor,** Main: Dato' Ir Dr Radin Umar Radin Suhadi, Faculty of Engineering.

5. Maryam Sarabran (MS/ GS19070, 2008-2010). Improved Multicrossover Genetic Algorithm for Two Dimentional Rectangular Bin Packing Problem. **Co-supervisor,** Main: Dr Lee Lai Soon, Institute for Mathematical Research.

6. Choo Wei Cheong (MS / 1996-1998). Generalized Autoregressive Conditional Heteroscedasticity (GARCH) Models for Stock Market Volatility. **Co-Supervisor,** Main: Dr Idrees Ahmad, Faculty of Sciences

7. Ahmad Nazri (MS/ 2007-2009) Applying Visual Resource Assessment Procedure (VRAP) to Predict and Assess Quality at UPM's pasture. **Co-supervisor,** Main: faculty of Landscape, UPM.

8. Nahdiya Zainal Abidin (MS/GS 26022, 2009-2011), Goodness of fit test for extreme value. **Co-supervisor,** Main : Dr Bakri Adam, Institute for Mathematical Research

9. Yap Ching Nei (MS/ GS 25027, 2009-2011). Ant Colony Optimisation for Container Loading Problem. **Co-supervisor,** Main: Dr Lee Lai Soon, Institute for Mathematical Research.

10. Tan Wen Fang (MS/ GS 25036, 2009-2011). Ant Colony Optimisation for Vehicle Routing Problem . **Co-supervisor,** Main: Dr Lee lai Soon, Institute for Mathematical Research.

11. Ahmefule Happy John (GS31977, 2013-2014). Analysis of Robust Random Regression Imputation Method for Missing Data in the Presence of Outliers.**Co-Supervisor**, Main: Dr Sohel Rana, Faculty of Science.

12. Rebecca Loo Ting Jin (MS/2014-2016). Measures of Influence and Weighted Partial Likelihood Estimation for Cox Proportional Hazards Regression. **Co-supervisor,** Main: Dr Anwar Fitrianto, faculty of Science.

13. Grace Lau Chui Ting (MS/2014-2016). Global Optimization and alternative Construction Methods of Symmetrical Uniform Designs. **Co-supervisor,** Main: Dr Anwar Fitrianto, Faculty of Science.

14. Ahmad Kadom Hassan (GS42479, 2015-2017). Robust Cluster Approach to Detect Outliers. **Co-Supervisor**. Main Dr Anwar Fitrianto, Faculty of Science.

15. Adamu Adamu Muhammadu (2014-2016). Detection of Heteroscedasticity and the Leverage Information in Linear Regression. **Co-Supervisor**, Main: Dr Sohel Rana

(iii) Some SelectedMaster of Applied Statistics Projects-All main supervisor.

1. Tan Pei Chyi (GS52690, Sep 2019-August 2020).Outlier Detection and Improvised Robust Within Group Estimator for Fixed Effect Panel Data Model.

2. Sim Chee Yuong (GS 46536:Sept 2018-August 2019). Robust Within Group Estimators with Robust Centering Methods for Fixed Effect Panel Data Model.

3. Jama Osman (2018-2019). The Identification of High Leverage Points based on Support Vector Regression.

4. Nurfaza Fariha Zainuddin (2017-2018). Identification of outliers in Random Effect Variance Shift Model Using Meta-Analysis.

5. Loo Lie Yoon (2017-2018). On the Performance of Dual Response Surface Optimization based on MM Estimator.

6. Dahir Abdi Ali (2017-2018). Robust Parameter Estimation Method for Linear Model with Autocorrelated Errors and High Leverage Points.

7. Choo Chang Hong (2016-2017). Robust Estimation of Quantile Regression Parameter.

8. Osama, A.A.Alsattari(2016-2017). On the Performance of Wild Bootstrap based on MM-GM6 Estimator in the Presence of Heteroscedastic Errors and High Leverage Points.

9. Nurul Shakinah Mohamad Anwar (2016-2017). The Performance of GM6 Within Group Estimator in Fixed Effect Panel Data Model.

10. Anis Farhana Badrul Hisham (2016-2017). Comparison between Two Stages Least Squares, Two Stages Robust GM6 and Two Stages Robust MM in Simulataneous Equation Model.

11. Hala Mohammad Mustafa (GS42525, 2016-2017). Robust Estimation method in linear regression in the presence of multicollinearity and high leverage points.

12. Wang Dan (Matric No 45322, 2016-2017). Utilising a moderate robust heteroscedasticity consistent covariance matrix estimator on a finite sample for linear regression having heteroscedastic error and high leverage points.

13. Nur Hazirah Baharin (GS39353, 2015-2016). Robust Designs Optimization with Unbalanced Data.

14. Mohammad Izzuan Termidi (2015-2016). Geometric Decile Mean and its Applications in Detecting Multiple Outliers.

15. Nur Syazana Rashid (GS40197, 2016). An Improvised Robust Rescaled Moment Test based on MM-Estimator.

16. Norizzati binti Mohd Nasir (GS36134, 2013-2014). Analysis on the PM10 concentration data using robust methods.

17. Marliani Mohd Mahadar (GS 32609, 2013-2014). Comparison of the performance of the ordinary least squares and MM estimator.

18. Norasni Mustapa (GS35677, 2013-2014). Comparison between Pearson's Correlation, Pearson Correlation based on MM estimator, the absolute value from the sample mean and absolute value from the decile mean correlation coefficient.

19. Ilyas Jama Omar (2013-2014). Comparison between CUSUM Control Chart based on the mean and Cusum Control Chart based on the median.

20. Shazana Hashim (GS 34123, 2013-2014). The effect of high leverage point on the breush godfrey test (BG) and modified breush godfrey test (MBG).

21. Jaaz Suhaiza Jaafar (GS 32900, 2013-2014). A Simulation Study on Ridge Regression Estimator in the Presence of multicollinearity and outliers.

22. Loo Yee Peng (GS 25380, 2010-2011), The effect of outlier on the optimal yield of response surface design in response surface methodology.

23. Fatimah Bibi Hamzah (GS25566, 2010-2011), The performance of the VIF measure in the presence of high leverage point.

24. Emi Amielda Ahmad Mokhtar (GS24476, 2010-2011), Comparison between the classical CUSUM chart and robust CUSUM chart based on Minimum Volume Ellipsoid estimator.

25. Suriana Ishak (GS25563, 2010-2011), The detection of high leverage point and its effect on variance selection criterion.

26. Zaitul (GS 23235, 2009-2010), The identification of high leverage points in linear regression.

27. Hashima Idris (GS 27271, 2010-2011), The effect of outlier on the response surface model.

28. Nor Azima Ismail (GS 23235, 2009-2010), The identification of high leverage points in linear regression.

29. Norafefah Mohamad Sobri (GS 23291, 2009-2010). The effect of high leverage point on the correlation coefficient measure

30. Nurulhaida Zakaria (GS 23293, 2009-2010). The effect of high leverage points on the parameter estimates of linear model

31. Nurul Bariyah Ibrahim (GS 23290, 2009-2010). The effect of high leverage points on the multicollinearity measure.

32. Nurasfarizan Khaidzir (GS 23336, 2009-2010). The Performance of the LTS based Estimator in Solving Autocorrelation Problem in Simple Linear Regression with autocorrelated errors.

33. Rozila Omar (GS 23235, 2009-2010). Some Statistical Analysis on the Staff Satisfaction Survey at the HR Department, TATAIUC.

34. Siti Zahariah Abdul Wahab(2008-2009). The effect of outliers on the Coefficient and determination measures.

35. Noor Azwa Ansar (GS19137, 2008-2009). The performance of Bootstrap Confidence Intervals of the Process Capability Index, Cpk based on classical and robust estimators.

36. Phim Pha a/p Erom.(GS18837, 2008-2009). The performance comparison of process capability ration Cpm based on classical and robust methods.

37. Syafawati Abdul Refai (GS19358, 2008-2009). A comparison between Pearson's, Spearman, Kendall, Least Median of Squares and MM-estimators Correlation Coefficient.

38. Rohayu bte Mohd Salleh.(GS17393, 2008-2009) Estimation Of Population Mean Based on The LS,LMS, and MM-Estimator.

39. Aini Abbas (GS14063, 2007- 2008). The performance of bootstrap confidence intervals of the process capability index CPK based on the MVE, classical and M-estimators.

40. Khaleda Oseman (GS17028, 2007-2008). The performance of EWMA Control Chart Compared to Classical, Robust and Bootstrap Method.

41. Khadijah Daud (GS15051, 2007-2008). The performance of Ridge Regression Estimators.

42. Zamira Hasanah Zamzuri (GS17842, 2007-2008). Bootstrapping AR(9) Process, Some Simulations study.

43. Chan Pooi Lai (2007-2008). Robust Latent Root Regression.

44. Munirah Mohd Fadzil (GS17496, 2007-2008) Correlation Coefficient : A Comparison between non-robust estimator and robust estimator.

45. Raja Rajeswari D/O Ponnusamy (GS18343, 2007-2008). The Performance of Response Surface Methodology Based On The OLS and MM-Estimators for Second Order Regression Model.

46. Mazni binti Mohammad.(GS15292, 2007-2008) The Performance Of The MM-Estimators in Solving The Autocorrelation Problem In Simple Linear regression.

47. Mohammad Hussin bin Abd Hamid (GS15153, 2007-2008) The Performance of Non Linear Regression Estimator With Reweighting Scheme Using Robust PSI Function.

48. Ariani Alip (GS15738, 2007-2008) The Performance of The Classical and Modified Hostelling T^2 Control Charts Based On Robust Estimator.

49. Tou Siew Eng.(GS16721, 2007-2008) The Performance Comparison between different Cusum Charts For Monitoring Process Mean.

50. Siti Rahmah binti Roslant. (GS17310, 2007-2008) Least Square Estimation For Work Effort In Software.

51. Salmi Bt Idin (2006-2007). Estimation of a Population Mean based on the LS and LTS Estimation.

52. Chong Choy Yoke (2006-2007). Multi Level Marketing in Higher Education Institution within Klang Valley Malaysia.

53. Ng Siao chin (2006-2007). Least Squares Estimation of Monthly User Usage Scoring Model for Corporate Internet Banking Portfolio.

54. Saodah Bt Ismail (2006-2007). Performance of Ordinary Least Squares and Robust M-Estimator in Dealing with Real Life Data with Outliers.

55. Nor Aishah (2006-2007). The Performance of Robust MM EWMA Control Chart.

56. Nor Affizal bin Shafie (2006-2007). A Statistical Quality Control Technique on Pharmaceutical Product (RENACARB).

57. Nik Majizaidi Nik Muhammad (2006-2007). Statistical Analysis on Some Characteristics of Matriculation Students in Negri Sembilan Matriculation College.

58. Jayanthi A/P Arasan (2006-2007). Transforming the Regression Model and the Response for Nonlinear Regression Model with Heteroscedastic Errors.

59. Fadzilah Md. Ali (2006-2007). Jackknife-based Estimators in Nonlinear Regression Model.

60. Lim Hock Ann (2006-2007). Performance of the Trimmed Mean CUSUM Chart.

61. Foo Lee Kien (2006-2007). The Performance of Bootstrap Confidence Intervals of CPK Index based on M-estimator.

62. Johari Marijan (2006-2007). Comparition between Least Square Estimates and the M-estimates : A Case Study.

63. Tan Hui Shi.(GS14675, 2006-2007) The Comparison Between Classical and Robust Methods On Process Capability Indices and Multivariate Control Chart.

64. Lum Li Seong (2005-2006). Transforming the Regression Model and Response for Non-Linear Model with Heteroscedastic Errors.

65. Sim Hock Chai (2005-2006). Evaluation of the Performance of Bootstrap Estimates and Bootstraps Percentile Confidence Intervals for Pure AR(5) Processes.

66. Azniah Binti Mohamed Ghulam (2005-2006). The Analysis of the Control Charts, Process Capability Indices and Cost of Poor Quality at TCI SDN BHD; and Example on Cable Type 4C 1KV AL 185MMSQ.

67. Hamidah Bt Abu Bakar (2005-2006). Correlation Coefficient; Comparison Between Pearson's, Spearman and MM-Estimator.

68. Fong Kok Wai (2004-2005). Robust Approach in Estimating $\overline{X}$ Control Charts.

69. Lai Chai Yan (2004-2005). Detection and Accommodation of Outliers in Linear Regression by Using LS and MM-estimator.

70. Hii Siew Chen (2004-2005). Detecting Small Shifts by using Synthetic Control Chart.

71. Kennedy b.David (2004-2005). The Performance of the Cusum Chart based on Bisquare M-estimator.

72. Mah Wei Wei (2004-2005). The Comparison Between the Classical Hotelling T-Square Chart and Modified Sample Covariance Matrix.

73. Lam Siow Mei (2004-2005). Queing Theory Problem: A Case Study, Waiting Time in the Government Hospital.

74. Khor Ming Ming (2004-2005). Generalized Linear Model Procedures for Design Experiment with Non-Normal Response.

75. Noraine Halim (2004-2005). The Performance of Robust Latent Root Regression based on MM-estimator.

76. Samihah (2004-2005). The Performance of the D-Optimal Design based on the Robust M- estimator.

77. Zaleha Md. Ali (2003-2004). Estimation of a Population Mean Based on the MM-estimator.

78. Shee Bee San (2003-2004). Statistical Analysis on Sales of Brand X Skin Care Product and its Relationship with other Variable.

79. Lau Ung Hua (2003-2004). A Robust latent root Regression in the Presence of Multicolinearity and Outliers.

80. Siti zubaidah Mohamed (2002-2003). Estimation of a Population Mean Based on The Least Median Squares (LMS) Estimators.

81. Tang Eng Loong (2002-2003). Least Median Squares Estimation of a Fatigue model.

82. Wan Zawiah Wan Zin (2002-2003). The Six Sigma Methodology Application in Semiconductor Packaging, A-Case Study.

83. Hanissah Bt mohamad @ Sulaiman (2002-2003). The Performance of Bootstrap Confidence Intervals of Cpk Index based on MM- estimator.

84. Nora Bte Muda(2002-2003). Generalized Linear Models Procedures for Designed Experiment with Nonnormal Response.

85. Mohamad Sofian Awaludin (2002-2003). Improving Destructive Test Capability in Manufacturing Environment.

86. Hee Fong Ling (2002-2003). The Comparison Between a Robust Control Chart based on Hodges Lehmann Estimator and Classical Hotelling T-Squares Chart for Contaminated Normal Distribution.

87. Marina Zahari (2001-2002). A Robust Estimator in the Presence of Outliers and Multicollinearity.

88. Nurulhuda Bte Mohd Azmi (2001-2002). Identifying Multiple Outliers in Linear Regression by Clustering Methodology Using MM- estimator.

89. Muhamad Safiih Lola (2001-2002). A Correlation Coefficient Based on M- estimator.

90. Ng Kok Haur (2001-2002). The Performance of the Cusum Chart Based on MM-estimator.

91. Lieow Chieu Han (2000-2001). The Performance of the Cusum Chart Based on M-estimator.

Me and my PhD students in the Statistics Laboratory, Mathematics Department, UPM

(v) SOME SELECTED FINAL YEAR PROJECT SUPERVISION.

1. Siti Aishah Zaina Abidin (190623, Sem 2 2018/19:Feb -Sem 1 2019-2020-Jan). The Effect of High Leverage Collinearity-Enhancing Observations on Multicollinearity Pattern of a Data.**Main Supervisor**.

2. Zunah Syazana Mohamad Jiwa (186796, Sem 2 2018/19:Feb -Sem 1 2019-2020-Jan). An Improvised Shapiro Wilk Test for Normality in Regression.**Main Supervisor**.

3. Rosyaniza Azwa Roseli (189468, Sem 2 2018/19:Feb -Sem 1 2019-2020-Jan). An Improvised Goldfeld –Quant Test for the Detection of Heteroscedasticity in the Presence of Outliers.**Main Supervisor**.

4. Ang (Sem 2, 2017-2018). Robust Parameter Estimation for Logistic Regression Model in the Presence of High Leverage Points.**Main Supervisor**.

5. Vivian (Sem 2, 2017-2018). The Detection of High Leverage Collinearity –Enhancing Observation in the Presence of High Leverage Points.**Main Supervisor**.

6. Stanlee Mok Khaei (Sem 1, 2017-2018). The Performance of Two-Steps Robust Weighted Least Squares in the Presence of Heteroscedasticity and High Leverage Points.**Main Supervisor**.

7. Chee Sing Yee (Sem 1, 2017-2018). The Performance of Robust Jackknife Ridge Regression in the Presence of High Leverage Points and Multicollinearity.**Main Supervisor**.

8. Tin Wei Sheng (Sem 1, 2017-2018). The Performance of GM6 estimator for fixed Effect Panel Data Model in the Presence of High Leverage Points.**Main Supervisor**.

9. Goh Rui Ying (Sem 1, 2017-Sem 2, 2017). The Comparison Between Partial Robust M Estimator and Partial Least Squares Estimator to Deal With Multicollinearity and High Leverage Points.**Main Supervisor**.

10. Teh Shou Jun (Sem 1, 2017-Sem 2, 2017). Robust Estimation Methods for Simultaneous Equation Model in the Presence of High Leverage Points.**Main Supervisor**.

11. Fetty Simon (Matric No 174621). The Effect of Outliers on the Optimal Mean Response-MM and OLS based method. Sem 1 2016/17-sem 2 2016/2017. **Main supervisor**

12. Aisyah Johari (Matric No 173661). The performance of robust MM Ridge estimator in the presence of multicollinearity and outliers in a data set., Sem 1 2016/17-sem 2 2016/2017. **Main supervisor**

13. Tang Shin Jia (Matric No 16154). A Study of Logistic Regression on Occurrence of Congestive Heart Complications. Sem 1 2014/15-sem 2 2015. **Main supervisor**

14. Cheong Jia Sin (Matric No 163601). Optimization Using Response Surface Methodology in the Presence of Outliers. Sem 1 2014/15-sem 2 2015. **Main supervisor**

15. The Guan Wei (Matric No 157725). The determination of the distribution and power of the Wald-Wolfowitz Run test for testing randomness. Sem 1 2013/14-sem 2 2014. **Main supervisor**

16. Hanis Safirah Husaini(Matric No 158982). Comparison between One-way analysis of variance, F-test and Kruskal Wallis test. Sem 1 2013/14-sem 2 2014. **Main supervisor**

17. Juliha Sulaiman (Matric No 157031). The Comparison between paired T-test and Wilcoxon sign rank test. Sem 1 2013/14-sem 2 2014. **Main supervisor**

18. Normaslinda Mustafa (Matric No 157227). The Comparison between the Anderson Darling and the Shapiro Wilk test. Sem 1 2013/14-sem 2 2014. **Main supervisor**

19. Nur Syazana Daud (Matric No 156265). Coparison between Spearman;s rank and pearson correlation coefficient. Sem 1 2013/14-sem 2 2014. **Main supervisor**.

20. Chong Lily (Matric No 148794). The effect of outliers on the robust precisison to tolerance measure. Sem1 2009/10-sem 2 2009/10. **Main Supervisor**

21. Wong Teck Boon (Matric No 148143). The effect of high leverage points on the conditioned number. Sem1 2009/10-sem 2 2009/10. **Main Supervisor**

22. Ling Bei Xi (Matric No 149619). The performance of ridge regression bootstrap estmimates. Sem1 2009/10-sem 2 2009/10. **Main Supervisor**

23. Low Yeen Yee (Matric No 149619). The effect of high leverage points on the Latent Root Regression Estimates. Sem1 2009/10-sem 2 2009/10. **Main Supervisor**

24. Iznurani Rahman (Matric No 147682). The bootstrap estimates of the Weighted Least Squares estimator. Sem1 2009/10-sem 2 2009/10. **Main Superviso**

25. Wong Chin Seng (Matric No 143082). The effect of heteroscedasticity on the Weighted and Least Squares estimates. Sem1 2009/10-sem 2 2009/10. **Main Supervisor**

26. Ong Ying Shih (Matric no 143846). The effect of outliers on precision-to-tolerance measure. Sem1 2009/10-sem 2 2009/10. **Main Supervisor**

27. Hong Mei Nee (Matric no 144313). The effect of high leverage point on the VIF measure for a non-collinear data., Sem1 2009/10-sem 2 2009/10. **Main Supervisor**

28. Goh Chee Wei (Matric no 143085). The robustness of least trimmed of squares in the presence of outliers. Sem1 2009/10-sem 2 2009/10. **Main Supervisor.**

29. Nur Hidayah Md Noh. The effect of outliers on the CPK index. Sem1 2009/10-sem 2 2009/10. **Main Supervisor**

30. Juriah Zakaria (Matric no 141906). The autocorrelation problem in simple linear regression. Sem1 2009/10-sem 2 2009/10. **Main supervisor.**

31. Leong Chun Mooi (Matric no 141906). The performance of ridge regression in the presence of outliers and multicollinearity. Sem1 2009/10-sem 2 2009/10. **Main Supervisor.**

10. ACADEMIC SERVICE AND PROFESSIONAL CONTRIBUTIONS.

Appointments and Guest Lecturer International

- **Invited Guest Lecturer**, Mathematical Statistics (Master Students). Universitas Islam Indonesia (UII), Yogyakarta, Indonesia (Sem 1, 2025/2026)
- **Invited Guest Lecturer**, Publication Course (Master Students). Universitas Islam Indonesia (UII), Yogyakarta, Indonesia (Sem 1, 2025/2026)
- **Invited Guest Lecturer**, (2022). Identifying High Leverage Point for Low and High Dimensional Data (PhD students) . Department of Probability Theory and Mathematical Statistics, Institute of Mathematics, National University of Uzbekistan. Uzbekistan

- **Technical Review** Panel (for curriculum, research, publication, academic staff promotion), COMStats University, Islamabad, Lahore, Pakistan 2024-present.

- **External Assessor f**or Academic Staf Promotion to Asociate Professor (2019)-University of Punjab, Lahore, Pakistan.

- **Member, Executive Committee**, 62nd International Statistical Institute (ISI) World Statistics Congress, 2016–2019, Kuala Lumpur.

- **Funding Committee Member, ISI** World Statistics Congress, 2018–2019.

- **Reviewer, Invited/**Contributed Papers, ISI World Statistics Congress, 2018–2019.

- **Short Course Instructor,** ISI World Statistics Congress, 16–17 Aug 2019 (course selected among top 10 globally).
- **Invited to** Samarkand State University, Uzbekistan (2019), for initiating MOU activities between Samarkand State University and UPM.

Local-Malaysia (Outside UPM)
- **Visiting Professor**, Fakulti Sains Komputer dan Matematik (FSKM),Universiti Malaysia Terengganu (June 2024 – present, 2-year appointment)2024-present (**Local-Malaysia**).

- ➢ **Invited Guest Lecturer**, Nonparametric Statistics Course, University of Malaya, Semester 2, Academic Year 2024/2025. (**Local-Malaysia).**
- ➢ **Invited Guest Lecturer**, "Industry in the Classroom" Program – Courses: Survey Sampling Method & Experimental Design, Faculty of Computer and Mathematical Sciences (FSKM), Universiti Malaysia Terengganu, October 2024.(**Local-Malaysia**).
- ➢ **Co-Chair of the 9th, 10th, and 11th** Malaysia Statistics Conferences (MyStats 2022, 2023, and 2024), organized by the Prime Minister's Department and the Department of Statistics Malaysia, in collaboration with the Institute of Statistics Malaysia and Bank Negara Malaysia.

MYSTATS 2022: Mendepani Ketidakpastian: Mengenalpasti Langkah-langkah untuk Pemulihan

" Mendepani ketidaktentuan ekonomi, politik, keselamatan siber, kesihatan dan sebagainya memerlukan strategi pemulihan yang spesifik bagi memastikan solusi yang tepat dan jitu. Ini boleh dicapai melalui analisis data berpandukan kaedah statistik yang mampan. MyStats 2022 menyediakan cadangan penyelesaiannya. "

YBrs. Prof. Dr. Habshah Midi
Presiden

Institut Statistik Malaysia (ISMy)

Paparkan Quote ini

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➢

"Bersama Ketua Perangkaan Malaysia, Timbalan Menteri Ekonomi dan Timbalan Governor Bank Negara Malaysia"

➢ **Committee Member** of the Virtual Short Course at the 9th Malaysia Statistics Conference (MyStats 2022), organized by the Department of Statistics Malaysia in collaboration with the Institute of Statistics Malaysia and Bank Negara Malaysia, 4 October 2022.

➢ **Program Advisor and External Assessor** for the Academic Program Proposal (New Program), Master of Sience (Data Analytics) Universiti Malaysia Trengganu. 2024-present.

➢ **Program Advisor and External Assessor** for the Academic Program Proposal (New Program), Master of Sience (Data Analytics), Institute of Engineering Mathematics (IMK), Universiti Malaysia Perlis. 2024.

➢ **Program Advisor and External Assessor** for the Academic Program (Master of Applied Statistics), Universiti Malaysia Trengganu, 2024-present.

➢ **Program Advisor and External Assessor** for the Academic Program Proposal (New Program), Master of Social Analytics, Pusat Pengajian Pendidikan Jarak Jauh, Universiti Sains Malaysia. 2024-present.

- ➢ **Program Advisor and External Assessor**, New Academic Programs, Universiti Pendidikan Sultan Idris : 2024-present.

- ➢ **External Assessor** for the Full Accreditation Compliance Audit of the UiTM Bachelor of Statistics program at three branches: i) UiTM Shah Alam Campus, ii) UiTM Seremban Campus, Negeri Sembilan, and iii) UiTM Kota Bharu Campus, Kelantan, 24 June 2024-.

- ➢ **EXTERNAL Assessor** for the Full Accreditation Compliance Audit of the UiTM Diploma in Statistics program at three branches: i) UiTM Tapah Campus, Perak, ii) UiTM Raub Campus, Pahang, and iii) UiTM Machang Campus, Kelantan – 3 May 2024 -24 June 2024.

- ➢ **External Assessor** for the Full Accreditation Compliance Audit of the UiTM Master's and Ph.D. (Statistics) programs at UiTM Shah Alam Campus, Selangor , 12 January 2024 - 26 February 2024

- ➢ **External Assessor**, BSc (Honours) Industrial Statistics, Sunway University Malaysia., 2020.

- ➢ Nominated as External Assessor for Program Maintainance Audit of Doctor of Philosophy in Industrial Science Program, 2020, Uniten.

- ➢ **External Assessor**, to determine the eligibility of a Master's student for promotion to Ph.D. candidature in Statistics. Universiti Pendidikan Sultan Idris (UPSI), 2019.
- ➢ **External Assessor** for New Academic Programmes in Statistics (BSc, MSc, PhD), Universiti Teknologi MARA, 2017–present
- ➢ **Panel Member, Board** of Studies for New Academic Programmes (Master and PhD Statistics), Faculty of Science and Mathematics, UPSI, 2016–2017.
- ➢ **Assessor f**or the Lintas Bitara Program, Department of Mathematics, Faculty of Science and Mathematics, Universiti Pendidikan Sultan Idris (2021).
- ➢ **External Member, Board** of Studies for Programme Review, Bachelor of Mathematical Sciences, Kulliyyah of Science, International Islamic University Malaysia, 2017–2018.
- ➢ **Interview Panel Member,** Full-Pay Study Leave (CBBP) Scholarship Programme for Education Service Officers, Ministry of Education Malaysia, 2019.
- ➢ **External Expertise Committee** Member for the Promotion Evaluation to Associate Professor (2022), Universiti Kebangsaan Malaysia (UKM).
- ➢ **External Assessor**, Bachelor of Sc (Statistics), Infrastructure University Kuala Lumpur (IUKL).

- ➢ **External Promotion Assessor**:

  - Professor, Universiti Kebangsaan Malaysia (2024)
  - (Academic Staff promotions (AP & Prof) (2024-present)
  - Professor, Universiti Teknologi MARA (2019)
  - Associate Professor, Universiti Malaysia Pahang (2018, 2017)
  - Associate Professor, Universiti Malaya (2021)
  - Associate Professor, UTHM (2021)
  - Universiti Sains Islam Malaysia (2020)
  - Associate Professor, Universiti Teknikal Melaka. (2020).
  - Associate Professor, Universiti Kebangsaan Malaysia (2018)
  - Associate Professor, International Islamic University Malaysia (2017).
  - Many more
- ➢ **Chairperson o**f the 18th, 19th National Seminar of the Institute of Statistics Malaysia, SKISM-18, 2024, 2022, 2018, 2016, 2014, 2012.
- ➢ Panel Assessor for the Institute of Statistics Malaysia Award, 2024, 2025.

Editorial Roles

- ➢ Editor in Chief, Journal of Statistical Modelling & Analytics (JOSMA), 2024-present (**Local-Malaysia**).

- ➢ Editorial Board of Iraqi Journal of Statistical Sciences, 2022-present. **(International).**

- ➢ Editorial Board of the Journal of Modelling and Forecasting (MJMF), Universitas Negeri Padang, Indonesia. (**International**)

- ➢ Advisory Board, Journal of Statistical Modelling & Analytics (JOSMA)- 2020- 2024 **(Local-Malaysia)**

- ➢ Editorial board, Mathematical Problems in Engineering Journal, 2020-present **(International).**

- ➢ Editorial Board Member, Jurnal Teknologi Maklumat and Sains Kuantitatif(**Local-Malaysia)**

- ➢ Editorial Board Member, Malaysian Journal of Mathematical Sciences, 2004-2010(**Local-Malaysia)**

- ➢ Reviewer, Journal of Communication in Statisticss-Simulation and Computation **(International).**
- ➢ Reviewer, Journal of Communication in Statisticss-Theory and Methods **(International).**
- ➢ Reviwer, Journal of Statistical Modelling and Analytics (JOSMA)**(Local).**
- ➢ Communication in Statisticss- Theory and Method (**International**)

- Reviwer, Journal of Statistical Computational and Simulation (**International**)
- Reviwer, Current Journal of Applied Science and Technology (**International**).
- Reviwer, Asian Journal of Probability and Statistics (**International**).
- Reviwer, Journal of Scientific Research and Reports (**International**).
- Reviwer, Pertanika Journal of Science &Technology(**Local**)
- Reviwer, Malaysian Journal of Mathematical Science (**Local**).
- Reviwer, Pakistan Journal of Statistics (**International**).
- Reviewer, Journal of Applied Statistics (**International**)
- Reviewer, International Journal of Statistical Sciences (**International**).
- Reviwer, Jurnal Teknologi Maklumat and Sains Kuantitatif (**Local**).
- Reviewer, Sains Malaysiana (**Local**)
- Heliyon Journal (**International**)
- Reviewer , Matematika Journal (**Local**)
- Reviewer, Journal of Quality Measurement and **Analytics (Local)**
- Many more

11. Professional and Community Contributions (Special Roles/Projects/Facilitation/Trainings)

- Project Leader and Session Chair, Programme on Smart and Intelligent Children in Mathematics (*Program Kanak-Kanak Pintar Cerdas Matematik*), Dewan Besar UPM, 2006.
-

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- Testing Adi Putra's Mathematical Intelligence

- Head of Delegation, Visit to Institut Teknologi Bandung (ITB) and Universitas Islam Bogor (UNISBA), Indonesia, for potential research collaboration, 28–31 August 2005.
- Project Leader, Study on the Effectiveness of the Implementation of the National Integrity Plan, presented at Institut Integriti Malaysia, Kuala Lumpur, 5 June 2006.
- Committee Member, Master of Ceremony, and Dialogue Session Chair for *"The Importance of a National Consumer Satisfaction Index at a Time of Economic Crisis"*, by Prof. Claes Fornell, University of Michigan, organised by Institut Statistik Malaysia, Dynasty Hotel, Kuala Lumpur, 16 June 1998.
- Committee Member and Master of Ceremony, Official Launching of the Malaysian Customer Satisfaction Index by Dato' Megat Jonid, organised by Institut Statistik Malaysia, 1998.
- Committee Member and Master of Ceremony, Forum on Cyberlaw and Cybernetics, Department of Computer Science, UPM, 2002.
- Facilitator, Leadership Courses for secondary school students, Batu Gajah (Perak), Petaling Jaya, Kedah, and Klang, with the Faculty of Education, UPM, 1985.
- Speaker, Workshop on Statistics for STPM Teachers (*Regression and Correlation*), Universiti Kebangsaan Malaysia and Institut Statistik Malaysia, December 1985.
- Committee Member, Malaysian Customer Satisfaction Index Team, Add-Math Consultation Services, 1998.
- Committee Member, National Poster Competition (Malaysian Schools), World Statistics Day Celebration, Institut Statistik Malaysia, 2010.
- Main Committee Member, Overseas Students' Reorientation Programme, UPM, 26 June – 6 July 1985 (Organised by JPA and the Prime Minister's Department).
- Committee Member, Orientation Week for New Students, Universiti Putra Malaysia (1981–1985).
- Fellow, Kolej Kediaman Kelima, Universiti Putra Malaysia (1981–1985).
- Panel Interviewer, UPM Diploma Programme Student Admissions (1984, 1985, 1988).
- Panel Interviewer, INSPEM New Staff Recruitment, June 2004 – May 2010.
- Singing Participant, Orientation Week Closing Ceremony, Universiti Putra Malaysia (1981–1985).
- Organising Committee Member, Annual Banquet Dinner of the Sekolah Menengah Sains Selangor Alumni Association (1982–1985).
- Organiser, Student Educational Trip to the Hydroponic Centre, Bukit Fraser, for second-year Biology students (1983).
- Master of Ceremony, various academic and social activities organised by the Department of Mathematics, Faculty of Science, and INSPEM (1981 – May 2010).
- Auditor, Parent–Teacher Association, Sekolah Agama Jalan F, Kampong Pandan, Kuala Lumpur (1999–2000).

- Committee Member, *Rukun Tetangga*, Taman Castlefield, Sri Petaling (1985).
- Committee Member, Project *"Malam Jasacipta P. Ramlee"*, organised by the Student Affairs Office, Universiti Putra Malaysia, 1985.
- Participant, Master Chef Group Cooking Competition, organised by the Faculty of Science, Universiti Putra Malaysia, 2016.

- Many more not listed.

12. Assessment & Examination Roles

International

- ❖ **External Examiner**, PhD Thesis (2024), College of Statistical Sciences, University of the Punjab, Lahore, Pakistan. The title of the thesis is "New Statistical Approaches for the Assessment of Drought and Extreme Events in relation to Climate Change".
- ❖ **External Examiner**, PhD Thesis (2025), College of Statistical Sciences, University of the Punjab, Lahore, Pakistan. Title of Thesis is " Development of Hybrid Paradigms for Simultaneous Handling Bias and Multiplicity in Global Climate Models for Future Drought Characterization".

- ❖ **External Examiner**, PhD Thesis (2019),University of Punjab, Lahore, Pakistan.

- ❖ **External Promotion Assessor, Associate Prof,** University of Punjab, Lahore, Pakistan. (2019).

- ❖ **External Examiner**, Doctor of Science (PhD-Science thesis) (2023), "ROBUST COMPUTATIONAL STATISTICAL CLASSIFIERS FOR SOLVING HIGH DIMENSIONAL CLASSIFICATION PROBLEMS",

Department of Probability Theory and Mathematical Statistics, Institute of Mathematics, National University of Uzbekistan. Uzbekistan.

❖ **Supervisor,** Inbound Student Practical Attachment (Statistics Project), Department of Mathematics — Sura Hassan, Faculty of Computer and Mathematics, University of Al-Qadisiyah, Iraq, 20 June – 20 October 2015.

Local (Malaysia)

- Assessor for ISMy Awards, (2024-2025)
- Assessor for Research Grant Applications, 2004-2020.
- Internal Assessor, Excellent Teaching Award, Universiti Putra Malaysia, 2008-2012.
- Journal Paper Evaluator, for Persama Award, 2007
- Group Leader, Marking of Statistics and Mathematics Examination Papers for Matriculation Students, 2001–2008, 2011.
- Moderator/Assessor, Mathematics and Statistics Examination Papers for Matriculation Students, 2001–2008.

- Examiner, Mathematics and Statistics Paper, Open University Malaysia, 2003-2006

- Review Committee Member, Master of Applied Statistics Programme, UiTM Shah Alam.
- External Examiner, MSc and PhD Theses, Universiti Malaya, & Universiti Kebangsaan Malaysia, Universiti Teknologi Malaysia (UTM), Universiti Islam Antarabangsa, Universti Malaysia Trengganu, Universiti Malaysia Sarawak, etc. 2002–present. **Evaluated more than 50 thesis. Few are listed as follows:**

➢ Alharbi Nada Mohammed Saeed. Inferential Procedures For Generalized Exponential Model Having Covariate, with Right and Interval Censored Data. Universiti Putra Malaysia, Serdang, Selangor. PhD Thesis. **May 2023-23 Oct 2023.**

➢ Pemeriksa tesis Doctor of Science (Dr Friday Okwonu-Nigeria) , "ROBUST COMPUTATIONAL STATISTICAL CLASSIFIERS FOR SOLVING HIGH DIMENSIONAL CLASSIFICATION PROBLEMS. Tesis Doctor of Science, Department of Probability Theory and Mathematical Statistics, Institute of Mathematics, National University of Uzbekistan, 29,Dormon Yoli str., Tashkent 100125, Uzbekistan. 30 **Sept 2023-Jan 2024.**

➢ Hussein Ali Ghaffoori Al-Hakeem. Inference and Diagnostics for Generalized Exponential Distribution with Fixed and Time Dependent Covariates and Interval Censored Data. Universiti Putra Malaysia, Serdang, Selangor. PhD Thesis. 2021

- Nurul Hidayah Sadikon, Some Problem of Outliers in Cylindrical Data. Institute of Mathematical Sciences, University of Malaya, Kuala Lumpur. Master Thesis.

- Kafi Dano Pati, <u>Robust Ridge Estimation Method for Multiple Linear Regression in the presence of Multicollinearity and Outliers.</u> Universiti Teknologi Malaysia, Skudai Johor. PhD Thesis.

- Fadhaa Othman Sameer. Fuzzy Clustering method and evaluation based on multi criteria dissection making technique for credit scoring. Universiti Putra Malaysia, Serdang, Selangor. PhD Thesis.

- Irianto. A Necessary and Sufficient Condition for the Stability of Process Variability in Manufacturing Industries. Universiti Putra Malaysia, Serdang, Selangor. PhD Thesis.

- Zahra Nazemi Ashani. Skewed Distributions Generated by the Truncated Cauchy Kernel. Universiti Putra Malaysia, Serdang, Selangor. PhD Thesis.

- Madaki Umar Yusuf. A Bayesian Estiation of Beta Kumarasmavy Burr Type X Model based on Cure Model with or without Covariates via MCMC Algorithm. PhD Thesis.

- Patrick Ozoh. Achieving Efficiency in Electricity Consumption using Improved Machine Learning Tools. Universiti Malaysia Serawak. PhD Thesis.

- Najiah Nadir. Photochromism Behaviour Prediction Using Statistical Approach. International Islamic University Malaysia, Gombak, Selangor. PhD Thesis.
- Sharifah Nurul Hikmah Syed Yasin. Interactive Fuzzy Multi-Attribute Decision Making in Choosing Academic Programmes and Universities. Universiti Malaysia Trengganu. PhD Thesis.

- Anthea D.A. David. Pemodelan Autogerrasif: Pendekatan Teguh dan Bootstrap. Universiti Malaysia Trengganu. Master Thesis.

- Many more..

13. University/Institutional Service

⊃ At University Level

- **Research Grant Evaluator**, Universiti Putra Malaysia (UPM) – RUGS and FRGS, 2002–to date
- **Postgraduate Thesis Examiner**, 2004–to date
- **Committee Member**, Industry and Community Relations Committee, Universiti Putra Malaysia, 2010–August 2016.

- ➢ **Panel Judge**, Vice-Chancellor's Fellowship Award (Teaching Category), Universiti Putra Malaysia, 208-2016
- ➢ **Mentor**, Basic Teaching Course (KAP), Series 1/2018
- ➢ **Mentor**, Basic Teaching Course (KAP), Series 1/2017
- ➢ **Mentor**, Writing Cell Project, 1 November 2016 – 31 October 2017.
- ➢ **Committee Member**, Laboratory Management and Safety Committee, Universiti Putra Malaysia, July 2011–2013.
- ➢ **Panel Interviewer**, Student Admissions for UPM Diploma Programs, Kluang and Batu Pahat, Johor, 1984, 1985, 1988
- ➢ **Fellow**, Fifth Residential College, Universiti Putra Malaysia, 1981–1985
- ➢ **Facilitator**, New Student Orientation Week, Universiti Putra Malaysia, 1981–1985
- ➢ **Speaker and Evaluator**, Competency Equivalent PTK Stage III Course (Academic Staff), November 2010
- ➢ **Speaker**, INSPEM Graduate Month Program, PUTRA Sarjana, 2007
- ➢ **Judge**, Putra Teaching Awards, Universiti Putra Malaysia, 2007–2016.
- ➢ **Facilitator**, "Starting School for New Students" Program, 2007
- ➢ **Committee Member**, CADE Teaching and Learning Development Committee, 2007–2016
- ➢ **Panel Member**, Evaluation Panel for New Lecturer Recruitment Scheme (Science and Engineering Cluster), 2005.
- ➢ Main Committee Member, Overseas Students' Reorientation Programme, UPM, 26 June – 6 July 1985 (Organised by JPA and the Prime Minister's Department).

↪ Faculty and Institute Level

- ❖ **Committee Member**, Inaugural Lecture Book Committee, Faculty of Science, Universiti Putra Malaysia, 2018–2020.
- ❖ **Committee Member**, Research Monitoring Committee, Faculty of Science, Universiti Putra Malaysia, 2018–2020.
- ❖ **Chairman**, Asset Management and Development Committee, Faculty of Science, Universiti Putra Malaysia, 2010–August 2016.
- ❖ **Chairman**, Financial Management Committee, Faculty of Science, Universiti Putra Malaysia, 2010–August 2016.
- ❖ **Chairman**, Asset Disposal Committee, Faculty of Science, Universiti Putra Malaysia, 2010–August 2016.
- ❖ **Chairman**, Technical Committee, Faculty of Science, Universiti Putra Malaysia, 2010–August 2016.
- ❖ **Chairman**, Industry and Community Relations Committee, Faculty of Science, Universiti Putra Malaysia, 2010–August 2016.
- ❖ **Chairman**, Calibration Committee, Faculty of Science, Universiti Putra Malaysia, 2010–August 2016.
- ❖ **Chairman**, TIMSS Programme Committee, Faculty of Science, UPM, 2014.

❖ **Committee Member**, Academic Expertise Committee, Faculty of Science, Universiti Putra Malaysia, 2010–August 2016.

❖ **Committee Member**, Internationalization Committee, Faculty of Science, Universiti Putra Malaysia, 2010–August 2016.

❖ **Chairman**, Organising Committee, Nobel Laureate's Outreach Camp, Faculty of Science, Universiti Putra Malaysia, 17–20 August 2015.

❖

❖ **Committee Member**, Curriculum Committee, Faculty of Science, Universiti Putra Malaysia, 1997–May 2004

❖ **Committee Member**, Graduate Studies Committee, Faculty of Science, Universiti Putra Malaysia, 1997–May 2004

❖ **Committee Member**, ISO Management Committee, Faculty of Science, Universiti Putra Malaysia, 2002–May 2004

❖ **Committee Member**, ISO Management Review Committee, Faculty of Science, Universiti Putra Malaysia, Nov 2002–May 2004

❖ **Committee Member**, Internationalization Committee, Faculty of Science, Universiti Putra Malaysia, 2010–present

❖ **Chairman**, Occupational Health and Safety Committee, Faculty of Science, Universiti Putra Malaysia, 2010–August 2016

❖ **Curriculum Committee** Member, Faculty of Science, UPM

❖ **Committee Member**, Assurance Committee, Institute for Mathematical Research (INSPEM), Universiti Putra Malaysia, June 2004–May 2010

❖ **Committee Member**, Innovation Day Committee, Institute for Mathematical Research (INSPEM), Universiti Putra Malaysia, June 2004–May 2010

❖ **Committee Member**, Research Officer Committee, Institute for Mathematical Research (INSPEM), Universiti Putra Malaysia, June 2004–May 2010

❖ **Committee Member**, Annual Report Committee, Institute for Mathematical Research (INSPEM), Universiti Putra Malaysia, June 2004–May 2010

❖ **Committee Member**, Postgraduate Studies Committee, Institute for Mathematical Research (INSPEM), Universiti Putra Malaysia, June 2004–May 2010

❖ **Committee Member**, Research Committee, Institute for Mathematical Research (INSPEM), Universiti Putra Malaysia, June 2004–May 2010

Chairman of OSH Committee, Faculty of Science

➢ **Chairman**, INSPEM Bulletin, Universiti Putra Malaysia, June 2005–2007.

➢ **Editorial Board Member**, *Malaysian Journal of Mathematical Sciences*, June 2004–May 2010.

➢ **Editorial Board Member**, *Math Digest Bulletin Putra*, June 2004–May 2010'

- ➢ **Committee Member**, Assurance Committee, Institute for Mathematical Research (INSPEM), Universiti Putra Malaysia, June 2004–May 2010.
- ➢ **Interview Panel Member**, INSPEM Staff Recruitment, June 2004–May 2010.
- ➢ **Research Grant Evaluator**, Institute for Mathematical Research (INSPEM), Universiti Putra Malaysia, June 2004–May 2010.
- ➢ **Panel Member**, Question Setter for the Olympiad Mathematics Competitions, INSPEM.
- ➢ **Resource Person / Speaker**, Workshop on the Right Way to Design and Analyse Experiments.
- ➢ **Committee Member**, International Conference on Mathematical Biology, April 2011, Malacca, Malaysia.
- ➢ **Session Chair**, Fundamental Science Congress, 18–19 May 2010, Universiti Putra Malaysia.
- ➢ **Committee Member, Scientific and Editorial Board; Master of Ceremony; Keynote and Session Chair**, 4th International Conference on Research and Education in Mathematics (ICREM4), 21–23 October 2009, Renaissance Hotel, Kuala Lumpur.
- ➢ **Session Chair**, Fundamental Science Congress, 17–18 June 2009, Universiti Putra Malaysia.
- ➢ **Committee Member, Scientific and Editorial Board; Master of Ceremony; Keynote and Session Chair**, 3rd International Conference on Research and Education in Mathematics (ICREM3), 10–12 April 2007, Legend Hotel, Kuala Lumpur.
- ➢ **Committee Member, Scientific and Editorial Board; Master of Ceremony; Keynote and Session Chair**, 2nd International Conference on Research and Education in Mathematics (ICREM2), 25–27 May 2005.
- ➢ **Committee Member, Scientific and Editorial Board; Master of Ceremony; Keynote and Session Chair**, International Conference on Research and Education in Mathematics (ICREM), 2003.
- ➢ **Committee Member and Master of Ceremony**, International Conference on Mathematics and Its Applications & Workshop on Multimedia Applications in Mathematics, Department of Mathematics, Universiti Putra Malaysia, 2000.
- ➢ **Committee Member and Master of Ceremony**, National Seminar on Industrial Mathematics, 2002.
- ➢ **Committee Member, Scientific and Editorial Board; Master of Ceremony; Keynote and Session Chair**, International Conference on Mathematical Biology, 4–6 September 2007.
- ➢ **Committee Member and Master of Ceremony**, Forum on Cyberlaw and Cybernetics, 2002.

❍ **At Department Level**

❖ **Accreditation Committee Member**, Royal Statistical Society Accreditation, Department of Mathematics and Statistics, Universiti Putra Malaysia, 2022.
❖ **Facilitator**, Writing Workshop, Department of Mathematics and Statistics, Faculty of Science, Universiti Putra Malaysia, 17–19 May 2022.
❖ **Examiner**, Test and Final Examination Papers, Department of Mathematics and Statistics, Universiti Putra Malaysia, 2022.
❖ **Examiner**, Master of Applied Statistics Project, Universiti Putra Malaysia, 2022.
❖ **Contributor**, Curriculum Review Paper (Statistics-related courses), Department of Mathematics and Statistics, Universiti Putra Malaysia, 2022.
❖ **Representative**, Curriculum Review Meeting (responding to internal and external experts' questions), Department of Mathematics and Statistics, Universiti Putra Malaysia, 2022.
❖ **Course Coordinator**, MTH 3403 and MTH 3411 (new courses). Prepared all teaching materials (notes, assignments, and lecture slides) for new lecturers (Dr. Muhammad Shafie and Dr. Wendy).
❖ **Mentor**, Department of Mathematics, Universiti Putra Malaysia, mentoring four new lecturers (Dr. Mohd Shafie Mustafa, Dr. Nur Haizum, Dr. Syafrina, and Ms. Nazihah), 2016–2020.
❖ **Chairman, Organising Committee**, National Seminar of the Malaysian Institute of Statistics (SKISM-12), 29 March 2018.
❖ **Committee Member**, Fundamental Science Congress, Department of Mathematics, Faculty of Science, Universiti Putra Malaysia, 2018.
❖ **Committee Member**, Fundamental Science Congress, Department of Mathematics, Faculty of Science, Universiti Putra Malaysia, 2010.
❖ **Committee Member**, 3rd International Conference on Mathematical Sciences and Statistics (ICMSS2018).
❖ **Scientific Committee Member**, all conferences organized by the Department of Mathematics, Universiti Putra Malaysia.
❖ **Committee Member**, Timetable Committee, Department of Mathematics, Faculty of Science, Universiti Putra Malaysia, 2017–2019
❖ **Chairman, Organising Committee**, 2-Day Workshop on the Right Way to Design and Analyse Experiments, Department of Mathematics, Faculty of Science, Universiti Putra Malaysia, 26–27 February 2018.
❖ **Many more, not listed..**

Workshops & Training (Chairman / Organiser):

➢ 2-Day Workshop on the Right Way to Design and Analyse Experiments, Institute for Mathematical Research (INSPEM), Universiti Putra Malaysia, 2024

➢ 2-Day Workshop on the Right Way to Design and Analyse Experiments, Department of Mathematics, Faculty of Science, Universiti Putra Malaysia, 2021.

➢ 2-Day Workshop on the Right Way to Design and Analyse Experiments, Department of Mathematics, Faculty of Science, Universiti Putra Malaysia, 26–27 February 2018.

➢ Workshop on the Introduction to Robust Statistics and Its Application, Faculty of Science, UPM, 14–15 Sept 2017.

➢ Workshop on the Introduction to Robust Statistics and Its Application, Faculty of Science, UPM, 6–7 April 2017.

➢ 3-Day Workshop on the Right Way to Design and Analyse Experiments, Faculty of Science, UPM, 14–16 April 2015.

➢ 3-Day Workshop on the Right Way to Design and Analyse Experiments, Faculty of Science, UPM, 3–5 Dec 2012.

➢ And many more not listed.

Programme Development and Curriculum Contributions:

❖ First Coordinator, Master of Applied Statistics Programme, 1998–May 2004.

❖ Head, Curriculum Committee, Department of Mathematics, UPM, 1996–May 2004.

❖ Prepared working papers for new and revised programmes and curricula as follows:
  - MSc (Applied Statistics), Structure C (1997–1998).
  - MSc (Financial Mathematics), Structure C (1999–2000).
  - Double Major Programmes (Mathematics & Computer Systems; Statistics & Computer Systems), 1999–2000.
  - BSc (Financial Mathematics), 100 credits.
  - BSc (Mathematics) and BSc (Statistics), 100-credit curriculum.
  - BSc (Mathematics) and BSc (Statistics) with Education, 125–130 credits.
  - BSc (Mathematics with Management) and BSc (Statistics with Management).
  - BSc (Mathematics with Computer Systems).
  - Diploma in Science (Mathematics) – 90 credits.
  - Prepared New courses (examples):
    - ✓ MTK 5409 Design and Analysis of Experiments
    - ✓ MTK 5411 Robust Statistics
    - ✓ MTK 2100 Intermediate Calculus
    - ✓ MTK 2200 Intermediate Algebra
    - ✓ MTH 1400 Elementary Statistics

✓ MTH 1100 Elementary Calculus
✓ MTH 1202 Elementary Algebra

Other Departmental Contributions:

- Mathematics Representative, Faculty Guide Book Committee.
- Assessor, final examination questions, 2002–2020.
- Member, Sports and Welfare Committee, Department of Mathematics, 1998–2004.
- Master of Ceremony for almost all departmental events, 1981–1990, 1995–May 2004.

14. Professional Memberships and Leadership

➢ President, Malaysia Institute of Statistics Society (ISMy) (2022-2024, 2024-2026).
➢ Vice President, Malaysia Institute of Statistics (2014-2016, 2016-2018, 2018-2020, 2020-2022).
➢ Member PERSAMA
➢ Council Member, Malaysia Institute of Statistics Society (1983-1995).
➢ Exco member, Ex-Sekolah Menengah Sains Selangor Association (1982-1987).
➢ Treasurer, Ex-Sekolah Menengah Sains Selangor Association (1983-1986)
➢ Auditor, Ex-Sekolah Menengah Sains Selangor Association (1986
➢ Member, Ex-Sekolah Menengah Sains Selangor Association (1982-1987)
➢ IAENG MEMBER, 2007-PRESENT
➢ MOCCIS, 2007-PRESENT

15. Awards and Honours.

- *The recipient of the Vice Chansellor Fellowship Award (Excellence in Teaching),* UPM, 2007.
- *The sole finalist in the Pure Science Category of the National Academic Award (Anugerah Akademik Negara) for Excellence in Teaching*, Malaysia, 2016.
- *Certificate of Excellent Service*, Universiti Putra Malaysia, 2019 (Performance score: 99.7).
- *Excellent Performance Award*, INSPEM, UPM, 2019 (highest number of presentations delivered at local and international conferences in 2018).
- *Excellent Performance Award*, INSPEM, UPM, 2018 (highest number of presentations delivered at local and international conferences in 2017).
- *Excellent Performance Award*, INSPEM, UPM, 2017 (highest number of presentations delivered at local and international conferences in 2016).
- *Excellent Performance Award*, INSPEM, UPM, 2016 (highest number of presentations delivered at local and international conferences in 2015).
- *Excellent Performance Award*, INSPEM, UPM, 2015 (highest number of presentations delivered at local and international conferences in 2014).

- *Excellent Performance Award*, INSPEM, UPM, 2014 (highest number of presentations delivered at local and international conferences in 2013).
- *Excellent Performance Award*, INSPEM, UPM, 2013 (highest number of presentations delivered at local and international conferences in 2012).
- *Excellent Research Award*, INSPEM, UPM, 2017 (excellence in mathematics research, 2016).
- *Excellent Research Award*, INSPEM, UPM, 2016 (excellence in mathematics research, 2015).
- *Excellent Research Award*, INSPEM, UPM, 2015 (excellence in mathematics research, 2014).
- *Excellent Research Award*, INSPEM, UPM, 2014 (excellence in mathematics research, 2013).
- *Excellent Research Award*, INSPEM, UPM, 2013 (excellence in mathematics research, 2012).
-

Receiving Excellent Service Award from *Professor Dato*' Dr. Kamel Ariffin bin Mohd Atan (Director of Institute for Mathematical Research,

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- *Certificate of Recognition* as Facilitator, "Bengkel Penulisan Manuskrip", Faculty of Science, UPM, 2019.
- *Anugerah Perkhidmatan Cemerlang*, UPM, 2017.
- *Anugerah Khas Jaringan Industri dan Masyarakat Berimpak Tinggi*, 2018, awarded to the Department of Mathematics, UPM, for organizing ISM National Seminars (2012, 2014, 2016, 2018, 2022, 2024)-where I am the chairman.
- B*est Presentation Award*, 18th International Conference on High Performance Computing and Statistics, Zurich, Switzerland, 15–16 September 2016.
- Certificate of Merit, paper presented, 2013 Int. Conf. Computational Statistics & Data Engineering, London, 2013

- *High Impact Community and Industrial Linkage Award*, Universiti Putra Malaysia, 2016 (for Nobel Laureates Outreach Camp 2015: Scientist of Tomorrow).
- *High Impact Community and Industrial Linkage Award*, Universiti Putra Malaysia, 2016 (for Nobel Laureates Outreach Camp 2015: Scientist of Tomorrow).

- High Impact Community and Industrial Linkage Award (2016), for Nobel Laureates Outreach Camp 2015: Training of Trainers Camp for Future Noble Laureates, UPM .

- Faculty of Science Figure , UPM 2015 (tokoh Fakulti Sains).

- Leadership Award (Management), UPM, 2012)

- *Nominee, National Academic Award (Anugerah Akademik Negara) for Excellence in Teaching*, 2016 (selected as sole candidate from Pure Science Cluster for national-level interview).

CURRICULUM VITAE

AAN KE-10

PROF. DR. HABSHAH MIDI
Fakulti Sains Tulen

KELOMPOK SAINS TULEN
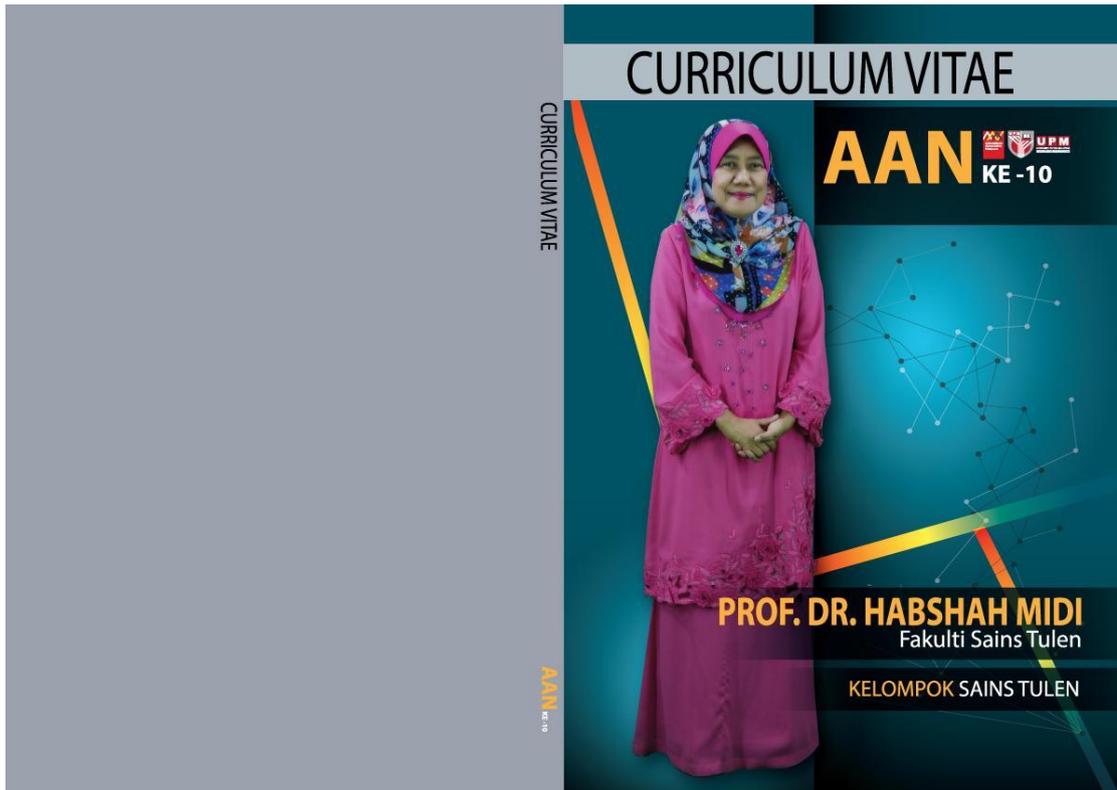
Certificates of Appreciation (PhD Supervision)

Recognized by UPM's Vice Chancellor, Deputy Vice Chancellor (Academic & International), and Dean of School of Graduate Studies for timely PhD supervision:

- Dr. Muhammad Sani (2019)
- Dr. Ehab Abdulsalam Mahmood (2018)
- Dr. Shelan Saied Ismaeel (2018)
- Dr. Taha Hussein Ali (2017)
- Dr. Arezoo Bagheri (2010)
- Dr. Sohel Rana (2010)

Medals at Research Exhibitions (PRPI, UPM & ITEX)

- *Gold Medals*:
  - 2016 – Robust Centering in the Fixed Effect Panel Data Model
  - 2016 – Diagnostic Plot for the Identification of High Leverage Collinearity Influential Observations
  - 2012 – Collinearity-Influential Observation Diagnostic Measure Based on a Group Deletion Approach
  - 2010 – Robust Estimators in Simple Mediation Analysis
  - 2010 – Diagnostic-Robust Generalized Potentials for the Identification of Multiple High Leverage Points
  - 2009 – The Misconception of Some Statistical Techniques in Research

Silver Medals:

- o 2012 – The Effect of Collinearity-Influential Observations on Collinear Data Set
- o 2010 – Multivariate Control Chart based on High Breakdown Point Estimator
- o 2010 – Mutual Information for Mixture of Bivariate Normal Distribution
- o 2009 – Robust Diagnostic Method for Identification of Multiple High Leverage Points
- o 2009 – Robust Bootstrapping Technique in Regression Model Selection
- o 2009 – Robust Rescale Moment Test for Normality in Regression
- o 2007 – Weighted Bootstrap with Unequal Probability
- o 2006 – WRLSRDSM in Regression with Continuous & Categorical Variables.
- *Bronze Medals*:
  - o 2016 – Modified GM Estimator Based on Support Vector Regression
  - o 2010 – Robust Individual Control Charts Using Change Point Formulation
  - o 2010 – Robust Remedial Measures of Heteroscedasticity with Outliers
  - o 2010 – Robust Multicollinearity Diagnostics Measures
  - o 2010 – Reliability of Visual Resource Assessment Procedure

- o 2007 – HWPC Tool for Efficient Detection of Out of Control Process
- o 2006 – Max Median Likelihood Estimator in Multiple Regression
- o 2006 – *3R Software for Agriculture Efficient Prediction*, ITEX, KLCC Convention Centre.
- o 2005- *The Performance of the Robust Non-Linear Regression based on Huber Psi Function.*
- o 2005- *The Performance of a Robust Ridge Regression Estimator based on MM Estimator in the presence Outliers and Multicollinearity.*
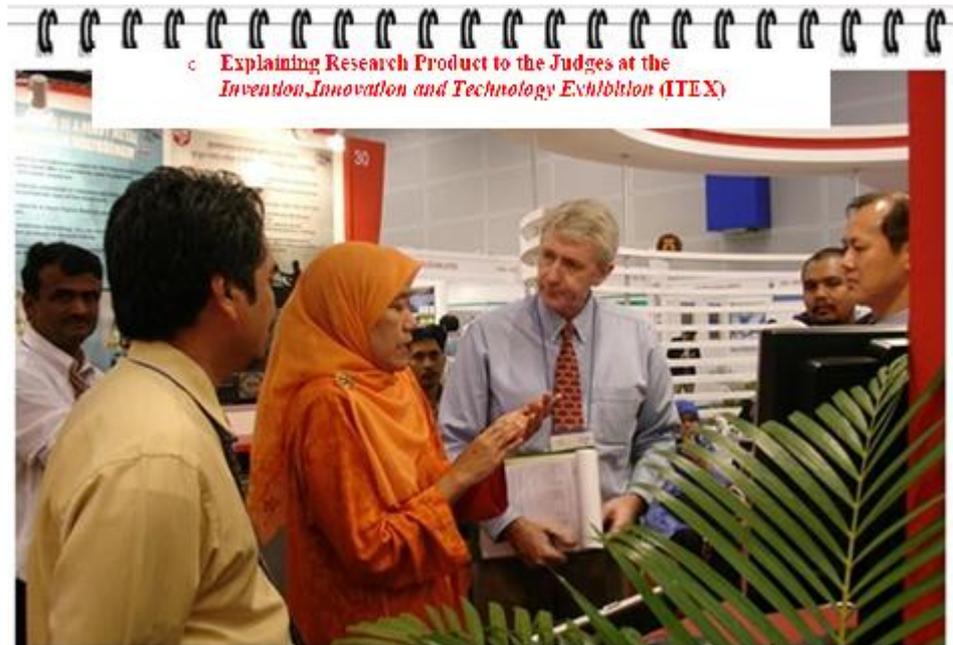
Other Recognitions

- *Speaker Appreciation Certificate*, INSPEM, UPM (Mathematics Camp – Journey to Amazing Statistics), 31 July – 2 August 2015..
- Certificate of Appreciation from the Director of INSPEM for delivering an invited Special Lecture on *Design and Analysis of Experiments* at the SEAM School, jointly organized by INSPEM and the South East Asia Mathematical Society, 31 October – 2 November 2015.

- ➢ Several further certificates of appreciation, awards, and professional recognitions (not listed for brevity).

16. CONFERENCES, SEMINAR, COURSES ATTENDED AND PRESENTATION.

1. **Keynote Speaker**, *The 13th International Conference on Numerical Optimization and Operations Research (ICNOOR-XIII 2025)*, Universitas Islam Indonesia (UII), Yogyakarta, Indonesia.
Talk title: "A Robust and Scalable Framework for High-Dimensional Regression:

Enhancing Variable Selection via Selective Outlier Downweighting". 30 August – 2 September 2025.

2. **Plenary Speaker**, *The 7th International Conference of Institut Statistik Malaysia (ICSM-7)*, Everly Hotel, Putrajaya. Talk title: *"A Hybrid Weighted LAD-Lasso and Nu-Support Vector Regression Approach for Outlier-Resistant Variable Selection in High-Dimensional Data"*. 26–27 August 2025.

3. **Keynote Speaker**, *National Conference on Intelligent Computing and Statistical Sciences 2025 (NCIC-SS2025)*. Talk title: *"Enhancing Regression Diagnostics: Outlier Detection with Nu-Support Vector Regression"*. 6 August 2025.

4. **Invited Speaker**, *32nd National Symposium on Mathematical Sciences (SKSM32)*, Cyberview Resort & Spa, Cyberjaya. Talk title: *"Addressing High Leverage Collinearity-Reducing Observations: Key to Avoiding Misleading Inferences in Regression Models"*. 8–9 July 2025.

5. **Pengerusi Ceramah (2024)**. Banci Pertaniam dan Matlamat Pembangunan Lestari oleh Pengarah Jabatan Perangkaan Negeri Sembilan. *Program StatsExplore 2024.* Jabatan Matematik dan Statistik, UPM, 24 October 2024.

6. **Online Participant (2024)**. International Conference of Stochastic Analysis, Mirzo Ulugbek National University of Uzbekistan, 21-23 October, 2024.

7. **Speaker (2024)**. An Efficient Method of Identification of Outliers for High Dimensional Data for Making Accurate Statistical Inferences. Th*e 11th Malaysia Statistical Conference* 2024. Sasana Kljang, Bank Negara Malaysia,19 September 2024.

8. **Keynote Speaker (2024)**. Handling of Outliers and Multicollinearity Using Robust SIMPLS Algorithm to Model Multicollinear High Dimensional Data. *The 8th International Conference on Quantitative Sciences and Its Applications (ICOQSIA) 2024*, organized by Universiti Utara Malaysia, 17-19 Sept. 2024, EDC Hotel.

9. **Keynote Speaker (2024)**. Identification of Outliers for Making Better Statistical Inferences. *The 12th International Conference on Numerical and Operation Research (ICNOOR-XII),* Universitas Abulyatama, Banda Aceh, Indonesia. 28-30 Ogos, 2024.

10. **Invited Speaker (2024)**. New Discovery: High Leverage Points is Another Prime Source of Multicollinearity and it's Solution To get Better Statistical Inferences. *International Conference On Fundamental Science Congress*, organized by Faculty Science, Universiti Putra Malaysia, CO-ORGANIZED BY Kasetsart University, Thailand and IPB , Indonesia. 19-21 August, 2024, Bangi Resort Hotel.

11. **Speaker (2024)**. Remedial Measures for Multicollinearity Caused by High Leverage Collinearity Enhancing Observations". The 4th International Congress on Scientific Research (Online), Institute of Economic Development and Social Research of Turkey, Kirsehir Ahi Evran University, Ankara, Turkey. **26**th April 2024.

12. **Keynote Speaker (2024)**. Remedial Measures for Some Common Misconception of Statistical Techniques in Data Analysis. Seminar Kebangsaan Institut Statistik Malaysia ke-18 (SKISM XVIII). Institute for Mathematical Research (INSPEM, UPM). 7th March 2024.

13. **Invited Speaker (2024).** An Effective Method of Detecting Influential Observations in Linear Regression to Avoid Misleading Conclusion. Institute for Mathematical Research (INSPEM, UPM). Online seminar, 1st March 2024.- sharing session to ISMy members.

14. **Invited Speaker (2023).** Understanding the Source of Multicollinearity in Linear Regression to Avoid Misleading Inferential Statement**.** Institute for Mathematical Research (INSPEM, UPM). Online seminar, 10th Nov. 2023.-sharing session to ISMy members.

15. **Invited Speaker (2023).** An Efficient Method for Identification of Multiple High Leverage Points in Linear Regression Model: Why it should be detected? Institute for Mathematical Research (INSPEM, UPM) Online seminar, 3rd Nov. 2023.-sharing session to ISMy members.

16. **Presenter (2023**). GM Estimator based on RFIID as a Remedy of Vertical Outliers and High Leverage Points. *The 10th Malaysia Statistics Conference,*MyStats2023. Department of Statistics Malaysia in Collaboration with Institut Statistik Malaysia and Bank Negara Malaysia. Sasana Kijang, Bank Negara Malaysia. 26 September 2023.

17. **Plenary Speaker (2023**). Identification of High Leverage Points for Low and High Dimensional Data. *The 6th International Statistical Conference (ISM-VI), 2023.* Concorde Hotel, Shah Alam, 19-20 September, 2023.

18. **Chairperson (2023**). *The 6th International Statistical Conference (ISM-VI), 2023.* Concorde Hotel, Shah Alam, 19-20 September, 2023.

19. **Presenter (2022).** Prediction Uncertainties: Dealing with Multicollinearity Caused by High Leverage Collinearity Enhancing Observations in Regression Analysis. *The 9th Malaysia Statistics Conference,*MyStats2022. Department of Statistics Malaysia in Collaboration with Institut Statistik Malaysia and Bank Negara Malaysia. Institut Latihan Statistik Malyasia, Sungkai, Perak, 5 Oktober, 2022.

20. **Moderator of Short Course (2022).** Sharing Experiences, Tips & Uncertainty in Statistical Consulting Projects. *Virtual Short Course for the 9th Malaysia Statistics Conference,*MyStats2022. Department of Statistics Malaysia in Collaboration with Institut Statistik Malaysia and Bank Negara Malaysia. Putrajaya, 4 Oktober,2022.

21. **Participant of Short Course (2022).** Managing Uncertainties in Data Analytics.*Virtual Short Course for the 9th Malaysia Statistics Conference,*MyStats2022.Department of Statistics Malaysia in Collaboration with Institut Statistik Malaysia and Bank Negara Malaysia. Putrajaya, 4 Oktober, 2022.

22. **Poster Presenter (2022).** A Highly Efficient Method for Classification and Identification of Outliers in High Dimensional Data. *Infographic Poster Challenge For Mathematics Unites in Conjunction with International Day of Mathematics 2022 (IDM2022) and INSPEM's 20th Anniversary, 1st April ,2022.* INSPEM, UPM.

23. **Presenter (2022).** New Classification Algorithm for High Dimensional Data based on Robust SIMPLS. *Virtual 4th International Conference on Mathematics and Statistics,* UPM, 15-16 March, 2022.

24. **Chairman of the organizing committee and participant (2022).** Seminar Kebangsaan, Institut Statistik Malysia 2022. UPM, 8 Mac 2022.

25. **Invited Lecture Series (2021).** Detection of Outliers in low and high dimensional data using nu-support vector regression. *3 Days Lecture series to post-graduate students of Mirzo Ulugbek National University of Usbekistans*. Dec 21-23, 2021.

26. **Participant of Short Course (2021).** Forecasting of Economic Indicators During the COVID-19 Pandemic Using Time Series Method. *Virtual Short Course for the 8th Malaysia Statistics Conference,*MyStats2022. Department of Statistics Malaysia in Collaboration with Institut Statistik Malaysia and Bank Negara Malaysia. Putrajaya, 18 Oktober, 2021.

27. **Participant of Short Course (2021).** Learning From Case Studies: Some Examples from Statistical Offices in New Zealand and United Kingdom. Vi*rtual Short Course for the 8th Malaysia Statistics Conference,*MyStats2022. Department of Statistics Malaysia in Collaboration with Institut Statistik Malaysia and Bank Negara Malaysia. Putrajaya, 18 Oktober, 2021.

28. **Invited Speaker (2021).** Robust SIMPLS Estimation Method in the Presence of Outliers for High Dimensional Data.nel Data Model. The 5th *Institute Statistics of Malaysia In*ter*national Statistical Conference. University Teknologi Malaysia.* August 16-17, August, 2021.

29. **Invited Speaker (2020).** The Correct Technique to Rectify Multicollinearity Problems Caused by High Leverage Collinearity Enhancing Observations. *International Symposium on Advanced Statistical Data Analysis & Operational Research (iADORE2020). Universiti Teknologi Malaysia in collaboration with University of Dhaka and Universitas Andalas, Indonesia. 7-8 Dec, 2020.*

30. **Poster Presenter and Participant (2020).** The Detection of High Leverage Points Using Support Vector Regression in High Dimensional Data. *The 7th Malaysia Statistics Conference,*MyStats2020. Prime Minister Department, Department of Statistics Malaysia in Collaboration with Institut Statistik Malaysia and Bank Negara Malaysia. Putrajaya, 20 Oktober, 2020.

31. **Participant (2020).** Webinar Kajian Data Analitik Siri 1. Jabatan Sains Matematik UKM in Collaboration with Institut Statistik Malaysia and Bank Negara Malaysia. Putrajaya, 16 Oktober, 2020.

32. **Keynote Speaker (2020)**. An Overview on Outlier Detection, Challenge and Solutions in Data Analysis. *First International Virtual Conference on Statistics*. University of Al-Qadisiyah, Iraq. May 12-13, 2019. Four (4) of my PhD students also delivered oral presentations.

33. **Presenter. (2019)**. On the Performance of Fast Robust Within Group GM-Estimator for Fixed Effect Panel Data Model and its Application to Malaysian Aitr Pollution Data. *Simposium Kebangsaan Sains Matematik ke-27.* Terera Hotel, Bangi. 26-27 November, 2019. One (1) of my PhD students also delivered oral presentations.

34. **Invited Speaker (2019)**. Robust Augmmented Approach to Desirability Function for Optimizing Multiple Response and its Application to Manufacturing Industries. *The 11ᵗʰ International Fundamental Science Congress (iFSC2019).* Faculty of Science, Universiti Putra, Palm Garden Hotel, Putrajaya . 30-31 October, 2019.

35. **Keynote Speaker (2019)**. On the Performance of High Leverage Collinearity Enhancing Observations Diagnostic Measure. *Control and Optimization and Dynamical Systems –CODS-2019.* Andijan State University, Usbekisthan. October 17-19.

36. **Keynote Speaker (2019)**. The remedy for High Leverage Collinearity Influential Observations. *The 10ᵗʰ International Optimization and Operation Research Conference, ICNOOR X,* Vientiane, Laos. *Agust 27-30*, 2019.

37. **Speaker of Special Topic Session (STS). (2019).** Analysing Air Quality Data in Several Monitoring Stations, Malaysia Using Robust Statistical Methods. *The 62ⁿᵈ International Statistics Institute (ISI) World Statistics Congress.* 18-23 August, 2019. Kuala Lumpur Convention Centre, Kuala Lumpur. Four (4) of my PhD students also delivered oral presentations.

38. **Speaker of Pre- World Statistics Congress Short Course (2019).** Diagnostics and Robust Parameter Estimation of Nonlinear Regression with Application Using R. T*he 62ⁿᵈ International Statistics Institute (ISI) World Statistics Congress.* 16-17August, 2019. Bank Negara Training Centre, Sisana Kijang, Kuala Lumpur

39. **Keynote Speaker (2019)**. Handling of Multicollinearity and Outliers Using Robust Methods for Efficient Prediction. *Asia Pacific Conference on Applied Mathematics and Statistics (AMS 2019),* University of Malaya, Kuala Lumpur, Malaysia. February 21-24*, 2019.* The current VC of UM also one of the 5 keynote speakers. 1 USA, 1 India, 1 Hong Kong and 2 Malaysia.

40. **Keynote Speaker (2018).** Robust Statistics: Handling of Outliers For Efficient Prediction. *International Conference on Mathematics, Statistics and their Applications(ICMSA 2018), Hatyai, Thailand. December, 8-10, 2018.* My PhD student also delivered oral presentation.

41. **Keynote Speaker (2018).** Robust Statistics: Dealing with Outliers For Better Inferences. *Somposium Kebangsaan sains Matematik, Universiti Malaysia Sabah, November, 27-29, 2018.*

42. **Invited Speaker (2018).** The Effect of High Leverage Collinearity Enhancing Observations on the Ordinary Least Squares Estimates. *International Fundamental Science Congress, Uniten, Kajang, Malaysia. October, 23-24, 2018.*

43. **Invited Speaker (2018).** On the Performance of Robust Augmented Approach to Desirability Function for Optimizing Multiple Responses. *International Seminar on Mathematics in Industry & International Conference on Theoretical and Applied Statistics. Universiti Teknologi Malaysia, Jalan Semarak, KL. September, 4-6, 2018*

44. **Plenary Speaker (2018).** Robust Heteroscedasticity Consistent Matrix Estimator based on Influential Observations. *International Optimization and Operation Research Conference, ICNOOR IX, Chiangmai-Thailand, Agust 27-30*, 2018.

45. **Keynote Speaker (2018).** The Need For Robust Statistics For Efficient Prediction. *International Conference on Robust Quality Engineering. Universiti Teknologi Malaysia, Jalan Semarak, KL. 4-5 ,* August, 2018.

46. **Invited Speaker (2018).** On the Performance of Fast Improvised Generalized M-Estimator For Fixed Effect Panel Data Model. The 4th *Institute Statistics of Malaysia In*ter*ernational Statistical Conference. Sunway University, Malaysia,* August 1-2 August, 2018.

47. **Presenter (2018).** On the Performance of Robust GM Estimator as a Remedy to Multicollinearity Which is Due to High Leverage Collinearity Enhancing Observations. *International Conference on Pure and Applied Mathematics. Mathematics.* Budapest, Hungary, July 10-13, 2018.

48. **Invited Speaker (2018).** Fast GM Estimator to Reduce the Effect of Bad Leverage Points. The 3rd International Conference on Mathematical Sciences and Statistics 2018. LeMeredian Putrajaya Malaysia. 6-8 February 2018.

49. **Invited Speaker (2018).** Identification of High Levergae Collinearity Influential Observations and How to Remedy This Problems. *Seminar Kebangsaan Institut Statistik Malaysia*, Bangunan TNCPI, UPM. 29 Mac 2018. Four (4) of my PhD students also delivered oral presentations.

50. **Invited Speaker (2017).** Some Multicollinearity Issues and How to Remedy theese Problems. Fundamental Science Congress. Bangunan TNCPI, UPM, 21-22 Nov 2017. Four (4) of my PhD students also delivered oral presentations.

51. **Presenter (2017).** The Ignorance of Some Statistical Techniques in Research. Malaysian Science Technology Congress. Bangunan TNCPI, UPM, 31-2 Nov 2017.

52. **Invited Speaker (2017).** The Analysis of PM10 Suspended Particulate Air Polution Using Several Robust Techniques: case Study Industrial Area , Penang, Malaysia. The 61th World Statistics Congress, Marrakesh, Morocco, 17-21 July 2017.

53. **Keynote Speaker (2017).** High Efficient Estimator for Multiple Linear Regression in the Presence of Good and Bad Leverage Points. *International Conference of Mathematical and Computer Science* Langkawi, Malaysia, 3-5 May 2017. Four (4) of my PhD students also delivered oral presentations.

54. **Keynote Speaker (2017).** Journey to Robust Statistics: Should Outliers be Removed from a Dataset? *The International Conference on Mathematics and Statistics,* Banasthali University, Rajasthan, India, 24-26 Jan 2017.

55. **Invited Speaker (2016).** The Detection of High Leverage Collinearity Enhancing Observations using Robust Variance Inflation Factor. *The 10th National Seminar of Malaysia Institute of Statistics,* UPM, 18 Februari 2016.

56. **Presenter (2016).** The improvised Generalized M-Estimator to remedy multicollinearity caused by high leverage point. *The 7th European Congress of Mathematics.* Berlin, July 18-22, 2016.

57. **Invited Speaker (2016).** The Performance of variables selection technique based on Robust Least Angle Regression. *The 2nd International Conference and Workshop on Mathematical Analysis.* Langkawi, Malaysia, 2-4 August. 2016. Two (2) of my PhD students also delivered oral presentations.

58. **Invited Speaker (2016**). On the Performance of Robust variables selection technique based on Robust Least Angle Regression. *The 3rd International*

Conference of Malaysia Institute of Statistics. University of Malaya, Malaysia, 9-11. August. 2016.

59. **Participant (2016),** *Fundamental Science Congress*, Faculty of Science, UPM, 10-11 August, 2016

60. **Presenter (2016).** On the Performance of Improvised Generalized M-Estimator in the presence of High Leverage Collinearity Enhancing Observations. *The 18th International Conference on High Performance Computer, Computing and Statistics..* Zurich, Switzerland, September, 15-16, 2016.

61. **Plenary Speaker (2016).** Robust Within Group Estimator based on Improvised GM estimator for Fixed Effect Panel data Model. *The 7th International Conference on Numerical Optimisation and Operation Research.* Hanoi, Vietnam. 31th October- 2nd November,, 2016.

62. **Participant (2016).** *Malaysia Statistics Conference 2016. MyStat16. Sasana Kijang, Bank Negara Malaysia.* November 15, 2016.

63. **Presenter (2015).** The identification of good and bad high leverage points in multiple linear regression model. *The 6th European Conference on Applied Mathematicals and Informatics.* **Canary Island, Spain,** January 10-12, 2015.

64. **Invited Speaker (2015).** On the performance of DRGP-MGDFF Classification Scheme for the Identification of Bad Influential Observations. *The 9th National Malaysia Institute of Statistics Seminar.* **Universiti Kebangsaan Malaysia,** 31th March, 2015.

65. **Speaker and Chairman for Design and Analysis of Experiments** Workshop (2015), *3 Days Workshop on the Right Way to Design and Analysis of Experiments.* Faculty of Science, UPM, 13-16 April, 2015.

66. **Speaker for Mathematics Camp for Sekolah Menengah Sains Tun Azlan Shah, Taiping, Perak** (2015), *Journey to Amazing Statistics*, INSPEM Seratas, 31 July-2 Ogos, 2015.

67. **Plenary Speaker (2015) and Master of Ceremony.** Robust GM-Estimator for Linear Regression in the Presence of High Leverage Collinearity Influential Observations, the *6th International Conference on Numerical Optimisation and Operation Research,* **Siem Reip, Cambodia, 1-4 September, 2015.**

68. **Speaker and Facilitator** for Mathematics and Statistics Session (2015), *Training of Trainers Camp for Future Nobel Laureates*, 7-9 Sept 2015.

69. **Invited Speaker (2015),** Remedy for Multicollinearity caused by High Leverage Points, *Conference for Agricultural Statistics 2015*, Bintulu, Sarawak, 6-8 October, 2015.

70. **Invited Special Lecture (2015), Invited Special Lecture on Design and Analysis of Experiments,** *Conference for Agricultural Statistics 2015*, Bintulu, Sarawak, 6-8 October, 2015.

71. **Invited Special Lecture on Design and Analysis of Experiment (2015),** *Pre SEAM School,* jointly organized by INSPEM and South East Asian Mathe matical Society, UPM, 31 Oct.-2 Nov, 2015.

72. **Participant (2015).** Seminar: Bringing STEM to live. Faculty of Science, Dewan Taklimat, UPM, 28th July, 2015

73. **Invited Speaker** (2015), On the Performance of New Generalized-M estimator to rectify Multicollinearity caused by High Leverage Collinearity Enhancing Observations, *Simposium Kebangsaan Sains Matematik* , **UTM, 24-26 November, 2015.**

74. **Invited Speaker (2015),** Robust GM-Estimator for Linear Regression Model in the Presence of High Leverage Collinearity Influential Observations, *My Statistics3*, Bank Negara Malaysia, 17 November, 2015.

75. **Speaker (2015),** The Performance of Robust Variance Inflation Factor, *Fundamental Science Congress*, Faculty of Science, UPM, 12-13 November, 2015

76. **Key-Note Speaker (2014).** On the performance of Modified Generalized GDFITTS in the detection of multiple influential observations. *The 3rd International Conference on Computer Engineering and Mathematical Science,* **Langkawi, 4-5 December, 2014**.

77. **Invited Speaker and chairperson for 3 sessions (2014).** Estimation of parameters in autocorrelated multiple regression model using robust Cochrane-orcutt prais Winston iterative method. *ISI Regional Statistics Conference*, Sisana Kijang **Bank Negara Kuala Lumpur, 16-**19 November, 2014.

78. **Invited Speaker and Session Chairperson(2014).** New robust estimation method for multiple linear regression having high leverage collinearity influential observations.*The 2ⁿᵈ ISM International Conference*, Kuantan 14-16 Ogos, 2014.

79. **Invited Speaker and Session chairperson (2014).** A New Diagnostics Measure for the identification of high leverage collinearity enhancing observations**.** *The 8ᵗʰ National Seminar of Malysia Institute of Statistics, UPM, 11 Februari 2014.*

80. **Invited Speaker and Session Chairperson (2014).** Robust Diagnostic F for the identification of High Leverage Points.*The 3ʳᵈ International Conference on Global Optimization and its Applications.* **Yogyakarata, Indonesia, 9-12**

81. **Presenter and Session Chairperson (2013).** On a robust estimator in heteroscedastic regression model in the presence of outliers. *International Conference on Compuational* Mathematics in Engineering. **London, UK, 3-5 July**

82. **Invited Speaker and Session Cahirperson (2013).** Multiple high leverage collinearity enhancing observation diagnostic measure. *Regional Fundamental Science Congress, UPM*

83. **Presenter and Session Chairperson (2013).** Diagnostic plots for the identification of high leverage collinearity-influential observations. *International Conference on Applied Analysis and Mathematical Modeling*., Istanbul**, Turkey, 2-5 June, 2013.**

84. **Session Chairperson (2013).** Statistics and Operational Research International Conference 2013, KUCHING, Sarawak., 3-5 December, 2013**5 June, 2013.**

85. **Presenter and Session Chairperson (2012).** The performance of robust diagnostic F in the identification of multiple outliers. *The 12ᵗʰ Islamic Countries Conference on Statistical Sciences (ICCS-12)*, **Doha, Qatar, 19-22** Dec. 2012.

86. **Presenter and Session Chairperson (2012).** On the robust parameter estimation for linear model with autocorrelated errors. *International Conference on Mathematics and Aero Space Engineering (ICMAE2012).***Paris, France, 7-8 July , 2012.**

87. **Key-Note Speaker** (2012). Outliers, robust statistics & its application in data analysis. *The 1ˢᵗ ISM International Statistical Conference 2012*, Persada Johor International Convention Centre, Malaysia, September 4-6, 2012.

88. **Invited speaker (2012**), Collinearity Influential Obserbvations Diagnostic Measures, *Seminar on Applications of Cutting Edge Statistical Methods in Research.* Dewan Taklimat, Banguanan Pentadbiran UPM, Universiti Pura Malaysia, 4-5 Januari, 2012,

89. Fundamental Science Congress 2010, 18-19 May 2010, Universiti Putra Malaysia- **Presenter and chairman of a session.**

90. Simposium Kebangsaan Sains Mathematik Ke-18 (SKASM 18), 8-10 December 2010, Johor Bahru, Malaysia- **Presenter.**

91. Fundamental Science Congress 2009, 17-18 June 2009, Universiti Putra Malaysia- **Presenter and Chairman of a session.**

92. Simposium Kebangsaan Sains Matematik ke-17 (SKSM KE-17), 15-17 December 2009, Hotel Mahkota, Melaka, Malaysia- **Presenter and Chairman of a session.**

93. The 4th International Conference on Research and Education in Mathematics (ICREM 4), 21-23 October 2009, Renaissance Hotel, Kulala Lumpur, Malaysia- **Presenter, Master of Ceremony and Chairman of a session.**

94. The 8th WSEAS International Conference on Applied Computer and Applied Computational Science (ACACOS'09), 20-22 May 2009, Hangzhou, China- **Presenter and Chairman of a session.**

95. The 5th Asian Mathematical Conference, 22 – 26 June 2009, Putra World Trade Center, Kuala Lumpur, Malaysia- **Presenter and Chairman of a session.**.

96. 17th National Mathematical Science Symposium, 15-17 December 2009, Universiti Putra Malaysia- **Presenter and Chairman of a session**.

97. 16th National Mathematical Science Symposium, 3-5 June 2008, University Malaysia Terengganu, Malaysia- **Presenter**.

98. The 4th International Conference on Research and Education in Mathematics (ICREM 4), 21-23 October 2009, Renaissance Hotel, Kulala Lumpur, Malaysia- **Presenter, Master of Ceremony and Session Chairperson.**

99. The 8th WSEAS International Conference on Applied Computer and Applied Computational Science (ACACOS'09), 20-22 May 2009, Hangzhou, China- **Presenter and Session Chairperson.**

100. The 4th International Conference on Research and Education in Mathematics (ICREM 4), 21-23 October 2009, Renaissance Hotel, Kulala Lumpur, Malaysia- **Presenter, Master of Ceremony and Chairman of a session.**

101. The 8th WSEAS International Conference on Applied Computer and Applied Computational Science (ACACOS'09), 20-22 May 2009, Hangzhou, China- **Presenter and Chairman of a session.**

102. The 5th Asian Mathematical Conference, 22 – 26 June 2009, Putra World Trade Center, Kuala Lumpur, Malaysia- **Presenter and Chairman of a session.**.

103. 17th National Mathematical Science Symposium, 15-17 December 2009, Universiti Putra Malaysia- **Presenter and Chairman of a session**.

104. 16th National Mathematical Science Symposium, 3-5 June 2008, University Malaysia Terengganu, Malaysia- **Presenter**.

105. 3rd International Conference on Postgraduate Education (ICPE-3), 16-17 December 2008, Gurney Hotel, Penanag, Malaysia- **Presenter**.

106. 9th Islamic Countries Conference on Statistical Sciences 2007 (ICCS-IX), 12-14 December 2007, Concorde Hotel, Shah Alam, Malaysia- **Invited Speaker, and Chairman of a session.**

107. Integrating Mathematical Sciences Within Society (ICMS'07), 28-29 November 2007, Equatorial Hotel, Bangi-Putrajaya, Malaysia- **Presenter**.

108. International Conference on Research and Education in Mathematics (ICREM3), 10-12 April 2007, The Legend Hotel, Kuala Lumpur, Malaysia- Master of Ceremony, Chairman of Keynote Session and **Paper Presenter.**

109. National Conference on Mathematics and Statistics Modelling, 5-6 September 2006, Universiti Putra Malaysia- **Presenter**.

110. National Statistics Conference 2006, 4-5 September 2006, International Covention Centre, Putrajaya, Malaysia- **Invited Speaker.**

111. National Seminar on Quantitative Science, 19-21 December 2006, Helang Hotel, Langkawi, Malaysia- **Chairman of a session and Paper Presenter**.

112. International Statistics Conference, 27-31 December, 2005. Universiti Malaya, Malaysia- **Presenter**.

113. The second International Conference on Research and Education in Mathematics (ICREM 2), 25-27 May 2005, Universiti Putra Malaysia- **Master of Ceremony, Chairman of Key-note Session and Paper Presenter.**

114. The proceeding of 12th Mathematical Sciences National Symposium in UIA, 23-24 December 2004, Kuala Lumpur, Malaysia- **Chairman of a session and Paper Presenter.**

115. Seminar Sains Aktuari dan Matematik Kewangan 2003, 10 December 2003, Universiti Kebangsaan Malaysia, Malaysia- **Presenter**.

116. International Conference on Research and Education in Mathematics, 2-4 April 2003, Equatorial Hotel, Bangi, Malaysia- **Master of Ceremony, Chairman of Key-note session and Paper Presenter.**

117. Simposium Kebangsaan Sains Matematik ke-10, 23-24 December 2002, Hotel Puteri Pan Pacific, Johor Bahru, Malaysia- **Participant**.

118. Workshop on On-Line Lecture, 14-15 May 2002, Universiti Putra Malaysia- **Participant.**

119.   Seminar Kebangsaan Matematik Industri, 12 October 2002, Dewan Persidangan Institut Pendidikan dan Pembelajaran Jarak Jauh(IDEAL), Universiti Putra Malaysia-**Master of Ceremony and participant.**

120.   Bengkel ISO 2001: 2001 Penyemakan Pengurusan Fakulti, 21-23 September 2002, Gouman Resort Port Dickson, Malaysia- **Participant**.

121.   International Conference on Recent Developments in Statistics and it's Applications, 26th- 28th June 2001, Institute of Statistics Malaysia, Cititel Midvally Hotel, Kuala Lumpur, Malaysia- **Master of Ceremony and Chairman for four invited speaker sessions.**

122.   The launching of the Malaysian Customer Satisfaction Index by the minister of Domestic Trade and Consumer Affairs, 16 June 2001, Department of Statistics. UKM, Dynasty Hotel, Kuala Lumpur, Malaysia-**Master of Ceremony and Participant.**

123.   Intensive Workshop MS/ISO, 2000, Hotel Equitorial Melaka, Malaysia-**Master of Ceremony and Participant**

124.   International Conference on Mathematics and it's Application and the Workshop on Multimedia Applications, 18-19 July 2000. Palm Garden Hotel, Malaysia-P**resenter and Master of Ceremony.**

125.   International Workshop on Multimedia Applications, 20-21 July 2000. Mathematics Department, Universiti Putra Malaysia- **Master of Ceremony and Participant**.

126.   The 8th. National Symposium in Mathematics, 1-2 April 2000, UPMT Trengganu. **1999 Presenter**

127.   Experimental Design Workshop. 18-19 October 1999, Mathematics Department. **Speaker and Master of Ceremony.**

128.   The Malaysian Science & Technology Congress '98, 7-9 November 1998, Primula Hotel, Trengganu, Malaysia- **Presenter**.

129.   Panel Discussion on "the importance of a national Consumer satisfaction index at atime of economic crisis" by Prof. Claes Fornell, the director of the National Quality Research Center, University of Michigan Bussiness School, 16 June 1998, Hotel Dynasty, Kuala Lumpur-**Master of Ceremony and Chairperson of the discussion session.**

130.   Cyber Law and cyberethics Forum officiated by the Selangor Exco for infrastructure and information technology, 22 August 1998, Computer Department. IDEAL, Uiversiti Putra Malaysia- **Master of Ceremony.**

131.   Institute Statistik Malaysia Seminar. Mathematics Department, 20 September 1997, Universiti Putra Malaysia- **Master of Ceremony and Paper Presenter**.

132. UPM Senate Meeting, 1995, Senate Meeting Room, Universiti Putra Malaysia- **Paper Presenter**

133. One-Day International University Seminar, 1991, Mathematics Department, Universiti Putra Malaysia- **Master of Ceemony and Participant.**

134. 4th National Symposium on Mathematical Sciences, 1990, Universiti Sains Malaysia, Malaysia- **Presenter**.

135. The Fourth Workshop on the Academic Advisory System of the Faculty of Science and the Environmental Studies, July 1989, Administration Building, Universiti Putra Malaysia- **Master of Ceremony.**

136. The Third National Symposium on Mathematics, 22-24 August 1988, Universiti Putra Malaysia- **Master of Ceremony, repertoire and chairman for a session.**

137. The Third Workshop on the Academic Advisory System of the Faculty of Science and the environmental Studies, 1987, Universiti Putra Malaysia- **Master of Ceremony.**

138. One day Seminar on Numerical Analysis, 1987, Mathematics Department, Universiti Putra Malaysia- **Participant.**

139. Disk Operating System Course, 1987, Mathematics Department, Universiti Putra Malaysia- **Participant.**

140. Seminar on Artificial Intelligence and Statistics, March 1987, Institut Statistik Malaysia, Universiti Putra Malaysia- **Participant.**

141. Seminar on Advisory Academic System, March 1987, Universiti Putra Malaysia- **Master of Ceremony and Participant.**

142. Seminar and National Exhibition on Computer Sciences in Education, 1986, Universiti Putra Malaysia- **Master of Ceremony.**

143. Workshop on teaching of mathematics for secondary school teachers, June 1986, Universiti Putra Malaysia- **Speaker.**

144. The Second Workshop on the Advisory System of the Faculty Sciences and Environmental Studies, Mach 1986, Universiti Putra Malaysia- **Master of Ceremony, repertoire and chairman for a session.**

145. Seminar on Statistics and Creativity, March 1986, Institut Statistik Malaysia, Auditorium Muzium Sains Elektrik, University Teknologi Malaysia- **Participant.**

146. Workshop on Statistics for STPM teachers, December, 1985, Pusat Pengajian Kuantitatif Universiti Kebangsaan Malaysia- **Speaker.**

147. Seminar on The Application of Statistics on Medicine , 1985, Universiti Putra Malaysia- **Participant.**

148.   The First Workshop on the Advisory System of the Faculty Sciences and Environmental Studies, June 1985, Universiti Putra Malaysia- **Master of Ceremony, repertoire and chairman for a session.**

149.   Workshop on facilitator for Orientation week, 28-30 June 1985, Universiti Putra Malaysia- **Participant.**

150.   National Seminar on professional in management for Higher Education, 15-17 February 1984, Universiti Putra Malaysia- **Participant.**

151.   Workshop on marking STPM paper, April 1982, Universiti Malaya- **participant**

152.   Course on Bahasa Malaysia, 1982, Universiti Pertanian Malaysia- **participant.**

153.   Seminar Kebangsaan Professional Dalam Pengurusan Tinggi, 1982, Universiti Pertanian Malaysia- P**articipant.**

17. OTHER PRESENTATION (POSTER/EXHIBITION/SHOWCASE)- SELECTED SOME PRESENTATIONS.

1. **Speaker and Chairman of organizing workshop committee (2024)**. *Two days Workshops on the Right Way to Design and Analyse Experiment*s. Institute for Mathematical Research, Universiti Putra Malaysia. FMayy 6-7, 2025.

2. **Speaker and Chairman of organizing workshop committee (2020)**. *Two days Workshops on the Right Way to Design and Analyse Experiment*s. Department of Mathematics, Universiti Putra Malaysia. February 18-19, 2020.

3. **Chairperson for keynote session (2019).** *The 11th International Fundamental Science Congress (iFSC2019).* Faculty of Science, Universiti Putra Malaysia. Palm Garden Hotel, Putrajaya, 30-31 Oktober, 2019.

4. **Chairperson for one Special Topic Session (STS) and 2 contribution sessions (2019).** *The 62nd International Statistics Institute (ISI) World Statistics Congress.* 18-23 August, 2019. Kuala Lumpur Convention Centre, Kuala Lumpur.

5. **Speaker of Pre- World Statistics Congress Short Course (2019).** Diagnostics and Robust Parameter Estimation of Nonlinear Regression with Application Using R. T*he 62nd International Statistics Institute (ISI) World Statistics Congress.* 16-17August, 2019. Bank Negara Training Centre, Sisana Kijang, Kuala Lumpur.

6. **Facilitator (2019). Bengkel Penulisan Manuskrip 2009.** 31-JULAI-1 OGOS,2019. Fakulti Sainsm, UPM.

7. **Couch (Abdullah-PhD student) prior to oral presentation (first time) (2019).** Detection of High Leverage Points in High Dimensional Data Using Nu-SVR. *Seminar Kebangsaan Institut Statistik Malaysia, SKISM-13.* UiTM, Shah Alam, March 30th , 2019.

8. **Coach (Azizi-Master student) prior to oral presentation (first time) (2019)**. Identification of outliers in Crossed Gage Repeatability and Reproducibility Random Effect Model.*Seminar Kebangsaan Institut Statistik Malaysia, SKISM-13.* UiTM, Shah Alam, March 30th , 2019.

9. **Speaker and Chairman of organizing workshop committee (2019)**. Two days Workshops on Introduction to Robust Statistics and Its Application. Department of Mathematics, Universiti Putra Malaysia. September 5-6, 2019.

10. **Chaiperson for Plenary Session (2018).** Robust Heteroscedasticity Consistent Matrix Estimator based on Influential Observations. *International Optimization and Operation Research Conference, ICNOOR IX, Chiangmai-Thailand, Agust 27-30*, 2018.

11. **Promotion and Exhibition at Malaysian Booth, Marrakesh, Morocco, 17-21 July 2017** to attract people to attend World Statistics Congress jointly organized by Malaysia Institute of Statistics, Bank Negara Malaysia and Department of Statistics Malaysia which will be held in 18-23 Aug. 2019, Kuala Lumpur Malaysia. **See some of the photos below, immediately taken after promotional campaign to individual visited the Malaysian Booth**

12. **Session chairperson (2016).** *The 10th National Seminar of Malaysia Institute of Statistics,* UPM, 18 Februari 2016.

13. **Session chairperson (2016).** *The 2nd International Conference and Workshop on Mathematical Analysis.* Langkawi, Malaysia, 2-4 August. 2016. Two (2) of my PhD students also delivered oral presentations.

14. **Keynote Chairperson (2016**). T*he 3rd International Conference of Malaysia Institute of Statistics. University of Malaya,* Malaysia, 9-11. August. 2016.

15. **Session Chairperson (2016).** *The 7th International Conference on Numerical Optimisation and Operation Research.* Hanoi, Vietnam. 31th October- 2nd November,, 2016.

16. **One of the speaker for Faculty of Science Lab safety Course (2016).** *Lab safety Course,* Faculty of Science, UPM, 7-10 March, 2016.

17. **Presenter, PRPI** (Research Exhibition and Innovation), UPM, 2016, *Robust Centering in the Fixed Effect Panel Data Model.*

18. **Presenter, PRPI**, UPM, 2016, *Diagnostic Plot for the Identification of High Leverage Collinearity Influential Observations.*

19. **Presenter, PRPI**, UPM, 2016, A high breakdown, high efficiency and bounded influence modified GM estimator based on Support Vector Regression.

20. **Session Chairperson (2015).** *The 6th European Conference on Applied Mathematicals and Informatics.* **Canary Island, Spain,** January 10-12, 2015.

21. **Session Chairperson (2015).** *The 9th National Malaysia Institute of Statistics Seminar.* **Universiti Kebangsaan Malaysia,** 31th March, 2015.

22. **Speaker and Chairman for Design and Analysis of Experiments** Workshop (2015), *3 Days Workshop on the Right Way to Design and Analysis of Experiments.* Faculty of Science, UPM, 13-16 April, 2015.

23. **Speaker for Mathematics Camp for Sekolah Menengah Sains Tun Azlan Shah, Taiping, Perak** (2015), *Journey to Amazing Statistics*, INSPEM Seratas, 31 July-2 Ogos, 2015.

24. **Master of Ceremony and Session Chairperson (2015).** the *6th International Conference on Numerical Optimisation and Operation Research,* **Siem Reip, Cambodia, 1-4 September, 2015.**

25. **Speaker and Facilitator** for Mathematics and Statistics Session (2015), *Training of Trainers Camp for Future Nobel Laureates*, 7-9 Sept 2015.

26. **Key-Note chairperson (2015),** Remedy for Multicollinearity caused by High Leverage Points, *Conference for Agricultural Statistics 2015*, Bintulu, Sarawak, 6-8 October, 2015.

27. **Invited Speaker and Session Chairperson (2015), Invited Special Lecture on Design and Analysis of Experiments,** *Conference for Agricultural Statistics 2015*, Bintulu, Sarawak, 6-8 October, 2015.

28. **Invited Special Lecture on Design and Analysis of Experiment (2015),** *Pre SEAM School,* jointly organized by INSPEM and South East Asian Mathe matical Society, UPM, 31 Oct.-2 Nov, 2015.

29. **Invited Speaker and Session Chairperson (2015),** Robust GM-Estimator for Linear Regression Model in the Presence of High Leverage Collinearity Influential Observations, *My Statistics3*, Bank Negara Malaysia, 17 November, 2015.

30. **Speaker and Session Chairperson (2015),** The Performance of Robust Variance Inflation Factor, *Fundamental Science Congress*, Faculty of Science, UPM, 12-13 November, 2015

31. **Session Chairperson** (2015), *Simposium Kebangsaan Sains Matematik* , **UTM, 24-26 November, 2015.**

32. **One of the speaker for Faculty of Science Lab safety Course (2015).** *Lab safety Course,* Faculty of Science, UPM.

33. **Chairperson for 3 sessions (2014).** *ISI Regional Statistics Conference*, Sasana Kijang **Bank Negara Kuala Lumpur, 16-**19 November, 2014.

My remarks are included in the ISI Newsletter

" I am pleased that the conference has turned out to be a very good venue for statisticians to meet and share ideas with each other. The Plenary Sessions, with their highly experienced speakers, have been extremely insightful and participants have told me that they are very happy with the conference as a whole.

I look forward to more collaborative work such as this in the future, and would like to see greater turnout from the international community to help us build stronger bridges. It was very rewarding for me to see active participation and frank Q&A discussion in almost all sessions."

Habshah Midi
Deputy President, ISM
and Vice Chairperson,
Local Organising Committee of ISI-RSC 2014

34. **Session Chairperson (2014).** *The 3rd International Conference on Computer Engineering and Mathematical Science,* **Langkawi, 4-5 December, 2014**.

35. **Session Chairperson(2014).** *The 2nd ISM International Conference*, Kuantan 14-16 Ogos, 2014.

36. **Session chairperson (2014).** *The 8th National Seminar of Malaysia Institute of Statistics, UPM, 11 Februari 2014.*

37. **Session Chairperson (2014).** *The 3rd International Conference on Global Optimization and its Applications.* **Yogyakarata, Indonesia, 9-12.**

38. **One of the speaker for Faculty of Science Lab safety Course (2014).** *Lab safety Course,* Faculty of Science, UPM.

39. **Session Chairperson (2013).** On a robust estimator in heteroscedastic regression model in the presence of outliers. *International Conference on Compuational* Mathematics in Engineering. **London, UK, 3-5 July.**

40. **Session Cahirperson (2013).** Multiple high leverage collinearity enhancing observation diagnostic measure. *Regional Fundamental Science Congress, UPM*

41. **Session Chairperson (2013).** Diagnostic plots for the identification of high leverage collinearity-influential observations. *International Conference on Applied Analysis and Mathematical Modeling*., Istanbul**, Turkey, 2-5 June, 2013.**

42. **One of the speaker for Faculty of Science Lab safety Course (2013).** *Lab safety Course,* Faculty of Science, UPM.

43. **Session Chairperson (2013).** Statistics and Operational Research International Conference 2013, KUCHING, Sarawak., 3-5 December, 2013**5 June, 2013.**

44. **Session Chairperson (2012)**. *The 12th Islamic Countries Conference on Statistical Sciences (ICCS-12*), **Doha, Qatar, 19-22** Dec. 2012.

45. **Session Chairperson (2012).** *International Conference on Mathematics and Aero Space Engineering (ICMAE2012).***Paris, France, 7-8 July , 2012.**

46. **Presenter**, PRPI, UPM, 2012. *The Efect of Collinearity-Influential Observations on Collinear Data Set*

47. **Presenter**, PRPI, UPM 2012. *Collinearity-Influential Observation Diagnostic Measure Based on a Group Deletion Approach. .*

48. **Session Chairperson (2010).**Fundamental Science Congress 2010, 18-19 May 2010, Universiti Putra Malaysia.

49. **Presenter PRPI**, UPM, 2010, *Robust Estimators in Simple Mediation Analysis. 2010.*

50. **Presenter PRPI,** UPM, 2010, *Diagnostic-robust Generalized Potentials for the Identification of Multiple High Leverage Points*.

51. **Presenter PRPI**, UPM, 2010, *Multivariate Control Chart based on High Breakdown Point Estimator.*

52. **Presenter PRP**I, UPM, 2010, *Mutual Information for Mixture of Bivariate Normal Distribution based on Robust Kernel Estimation.*

53. **Presenter PRPI**, UPM, 2010, *Adequacy of Summary Measures of Fit in Binary Response Model.*

54. **Presenter PRPI**, UPM, 2010, *Robust Individual Control Charts Using a Change Point Formulation*.

55. **Presenter PRPI**, UPM, 2010, *Robust Remedial Measures of Heteroscedasticity in the presence of Outliers.*

56. **Presenter PRPI**, UPM, 2010, 2010, *Robust Multicollinearity Diagnostics Measures based on Robust Coefficient Determination...*

57. **Session Chairperson (2009).**Fundamental Science Congress 2009, 17-18 June, 2009. Universiti Putra Malaysia.

58. **Session Chairperson (2009).** Simposium Kebangsaan Sains Matematik ke-17 (SKSM KE-17), 15-17 December 2009, Hotel Mahkota, Melaka, Malaysia.

59. **Master of Ceremony and Session Chairperson (2009).** The 4th International Conference on Research and Education in Mathematics (ICREM 4), 21-23 October 2009, Renaissance Hotel, Kulala Lumpur, Malaysia.

60. **Presenter PRPI, UPM (2009).** *The Misconception of some Statistical Techniques in Research.*

61. **Presenter PRPI, UPM, (20**09), *Two-Step Robust Diagnostic Method for Identification of Multiple High Leverage Point.*

62. **Presenter PRPI, UPM, (20**09), *Linear Regression Model Selection based on Robust Bootstrapping Technique.*

63. **Presenter PRPI, UPM, (2009**). *A Robust Rescale Moment Test for Normality in Regression.*

64. **Session Chairperson (2009).** The 8th WSEAS International Conference on Applied Computer and Applied Computational Science (ACACOS'09), 20-22 May 2009, Hangzhou, China.

65. **Session Chairperson (2009).** The 5th Asian Mathematical Conference, 22 – 26 June 2009, Putra World Trade Center, Kuala Lumpur, Malaysia.

66. **Session Chairperson (2009).** The 17th National Mathematical Science Symposium, 15-17 December 2009, Universiti Putra Malaysia.

67. **Special Invitation to conduct workshop (2009).** *Workshop on the The Right Way to conduct Sampling Technique in Research*, Majlis Peperiksaan Malaysia, 2009.

68. **Invited Statistics Speaker (2007).** Faculty of Computer Sciences and Information Technology, *Program Bulan Siswazah PUTRA SARJANA, 2007.*

69. **Session Chairperson (2007).** The 9th Islamic Countries Conference on Statistical Sciences 2007 (ICCS-IX), 12-14 December 2007, Concorde Hotel, Shah Alam, Malaysia.

70. **Presenter PRPI (2007**). UPM, 2007, *HWPC Tool for Efficient Detection of Out of Control Process.*

71. **Presenter PRPI (2007).** UPM, 2007, *Weighted Bootstrap with Unequal Probability.*

72. **Presenter PRPI, UPM (2006).** *The performance of the Maximum Median Likelihood Estimator in Multiple Linear Regression with Heteroscedastic Errors.*

73. **Presenter PRPI, UPM (2006**), *The Perormance of Robust WRLSRDSM in Multiple Linear Regression Model with both Continuous and Categorical Variables with Heteroscedastic Errors..*

74. **Presenter ITEX (2006**). KLCC Convention Centre, *3R Software for Agriculture Efficient Prediction, 2006.*

75. **Session Chairperson (2006).** National Seminar on Quantitative Science, 19-21 December 2006, Helang Hotel, Langkawi, Malaysia.

PEJABAT KETUA EKSEKUTIF
(Office of the Chief Executive)
MAJLIS PEPERIKSAAN MALAYSIA
(Malaysian Examinations Council)

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"1 MALAYSIA: RAKYAT DIDAHULUKAN, PENCAPAIAN DIUTAMAKAN"

Ruj. Kami : MPM(S)/KE/26/Jld.4/(36)
Tarikh : _11 Jamadilawal 1431 H_
26 April 2010

Kepada sesiapa yang berkenaan

Tuan/Puan

SUMBANGAN KHIDMAT PROF. MADYA DR. HABSAH BINTI MIDI KEPADA MAJLIS PEPERIKSAAN MALAYSIA

Dengan segala hormatnya izinkan saya merujuk kepada perkara di atas.

2. Sukacita dimaklumkan bahawa Y. Bhg. Prof. Madya Dr. Habsah binti Midi, pensyarah dari Jabatan Matematik, Universiti Putra Malaysia (UPM) merupakan **Ketua Penyelidik** bagi **"Laporan Kajian Pencapaian _Malaysian University English Test_ (MUET) 2002-2006"**.

3. Kajian ilmiah ini telah beliau mulakan pada tahun 2007 dan telah berjaya didokumentasikan pada 26 Jun 2009. MPM juga telah mendapat kelulusan Y.A.B. Timbalan Perdana Menteri merangkap Menteri Pelajaran Malaysia pada 9 Mac 2010 untuk mengedarkan laporan kajian ini kepada awam.

4. Sebelum kajian ini berjaya direalisasikan, Y. Bhg. Prof. Madya Dr. Habsah binti Midi telah membentangkannya sebanyak empat (4) kali di hadapan ahli lembaga Majlis Peperiksaan Malaysia (Ahli Majlis) yang terdiri daripada 19 orang Naib Canselor universiti awam, Ketua Setiausaha Kementerian Pelajaran Malaysia (KPM), Ketua Pengarah Pelajaran KPM, Pengarah Lembaga Peperiksaan Malaysia, Ketua Eksekutif MPM, dan lima (5) orang yang dilantik oleh Yang di-Pertuan Agong pada tarikh seperti yang berikut:

(a) Pembentangan pertama pada 12 Februari 2007

(b) Pembentangan kedua pada 23 Julai 2007

(c) Pembentangan ketiga pada 5 November 2007

(d) Pembentangan keempat pada 11 Mac 2008

Ini membuktikan hasil kerja Y. Bhg. Prof. Madya Dr. Habsah binti Midi diikuti dengan penuh minat dan komitmen yang tinggi oleh Ahli Majlis. Laporan kajian ini, sesungguhnya telah memberikan manfaat yang banyak kepada pihak yang berkepentingan seperti KPM, Kementerian Pengajian Tinggi Malaysia, institusi pengajian tinggi awam (IPTA), dan agensi yang terlibat sama ada secara langsung atau tidak langsung dalam bidang pendidikan bagi mengetahui prestasi dan tahap kemahiran berbahasa Inggeris calon-calon MUET berdasarkan pelbagai faktor.

..2/-

5.   Kejayaan Y. Bhg. Prof. Madya Dr. Habsah binti Midi mencurahkan sumbangan beliau dalam kajian ilmiah ini telah mendorong MPM menjemput beliau untuk memberikan ceramah kepada semua pegawai MPM dalam **"Bengkel Kaedah Pensampelan dalam Penyelidikan"** yang diadakan di MPM pada 27 Oktober 2009. Perkongsian ilmu beliau dalam bidang pensampelan kepada pegawai MPM amat besar maknanya bagi pelaksanaan tugas-tugas penyelidikan yang berkaitan dengan bidang pentaksiran pendidikan di MPM.

6.   Sumbangan dan curahan jasa bakti beliau kepada MPM amat besar ertinya. Majlis Peperiksaan Malaysia menyokong usaha-usaha untuk menganugerahkan beliau sebagai penerima **Anugerah Akademik Negara 2009** di bawah kategori Anugerah Pengajaran bagi kelompok Sains Tulen.

Sekian, terima kasih.

"BERKHIDMAT UNTUK NEGARA"

Yang ikhlas

OMAR BIN ABU BAKAR
Ketua Eksekutif
Majlis Peperiksaan Malaysia

76. **Presenter, on 12ᵗʰ Feb 2007, 23 July, 2007, 5 Nov. 2007 and 11 Mac 2008. Progress Reports Findings (in stages) of the** *Kajian Pencapaian Malaysian University English Test (MUET) 2002-2006, at the Majlis Peperiksaan Malaysia* meeting, comprises of 19 IPTAs' Vice Chanselors, Secretary General of the Ministry of Education, Director General of the Ministry of Education, Director of Lembaga Peperiksaan Malaysia, Executive director of Majlis Peperiksaan Malaysia

77. **Master of Ceremony and Session Chairperson (2005).** The second International Conference on Research and Education in Mathematics (ICREM 2), 25-27 May 2005, Universiti Putra Malaysia.

78. **Presenter PRPI, UPM, (2005**). *The Performance of the Robust Non-Linear Regression based on Huber Psi Function.*

79. **Presenter PRPI, UPM, (2005).** *The Performance of a Robust Ridge Regression Estimator based on MM Estimator in the presence Outliers and Multicollinearity.*

80. **Session Chairperson (2004).** The 12ᵗʰ Mathematical Sciences National Symposium, UIA, 23-24 December 2004, Kuala Lumpur, Malaysia.

81. **Master of Ceremony and Session Chairperson (2003).** The International Conference on Research and Education in Mathematics, 2-4 April 2003, Equatorial Hotel, Bangi, Malaysia.

82. **Master of Ceremony (2002).** Seminar Kebangsaan Matematik Industri, 12 October 2002, Dewan Persidangan Institut Pendidikan dan Pembelajaran Jarak Jauh(IDEAL), Universiti Putra Malaysia.

83. **Master of Ceremony and Chairperson for four invited sessions (2001).** The International Conference on Recent Developments in Statistics and it's Applications, 26th- 28th June 2001, Institute of Statistics Malaysia, Cititel Midvally Hotel, Kuala Lumpur, Malaysia.

84. **Master of Ceremony (2001).** The launching of the Malaysian Customer Satisfaction Index by the minister of Domestic Trade and Consumer Affairs, 16 June 2001, Department of Statistics. UKM, Dynasty Hotel, Kuala Lumpur, Malaysia.**.**

85. **Master of Ceremony and Session Chairperson (2000).** Intensive Workshop MS/ISO, 2000, Hotel Equitorial Melaka, Malaysia.

86. **Master of Ceremony and Session Chairperson (2000).** The International Conference on Mathematics and it's Application and the Workshop on Multimedia Applications, 18-19 July 2000. Palm Garden Hotel, Malaysia.

87. **Master of Ceremony (2000).** The International Workshop on Multimedia Applications, 20-21 July 2000. Mathematics Department, Universiti Putra Malaysia.

88. **Speaker and chairperson (1999).** Experimental Design Workshop. 18-19 October 1999, Mathematics Department, UPM

89. **Master of Ceremony and Chairperson of Forum (1998).** Panel Discussion on the importance of a national Consumer satisfaction index at atime of economic crisis" by Prof. Claes Fornell, the director of the National Quality Research Center, University of Michigan Bussiness School, 16 June 1998, Hotel Dynasty, Kuala Lumpur..

90. **Master of Ceremony and Chairperson of Forum(1998).** Cyber Law and Cyberethics Forum officiated by the Selangor Exco for infrastructure and information technology, 22 August 1998, Computer Department. IDEAL, Uiversiti Putra Malaysia.

91. **Master of Ceremony (1997).** Institute Statistik Malaysia Seminar. Mathematics Department, 20 September 1997, Universiti Putra Malaysia-.

92. **Master of Ceremony (1991).** One-Day International University Seminar, 1991, Mathematics Department, Universiti Putra Malaysia.

93. **Master of Ceremony (1989).** The Fourth Workshop on the Academic Advisory System of the Faculty of Science and the Environmental Studies, July 1989, Administration Building, Universiti Putra Malaysia.

94. **Master of Ceremony, repertoire and Session Chairperson (1988).** The Third National Symposium on Mathematics, 22-24 August 1988, Universiti Putra Malaysia.

95. **Master of Ceremony (1987).** The Third Workshop on the Academic Advisory System of the Faculty of Science and the environmental Studies, 1987, Universiti Putra Malaysia- **Master of Ceremony.**

96. **Master of Ceremony (2009).** Seminar on Advisory Academic System, March 1987, Universiti Putra Malaysia.

97. **Master of Ceremony, repertoire and Session Chairperson (1988).** The Third National Symposium on Mathematics, 22-24 August 1988, Universiti Putra Malaysia.

98. **Master of Ceremony (1986).** Seminar and National Exhibition on Computer Sciences in Education, 1986, Universiti Putra Malaysia.

99. **One of the speaker (1986).** Workshop on teaching of mathematics for secondary school teachers, June 1986, Universiti Putra Malaysia.

100. **Master of Ceremony, repertoire and Session Chairperson (1986).** The Second Workshop on the Advisory System of the Faculty Sciences and Environmental Studies, Mach 1986, Universiti Putra Malaysia.

101. **Master of Ceremony, repertoire and Session Chairperson (1985).** The First Workshop on the Advisory System of the Faculty Sciences and Environmental Studies, June 1985, Universiti Putra Malaysia.

102. **One of the speaker (1986).** Workshop on Statistics for STPM teachers, December, 1985, Pusat Pengajian Kuantitatif Universiti Kebangsaan Malaysia.

103. Invited Talk: Special Session *"A Journey to Amazing Statistics"* at Mathematics Camps for Form Four students of SERATAS, organised by INSPEM, 2014–2016.

104. Invited Talk: *"Common Misuse of Statistical Techniques in Data Analysis and its Remedial Measures"*, Menara Wibawa, UiTM Sabah, 2013.

105. Invited Speaker, Workshop on *The Right Way to Conduct Sampling Technique in Research*, Majlis Peperiksaan Malaysia, 2009.

106. Public Lecture: *"The Importance of Mathematics in Everyday Life and Tips to Study Mathematics"*, Sekolah Menengah Convent, Kajang, 1983.

107. Motivation Talk: *"How to Become Excellent in Mathematics"*, Sekolah Menengah Sains Selangor, 2013.

Receiving Excellent Service Award from *Professor Dato*' Dr. Kamel Ariffin bin Mohd Atan (Director of Institute for Mathematical Research, UPM)

108.   Additional presentations have been delivered but are not listed here due to space limitations.

18. BIG CONSULTANCY WORK (SELECTED A FEW)

I have been actively involved in numerous consultancy and assessment projects at both national and institutional levels. Selected major works include:

➢ **Study on MUET Candidate's Achievement (2002–2007)**

- o **Organisation:** Majlis Peperiksaan Malaysia
- o **Role/Activities:** Conducted statistical analyses on factors influencing MUET performance.
- o **Outcome:** Findings presented at three national meetings attended by vice-chancellors of public universities, etc . The report (2002–2006) was endorsed by the Deputy Prime Minister & Minister of Education in 2010 for public release.

➢ **Development of a Coastal Resources Risk Index (CORRI)** (2006–2007)

- o **Organisation:** National Hydraulic Research Institute of Malaysia (NAHRIM)
- o **Role/Activities:** Performed statistical analyses on water quality data at multiple monitoring stations.
- o **Outcome:** Results presented to NAHRIM top management and documented in an official NAHRIM report.

- ➢ **1996 National Survey of Research and Development (R&D)**

  - o **Organisation:** Malaysian Science and Technology Information Centre (MASTIC), MOSTE
  - o **Role/Activities:** Co-researcher in a national survey on R&D activities in Malaysia.
  - o **Outcome:** Report published as *1996 National Survey of R&D* (MASTIC-RD-03.7, Dec 1997) after presentations to MOSTE and MPKSN task forces.

- ➢ **Excellent Teacher (JUSA C, KUP Mathematics) Assessment Panel** (2005)

  - o **Organisation:** Ministry of Education, Malaysia
  - o **Role/Activities:** Panel member for interviews and assignment evaluation of excellent mathematics teachers for JUSA C promotion.
  - o **Outcome:** Evaluation reports based on CVs, publications, assignments, and interviews.

- ➢ **Matriculation Program – Question Evaluator/Moderator** (2001–2008)

  - o **Organisation:** Ministry of Education, Malaysia
  - o **Role/Activities:** Evaluated and selected mathematics/statistics examination questions.
  - o **Outcome:** Finalised and approved exam question banks.

- ➢ **Matriculation Program – Question Setter & Group Examiners' Leader** (2001–2008)

  - o **Organisation:** Ministry of Education, Malaysia
  - o **Role/Activities:** Prepared exam papers, coordinated grading, and led examiner teams.
  - o **Outcome:** Produced examination papers, student results, and performance reports.

- ➢ **Working Paper on Bachelor of Statistics Programme** (2004)

  - o **Organisation:** Kuala Lumpur Infrastructure University College (KLIUC)
  - o **Role/Activities:** Drafted programme working paper for the proposed Bachelor of Statistics degree.
  - o **Outcome:** Completed working paper for programme development.

- ➢ **Teaching & Training (UiTM)**

  - o **Organisation:** Universiti Teknologi MARA (UiTM)
  - o **Role/Activities:** Delivered lectures and provided course notes for *Design and Analysis of Experiments* (Master of Statistics programme).

Picture taken at Laman Tawang, Jabatan Matematik and Statistik, Fakulti Sains, UPM, after having discussion with master and 2 PhD students (Iraq and Nigeria) 2024.

CLOSING REMARKS

Throughout my fourty one years career as a lecturer at the Universiti Putra Malaysia, I have been committed and shown great enthusiasm in my teachings, research, administrative and extension work, which is reflected from the confidence of colleagues and students alike, and through the additional awards and recognition I have received in forms of appointments. I have invested time and sweat to ensure that my teaching and research remains at par, relevant and in time with the globalized world. I experience great joy and great satisfaction when students can easily understand my teaching deliveries and my papers being published in journals. There are no words to express my feelings when poor students excel in their tests or examinations and my students obtain their degrees. I genuinely believe that a good teacher has to continuously show commitment to her work, be concern with their students' performances, and most importantly, be able to teach with clarity, passion and patience. Nothing means more to a student but the concern and commitment of a lecturer to their education, which in turn means burning the midnight oil and regularly skipping lunch! Not forgetting the relentless support from superiors, colleagues and supporting staff, for which I am most grateful. However, my heartfelt thanks and gratitude must go to my husband and children, without whom, I would be nothing. I am most thankful to ALLAH for His blessings and making me the recipient of a life generous with love and support. For all who have touched my life so graciously, they have indeed touched my heart, for which I am forever indebted.