

## CURRICULUM VITAE



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**Organization** : Universiti Malaysia Pahang  
**Position** : Senior lecturer  
**Expertise** : Statistics  
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Universiti Malaysia Pahang, Lebuhraya Tun Razak,  
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## EDUCATION

1. Doctor of Philosophy, Mathematics (2009-2013)  
Universiti Teknologi Malaysia, Skudai, Johor  
Thesis: A New Covariance Structure Stability Test Based on Vector-Variance
2. Bachelor's Degree, Industrial Mathematics (2006-2009)  
Universiti Teknologi Malaysia, Skudai, Johor  
Final year project: Assessing Science Faculty Students' Satisfaction on Perpustakaan Sultanah Zanariah (PSZ)' Services using Principal Component Analysis (PCA)

## AWARDS

1. Silver Medal, Creation, Innovation, Technology & Research Exposition (CITREX) 2018, "A Robust Firearm Identification Algorithm of Forensic Ballistics Specimens".
2. Bronze Medal, Creation, Innovation, Technology & Research Exposition (CITREX) 2015, "Understanding the Shift of Correlation Matrices during Financial Crisis: A Network Topology".
3. Bronze Medal, Creation, Innovation, Technology & Research Exposition (CITREX) 2014, "Understanding the Shift of Correlation Structure in Major Currency Exchange Rate".

4. Silver Medal, An International Innovation, Invention & Design Competition & Conference (ICON) 2014, “Learning from Mistakes Module for Understanding Statistical Concepts”.

## PUBLICATIONS

1. Zun Liang Chuan, Noriszura Ismail, Wendy Ling Shinyie, Tan Lit Ken, Soo-Fen Fam, Azlyna Senawi, Wan Nur Syahidah Wan Yusoff (2018). The efficiency of average linkage hierarchical clustering algorithm associated multi-scale bootstrap resampling in identifying homogeneous precipitation catchments. *IOP Conference Series: Materials Science and Engineering*, 342 (1). **(Indexed by Scopus)**
2. Nur Syahidah Yusoff, Shamshuritawati Sharif (2017). Detecting a currency’s dominance using multivariate time series analysis. *Journal of Physics: Conference Series*, 890 (1). **(Indexed by Scopus)**
3. Laila Amera Aziz, Abdul Rahman Mohd Kasim, Mohd Zuki Salleh, Sharidan Shafie, Wan Nur Syahidah Wan Yusoff (2017). Boundary layer flow of mixed convection viscoelastic micropolar fluid over a horizontal circular cylinder with aligned magnetohydrodynamic effect. *Malaysian Journal of Fundamental and Applied Sciences*, 13 (4). **(Indexed by Scopus)**
4. Nur Syamilah Arifin, Syazwani Mohd Zokri, Abdul Rahman Mohd Kasim, Mohd Zuki Salleh, Nurul Farahain Mohammad, Wan Nur Syahidah Wan Yusoff (2017). Aligned magnetic field on dusty Casson fluid over a stretching sheet with Newtonian heating. *Malaysian Journal of Fundamental and Applied Sciences*, 13 (3). **(Indexed by Scopus)**
5. Laila Amera Aziz, Abdul Rahman Mohd Kasim, Mohd Zuki Salleh, Nur Syahidah Yusoff, Sharidan Shafie (2017). Magnetohydrodynamics effect on convective boundary layer flow and heat transfer of viscoelastic micropolar fluid past a sphere. *Journal of Physics: Conference Series*, 890 (1). **(Indexed by Scopus)**
6. NS Arifin, SM Zokri, ARM Kasim, MZ Salleh, NF Mohammad, WNSW Yusoff (2017). Aligned magnetic field of two-phase mixed convection flow in dusty Casson fluid over a stretching sheet with Newtonian heating. *Journal of Physics: Conference Series*, 890 (1). **(Indexed by Scopus)**
7. Gamil Abdulraqeb Abdullah Saeed, Noryanti Muhammad, Chuan Zun Liang, Wan Nur Syahidah Wan Yusoff, Mohd Zuki Salleh (2017). Model for estimating of population abundance using line transect sampling. *Journal of Physics: Conference Series*, 890 (1). **(Indexed by Scopus)**
8. SM Zokri, NS Arifin, MZ Salleh, ARM Kasim, NF Mohammad, WNSW Yusoff (2017). MHD Jeffrey nanofluid past a stretching sheet with viscous dissipation effect. *Journal of Physics: Conference Series*, 890 (1). **(Indexed by Scopus)**
9. Yusoff, N.S. & Shamshuritawati Sharif (2016). Identifying the Influential Variable using Centrality Measure: A Case of Multivariate Time Series. *Advanced Science Letter*, p.p. 1-5. **(Indexed by Scopus)**
10. Yusoff, N.S., M. A. Djauhari & Shamshuritawati Sharif (2016). Power of Test: Box M’s Test Versus Jennrich’s Test. *Proceeding of 2016 Applied Mathematics in Science and Engineering International Conference (APPEMSE)*.
11. Yusoff, N.S. & Shamshuritawati Sharif (2016). Identifying influential variables in complex system: Network topology versus principal component analysis. *Advances in Industrial and Applied Mathematics AIP Conf. Proc.* 1750, p.p. 1-6. **(Indexed by ISI)**

12. Yusoff, N.S. & Shamshuritawati Sharif (2015). Understanding the shift of correlation matrices during financial crisis: A network topology. *AIP Conf. Proc.* 1643, p.p. 335-340. **(Indexed by ISI)**
13. Nur Syahidah Yusoff<sup>1</sup>, M. A. Djauhari<sup>2</sup>, Ismail Mohamad<sup>3</sup>, Nor Hafizah Moslim<sup>4</sup> & Laila Amera Aziz (2014). Understanding the Shift of Covariance Structure: A Network Topology Approach. *Proceeding of The 3<sup>rd</sup> International Conference on Computer Engineering & Mathematical Sciences 2014 (ICCEMS 2014)*.
14. Shamshuritawati Sharif, Wan Nur Syahidah Wan Yusoff, Zurni Omar & Suzilah Ismail (2014). Computational Efficiency of Generalized Variance and Vector Variance. *AIP Conf. Proc.* 1635, p.p. 906-911. **(Indexed by ISI)**
15. Yusoff, N.S. & Djauhari, M.A., (2013). A Statistical Test for the Stability of Covariance Structure. *Jurnal Teknologi*, 63(2), p.p. 81-83. **(Indexed by Scopus)**
16. Yusoff, N.S. & Djauhari, M.A., (2012). The Influence of Geothermal Environment to the Quality of Porcelain Insulator: A Correlation Analysis. *International Journal of Engineering & Technology IJET-IJENS*, 12(5), p.p. 22-25. **(IF: 0.425)**
17. Yusoff, N.S., Djauhari, M.A., & Ebi Shahrin Suleiman (2012). Organizational Commitment in Malaysian Public University: An Evidence via Social Network Analysis. *International Journal of Basic & Applied Sciences IJBAS-IJENS*, 12(5), p.p. 17-21. **(IF: 0.365)**
18. Yusoff, N.S. & Djauhari, M.A., (2012). A Correlation Network Approach to Analyze the Influence of Geothermal Environment on Porcelain Insulator. *International Journal of Applied Engineering Research*, 7(3), p.p. 263-275. **(Indexed by Scopus)**
19. Yusoff, N.S., Djauhari, M.A., & Ebi Shahrin Suleiman (2012). A Social Network Analysis on Organizational Commitment in Malaysia. *Proceedings of International Conference on Cloud Computing and Social Networking (ICCSN)*. **(Indexed by Scopus)**
20. Sharif, S., Yusoff, N.S. & Djauhari, M.A., (2012). Network Topology of Foreign Exchange Rate. *Modern Applied Science*, 6(11), p.p. 35-43, 2012. **(Indexed by Scopus)**
21. Yusoff, N.S. & Djauhari, M.A., (2011). The Influence of Geothermal Environment to the Quality of Porcelain Insulator: A Correlation Analysis. *Proceedings of 2011 IEEE International Conference on Industrial Engineering and Engineering Management (IEEM) 2011*, p.p. 424-427. **(Indexed by Scopus)**
22. Yusoff, N.S. & Djauhari, M.A., (2011). Comparison Study on the Speed of Convergence in Distribution of Sample Generalized Variance and Sample Vector Variance. *Proceedings of 2011 IEEE International Conference on Quality and Reliability (ICQR) 2011*, p.p. 617-619. **(Indexed by Scopus)**
23. Yusoff, N.S. & Djauhari, M.A., (2012). A Correlation Analysis of the Influence of Geothermal Environment to the Quality of Porcelain Insulator. *Menemui Matematik (Discovering Mathematics)*, 34(1), p.p. 49-56.
24. Yusoff, N.S. & Djauhari, M.A., (2012). Understanding the Shift of Correlation Structure in Major Currency Exchange Rate. *Malaysian Journal of Fundamental & Applied Sciences*, 8(3), p.p. 133-136.
25. Yusoff, N.S. & Djauhari, M.A., (2011). The Influence of Geothermal Environment to the Quality of Porcelain Insulator: A Correlation Analysis. *Proceedings of 2011 IEEE International Conference on Industrial Engineering and Engineering Management (IEEM) 2011*, p.p. 424-427. **(Indexed by Scopus)**

26. Yusoff, N.S. & Djauhari, M.A., (2011). Comparison Study on the Speed of Convergence in Distribution of Sample Generalized Variance and Sample Vector Variance. *Proceedings of 2011 IEEE International Conference on Quality and Reliability (ICQR) 2011*, p.p. 617-619. (**Indexed by Scopus**)

## **WORK IN PROGRESS**

1. Robustifying Hotelling  $T^2$  Statistic for Monitoring the Stability of Currency Exchange Rate During Global Financial Crisis, UMP Internal Grant, 2017 – 2019 (Leader)
2. Development of Clustering-based Procedures for the Detection Multiple Outliers in Circular Model with Wind Direction Data Applications”, FRGS, 2016 – 2018 (Co-researcher)
3. Convective Boundary Layer Flow of Viscoelastic Micropolar Fluid with Aligned Magnetohydrodynamic Effect, UMP Internal Grant, 2017 – 2019 (Co-researcher)
4. Nonparametric Predictive Inference for Diagnostic Accuracy, UMP Internal Grant, 2017 – 2019 (Co-researcher)
5. Estimation of Extreme Hydro-Meteorology Events Using Non-Stationary Intensity-Duration-Frequency Curves Based On Bayesian Framework, UMP Internal Grant, 2017 – 2019 (Co-researcher)

## **SUPERVISION**

1. Mohd Aizat Ahlam bin Mohamad Mokhtar, “Robustifying Hotelling  $T^2$  Statistic for Monitoring the Stability of Currency Exchange Rate During Global Financial Crisis”, MSc. (Main Supervisor) – Ongoing
2. Sharifah Sakinah bt Syed Abd Mutalib, “Robust Clustering Outlier Detection Algorithm for Multivariate Data”, PhD. (Co-supervisor) – Ongoing
3. Gamil Abdulraqueb Abdullah Saeed, “Development Parametric Models for Grouped and Ungrouped Line Transect Data”, PhD. (Co-supervisor) – Ongoing
4. Megat Muhammad Afif bin Megat Muainuddin, “Development of Forecasting Model for Ecotourism Product Demand in Pahang”, MSc. (Co-supervisor) – Ongoing

## **CONFERENCE PRESENTATIONS**

1. A network topology approach to diagnose the shift of covariance structure, 2018 Asia-Pacific Conference on Applied Mathematics and Statistics (AMS 2018), 23 – 26 March 2018, Hanoi, Vietnam.
2. Detecting a currency’s dominance using multivariate time series analysis, 1<sup>st</sup> International Conference on Applied & Industrial Mathematics and Statistics 2017 (ICoAIMS 2017), 8 – 10 August 2017, Pahang, Malaysia.
3. Power of Test: Box M’s Test Versus Jennrich’s Test, “2016 Applied Mathematics in Science and Engineering International Conference (APPEMSE), 26-28 January 2016, Melaka, Malaysia.
4. Understanding the Shift of Covariance Structure: A Network Topology, “The 3<sup>rd</sup> International Conference on Computer Engineering and Mathematical Sciences (ICCEMS), 4-5 Disember 2014, Langkawi, Malaysia.

5. Understanding the Shift of Correlation Matrices During Financial Crisis: A Network Topology, “The 2<sup>nd</sup> ISM International Statistical Conference 2014 with Applications in Sciences and Engineering”, 12-14 August 2014, Pahang, Malaysia.
6. Study on the Difference between Porcelain and Epoxy Resin Insulators: A Covariance Analysis, “The Asian Mathematical Conference 2013”, 30 June 2013-4 July 2013, Busan, Korea.
7. The Influence of Geothermal Environment to the Quality of Porcelain Insulator: A Gap Analysis, “International Conference on Statistics in Science, Business and Engineering”, 10-12 Sept 2012, Langkawi, Malaysia.
8. A Statistical Test for the Stability of Covariance Structure, “1st ISM International Statistical Conference”, 4-6 Sept 2012, Johor Bahru, Malaysia.
9. Testing the Stability of Covariance Structure, “Australia Statistical Conference”, 9-12 July 2012, Adelaide, Australia.
10. A Social Network Analysis on Organizational Commitment in Malaysia, “International Conference on Cloud Computing and Social Networking (ICCSN)”, 26-27 April 2012, Bandung, Indonesia.
11. The Influence of Geothermal Environment to the Quality of Porcelain Insulator: A Correlation Analysis, “The IEEE International Conference on Industrial Engineering and Engineering Management (IEEM)”, 6-9 Dec 2011, Singapore.
12. Understanding the Shift of Correlation Structure in Major Currency Exchange Rate, “Regional Annual Fundamental Science Symposium (RAFSS)”, 20-21 Dec 2011, Johor Bahru, Malaysia.
13. A Correlation Analysis of the Influence of Geothermal Environment to the Quality of Porcelain Insulator, “Simposium Kebangsaan Sains Matematik 9 (SKSM 9)”, 9-11 Nov 2011, Pulau Pinang, Malaysia.
14. Understanding the Shift of Correlation Structure, “International Seminar on the Application of Science & Mathematics (ISASM)”, 1-3 Nov 2011, Kuala Lumpur, Malaysia.
15. Comparison Study on the Speed of Convergence in Distribution of Sample Generalized Variance and Sample Vector Variance, “2011 IEEE International Conference on Quality and Reliability (ICQR)”, 14-17 Sept 2011, Bangkok, Thailand.
16. Plus and Minus of Generalized Variance in Testing the Equality of Covariance Matrices, “The Regional Conference on Statistical Sciences (RCSS)”, 13-14 June 2010, Kelantan, Malaysia.
17. Testing the stability of covariance structure in financial market using vector variance, “Regional Annual Fundamental Science Symposium (RAFSS)”, 8-9 June 2010, Kuala Lumpur, Malaysia.

## **PROFESSIONAL EXPERIENCE**

1. Leader of Research Grant under Research Acculturation Collaborative Effort (RACE) entitled “A Network Topology of Finance Industry Based on RV Approach, 2014 – 2017”.
2. Reviewer for “International Joint Conference 2017 (IJC 2017)”.
3. Reviewer for “Malaysian Journal of Fundamental and Applied Sciences (MJFAS)-International Seminar on Mathematics in Industry 2017 (ISMI 2017)”.
4. Reviewer for “The 13<sup>th</sup> IMT-GT International Conference Mathematics, Statistics and their applications (ICMSA 2017)”.
5. Reviewer for “1<sup>st</sup> International Conference on Applied & Industrial Mathematics and Statistics 2017 (ICOAIMS 2017)”.
6. Reviewer for “International Journal of Productivity and Quality Management (IJPQM)”.

7. Reviewer for “Malaysian Journal of Fundamental and Applied Sciences (MJFAS)-5<sup>th</sup> International Science Postgraduate Conference 2017 (ISPC 2017)”.
8. Reviewer for “Business Management and Computing Research Colloquium 2016”.
9. Editor for Proceedings of “The 2<sup>nd</sup> ISM International Statistical Conference 2014 with Applications in Sciences and Engineering”.
10. Reviewer for Proceedings of “The 2<sup>nd</sup> ISM International Statistical Conference 2014 with Applications in Sciences and Engineering”.
11. Invited Speaker, Skism VIII 2014, “Study on the Difference between Porcelain and Epoxy Resin Insulators: A Correlation Analysis”.
12. Member of Persatuan Sains Matematik Malaysia (PERSAMA), 2013-present.

## **TEACHING EXPERIENCE**

Januari 2013 - present

Course: Ordinary Differential Equation, Applied Statistics, Applied Mathematics, Calculus

## **WORK EXPERIENCE**

Employer: Universiti Malaysia Pahang

Position: Senior lecturer

Years of service: Januari 2013 - present

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