# DR. SHARIFAH SAKINAH SYED ABD MUTALIB

## SENIOR LECTURER

My area of research interest is statistical analysis. My main research interest is Robust Statistics, which is related to outlier detection. I proposed an improved robust estimator in 2019 named TOC to detect outliers in multivariate data and found that TOC is a promising robust estimator for a low dimensional data. Currently, I have been working on robust clustering and other multivariate methods.

### RESEARCHER PROFILE

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### CONTACT

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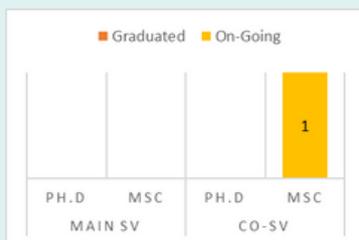
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### EDUCATION

- Doctor of Philosophy (Statistics), UMPSA
- Master of Science (Statistics), UKM
- Bachelor of Science with Honours (Actuarial Science), UKM

### AREAS OF EXPERTISE

- Outlier detection
- Robust Statistics
- Multivariate Data
- Applied Statistics

### SUPERVISION



| | Graduated | On-Going |
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| PH.D MSC MAIN SV | | |
| PH.D MSC CO-SV | | 1 |

### COLLABORATORS

### SELECTED RESEARCH PROJECTS

FRGS-EC. Development of Robust Principal Component Analysis Procedure for Outlier Detection in Health Data. (2023 - Present). RM28,000. 2. Geran Penyelidikan Jangka Pendek Fasa 1/2019 (GPJP 1/2019) UCTATI. Robust Outlier Detection Algorithm for Multivariate Data. (2019 – 2021). RM2,200.

### SELECTED PUBLICATIONS

**S.S.S. Abd Mutalib**, S.Z. Satari, and W.N.S. Wan Yusoff. Comparative Study of Test on Covariance Performance in Two Outlier Scenarios (2024). 3rd International Conference on Applied & Industrial Mathematics and Statistics 2022 (ICoAIMS 2022). AIP Conference Proceedings 2895. 090001.

**S.S.S. Abd Mutalib**, S.Z. Satari, and W.N.S. Wan Yusoff. A New Single Linkage Robust Clustering Outlier Detection Procedures for Multivariate Data (2023). Sains Malaysiana. 8(52).

**Sharifah Sakinah Syed Abd Mutalib**, Siti Zanariah Satari & Wan Nur Syahidah Wan Yusoff (2022). Synthetic Multivariate Data Generation Procedure with Various Outlier Scenarios using R Programming Language. Jurnal Teknologi. 84(3): 89-101.

**Sharifah Sakinah Syed Abd Mutalib**, Siti Zanariah Satari & Wan Nur Syahidah Wan Yusoff (2021). A Review of Outliers-Detection Methods for Multivariate Data. Journal of Statistical Modeling and Analytics. 3(1): 1 – 15.

**Sharifah Sakinah Syed Abd Mutalib**, Siti Zanariah Satari & Wan Nur Syahidah Wan Yusoff (2021). Comparison of Robust Estimators for Detecting Outliers in Multivariate Datasets, Journal of Physics: Conference Series. 1 – 9.

*"Search and Research"*