

# Seasonal Autoregressive Integrated Moving Average Model for Forecasting Tourist Arrivals in Malaysia.

- **Author(s):** Wan Nurul Ain binti Wan Marzuki ,Phoong Seuk Yen
- **Abstract:** Seasonal Autoregressive Integrated Moving Average (SARIMA) model was applied for fitting and forecasting the number of tourist arrivals in Malaysia. The time series data that applied in this study was 120 periods, which obtained from January 2008 until December 2017 for models testing and 24 periods include January 2018 to December 2020 for forecasting. The procedure in SARIMA model involving the identification of different SARIMA models, parameter estimation and diagnostic checking, that aims to identify the appropriate model for forecasting. The Akaike Information Criterion (AIC), Schwartz Criterion (SC) and Sum of Square Residual (SSR) are used to investigate the most plausible model that fit with the data. Therefore, SARIMA (1,1,1)(1,1,1)<sub>12</sub> model was selected for forecasting tourist arrivals in Malaysia.
- **Keywords:** Seasonal Autoregressive, SARIMA model, Sum of Square Residual, Akaike Information Criterion, Schwartz Criterion