

## **Abstract**

**Tourism is a variety of tourist activities and is supported by various facilities and services provided by the community, businessmen, government and local governments. With the tourism industry, gross domestic product income can be increased. Therefore, stakeholders must know what to improve in the tourism sector. This can be done by forecasting tourist arrivals with the help of search queries from Google Trend data so that stakeholders can find out what tourists want.**

**This research was conducted using the ARIMAX model forecasting method and artificial neural network algorithm as a comparison, with BPS data on foreign tourist arrivals to Bali Province through the door of Ngurah Rai Airport as primary data and Google Trend data as exogenous variables. With the forecasting of tourist arrivals, it is hoped that it can help stakeholders in building the tourism sector to be even better. Both models can predict tourist arrivals well with the best model in this study is the ARIMA model with an error of 12.8% with the most influential exogenous variable is the search query "Bali Beach" which can reduce errors in the model by 1.4%.**

**Keywords: Forecasting, ARIMA, ARIMAX, Tourism, Google Trend, Neural Network**