

Abstract

Information is the most valuable asset for a company in today's business world. From this information, the company can analyze and predict the data only using the past data. That is called time series forecasting. For example transportation companies, they need the information like transportation activities prediction data for risk management purposes. It is because the transportation is considered as a prerequisite to economic prosperity, mobility and well-being in the civilized world, in addition to providing one of the largest service sectors in the world.

At this final project, the implementation of Quickpropagation applied on forecasting time series to analyze the data preprocessing. Using the data from time series of data traffic Paris Metro Line # 11 and the data average delay per flight at San Francisco International Airport that is downloaded from the Time Series Data Library. Both datasets pattern, including regular and irregular pattern presented in the clock frequency.

The results after tests performed, Quickpropagation Neural networks can generate time series forecasting system with MAPE 0,07218 and 99,9278% accuracy.

Keywords: *Forecasting Time Series, Quickpropagation, Data Preprocessing, Data Time Series, Transportation*