

Prediksi Penyebaran Demam Berdarah di Kabupaten Bandung dengan Metode Hybrid Autoregressive Integrated Moving Average (ARIMA) dengan Support Vector Machine (SVM)

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Abstract

In the last 50 years, dengue fever case increased 30 times by the geographical expansion increase to the new world nations and, in this decade from the city to rural location. Areas that usually impacted by dengue fever is the tropic and subtropic. Indonesia becoome one of its because its located in tropical area. One of the region which impacted with dengue fever is Bandung District.

To minimize the casualties, many researchers make a model to predict dengue fever incident rate so that the medical authorities can optimize any medical instrument which needed to decrease the incident rate. One of the method which have good performance is ARIMA – SVM hybrid where as being teseted with dengue fever data in Bandung District, the output of ARIMA – SVM have small RMSE value compared with only ARIMA method. The choosen model is ARIMA (1,0,0) – SVM which have RMSE value of 0,056 hence can be concluded that ARIMA – SVM hybrid is better than ARIMA

Keywords: ARIMA, SVM, incident rate, weather
