Abstract

Covid-19 is an infectious disease caused by SARS-CoV-2 virus. The first known infection was discovered in Wuhan, China at the end of 2019. The virus has been declared as a global pandemic on February 2020. A method to predict the number of active cases of Covid-19 is needed thus the preventive measure can be maximally done. In this research, a prediction system for the increasement of daily active cases of Covid-19 in West Java was made. The prediction system was made using Multiple Linear Regression and Support Vector Regression methods. Multiple Linear Regression is one of the Linear Regression methods that is used to make predictions by estimating the value of the coefficients as the weight of the independent variable in the regression function. Support Vector Regression is a method which developed to predict the real number output by finding the best Hyperplane-tube to fit the data. After the two models are built, performance analysis needs to be done in order to decide which method provides better results. The result of this research shows that the Support Vector Regression method provides better RMSE and MAE results, which are 0.057 and 0.039, compared to the Multiple Linear Regression method which only produces 0.024 RMSE and 0.021 MAE.

Keywords: Covid-19, Multiple Linear Regression, Support Vector Regression.