

ABSTRACT

Crime is all forms of actions that are economically detrimental and violate applicable laws in the Indonesian state and social and religious norms. As a metropolitan city, the crime rate in Bandung is fairly high. This is evidenced from the criminal data in Bandung.

In this Final Project, a web-based system will be built to predict the Level of Crime in Bandung with the Support Vector Regression (SVR) algorithm. Support Vector Regression (SVR) is a development of the Support Vector Machine method for regression cases. This method is able to overcome overfitting, in selecting SVR parameters using the Grid Search algorithm. The data used in this Final Project uses historical data on crime rates in the city of Bandung in the 2016-2019 period in April and types of crime are divided into 5 that are Curan R2, Curan R4, Curat, Curas and Peras. The average SVR test results using the RBF kernel in Kota Bandung produce MAD (Mean Abosolute Deviation) performance values of 0.095, MSE (Mean Square Error) of 2.207 and MAPE (Mean Absolute Percentage Error) of 0.155.

Keywords: *Criminality, Prediction, Support Vector Regression.*