

## ABSTRACT

*Dengue Hemorrhagic Fever (DHF) is currently included as one of the public health problems in Indonesia because all provinces have been infected by DHF. Indonesia as a country with the largest tropical climate in Southeast Asia is very susceptible to dengue fever. In 2017 dengue cases were 68,407 cases, with a total of 493 deaths. This number decreased quite dramatically from the previous year, namely 204,171 cases and the number of deaths of 1,598 people.*

*On this occasion, research on prediction of DBD disease using classification method and regression with Support Vector Regression (SVR) and Gaussian Process Regression (GPR) algorithm. The data used in the final task comes from the Bandung health office with historical data of DHF infection in Bandung City period 2010-2020 in May. The Data is divided into 4 parts that are DHF sufferers, male sufferers, female sufferers, and deceased victims. So with this research is expected to help the health office of the city of Bandung and can know and predict the rise of the victims of dengue fever in Bandung. Then these results can be used as reference or reference by the Ministry of Health to anticipate dengue hemorrhagic fever disease.*

*Keywords: Support Vector Regression, Artificial Neural Network, Regression, Classification, DHF.*