Abstract

Indonesia is a country that is prone to Dengue Fever, this happens because Indonesia is a country with a tropical climate. More than 50 years after Indonesia contracted the dengue virus, dengue fever cases have not been resolved, currently the cases that occur are greatly increased over time this happens because of factors that cause dengue fever. By considering this serious problem, the authors created a system that can predict the vulnerability level in Bandung and looks for the factors that most influence from all factors of Dengue Fever using the KNN Algorithm and Random Forest. The results of the system show the results of the best model is KNN algorithm with RMSE 29,26, and from the model shows the most influencing factors are population density, growth rate population mobility, rainfall, wind speed. by utilizing the results of the study, the government can adjust actions to each level of sub-district vulnerability and pay more attention to the factors that most influence dengue fever according to the results of the study.