

Abstract

COVID-19 has become a pandemic outbreak that has attacked the whole world, including Indonesia, since 2019. Also, since 2019 confirmed cases in Bandung have continued to increase. According to data from the Bandung city government, as of January 2023, confirmed cases have reached 103,560 people. Many factors have influenced the increase in confirmed cases. Based on this, it is necessary to analyze the factors that influence the growth in confirmed cases. One way is by classifying cases in the city of Bandung. It aims to create a predictive model for the future using feature extensions. In this study, we build and compare several classification models for the spread of COVID-19. The method used is feature expansion using ANN and CNN. Using the feature extension method, several models are created: 2, 3, 4, and 5-month models before the target class, and each x-bulan model is generated into 4 models. The best result is the ANN model with 90% Akurasi using 36 features, resulting from feature development. The author's contribution to this study created several classification models with extended features and compared these models and conducted an analysis to determine the best model for classifying the spread of COVID-19.

Keywords: covid-19, artificial neural network, convolutional neural network, feature expansion, accuracy
