ABSTRACT

Stunting is a condition of growth failure in children which is the result of malnutrition for a long time. The stunted growth makes the child shorter than normal children his age. This problem is of particular concern with the aim of reducing the number of stunting rates, by utilizing machine learning technology.

Machine learning in this Final Project, is expected to be able to provide solutions to deal with cases of increased stunting. Machine learning will be implemented into the manufacture of mobile-based applications that can predict stunting status in toddlers. The mobile application system built to predict stunting cases uses a prediction system from the naive bayes classification learning algorithm. Naïve Bayes classification is a classification method algorithm using probability theory and statistics.

The Naïve-Bayes algorithm which is implemented in a mobile application in this Final Project, has performance value of 64.02% accuracy, 62.16% precision, and 71.86% recall from the results of the confusion matrix test with 10% data testing and 90% data training.

Keywords: Machine Learning, Mobile, Naïve Bayes, Stunting.