

Abstract

Badminton is a popular in Indonesia. The number of outstanding athletes from Indonesia makes not a few badminton fans want to learn badminton techniques. The lack of information related to badminton training makes some badminton fans not know how to take part in the training. Besides the badminton fans, training factors are also important in developing skills in badminton. Therefore, tools are needed to help the training and development process in badminton. The tool uses technology of a NodeMCU microcontroller which is combined with the MPU-6050 module as a gyroscope sensor to record the movements of badminton techniques performed by players. The device will be placed on the player's racket to record the racket's movements. The movements recorded by the gyroscope sensor will then be classified into two skill levels, the expert skill and the beginner skill, the classification is done to determine the skill level of badminton players and help badminton players to practice. The classification is done using the decision tree method and got 81.25% accuracy

Keywords: Badminton, Badminton Skills, Classification, Decision tree, gyroscope