

## **Abstract**

**Many people who play basketball on their own, but do not take basketball training, because of that there are also many cases of playing basketball without learning the basic basketball techniques. Shooting is a very important basic technique of basketball. Based on these problems, the authors use technology that can classify correct or invalid throws using the decision tree method. The data taken is when the player does the free throw basketball exercise / training sample data. The data collection method uses a gyroscope sensor to take X Y Z motion and an accelerometer to retrieve the speed of the hand movement. The sensor is placed in the hand. After that the data that has been taken is performed feature extraction using the Hjroth parameter to produce 9 features from 3 axes and selected features using SelectKBest. Then it is classified using a decision tree method. Based on the results of the research on this prototype, it was explained that the use of the Hjroth Parameters method and the decision tree classification process resulted in an accuracy value of 91% so that it could be used to predict the unknown correct throw data.**

**Keywords: Basketball, Free Throw, Accelerometer, Gyroscope, Decision Tree**

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