# ABSTRACT

*During the COVID-19 pandemic, almost all activities were hampered, and as much as possible, they were carried out independently at home or what is commonly known as WFH (work from home). Not all activities can be carried out as WFH, including Taekwondo activities. If forced to do Taekwondo practice independently, there is a potential that the person's practice could be more technical because no trainer usually accompanies it. In this study, a tool will be designed that can classify a type of kick in Taekwondo. Previously there had been research related to this, but in our research, there were changes in the device used to make it more compact and the addition of kicks that could be classified. This study's dataset was obtained from several taekwondo athletes with different body proportions.*

*Data was obtained using the LSM9DS IMU sensor on the Arduino Nano 33 BLE. Before going through the pre-processing process, the dataset is processed through a cleansing process. The dataset is labeled and trained using the Support Vector Machine (SVM) algorithm. By using the mean, median, min, max, and variance features, an accuracy of 99.76% is obtained. The experimental results show that the SVM algorithm effectively classifies the types of taekwondo kicks. This product is intended to be used for independent training with due regard to the techniques performed and has the potential to be applied to competitive events in Taekwondo.*