

Universiti Teknologi MARA

**Hand Gesture Recognition for Autism
Diagnosis using Support Vector
Machine (SVM) Algorithm**

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ABSTRACT

Autism Spectrum Disorder(ASD) is one of the disorder that are the most popular disorder that can happened in children and the need to detect of the disorder are very important before it too late. Since current technologies are evolving, the technologies can be uses to assist the doctors in their works. Many of the usage of the technologies proves that it facilitates the process in diagnosing and analysing diseases and disorders but there are none of it are related to ASD. To counter this problem, a system has been proposed to detect the hand gesture using one of the machine learning technique which is Support Vector Machine (SVM) Algorithm. This system intended to give the type of hand gesture to help the doctor analyse hand gesture that are made. The system that are proposed will used image as the input. The evaluation of the classifier that are developed are done by accuracy test and the system are evaluated by functionality test. From the accuracy test, SVM are proven to be one of the best classifier to classify the image data. For the future work, this system need to be improved by using dataset that are related to the ASD and by using other classification algorithm.

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