Smart phone sensor data: comparative analysis of various classification methods for task of human activity recognition

ABSTRACT

Human Activity Recognition has a long history of research and requires further exploration to produce useful and optimal outcomes. Areas such as medicine, daily routine, and security are some benefits that smartphone enables via embedded sensors. Our work has chosen sensor data of six activities such as standing, walking, laying from pre-recorded dataset gathered via smartphone to evaluate the performance of various supervised machine learning algorithms. The results suggest that logistic regression has been an optimal choice based on experiments. Whereas, the Support Vector Machine (SVM) has shown to perform well with ninety-five percentage accuracy.