

Abstract

Passengers overload often occurs on buses and other public transportation. Passengers pass in and off the bus everyday. Related to this, human body weight can be used for classification between passengers get on and get off the bus. This final project, uses the Support Vector Machine algorithm along with feature extraction to classify passengers getting on and off the bus. This research was conducted using 100 weight data of passengers trampling on a device mounted on the bus door step. The training data and test data randomly distributed with ratio of 80%:20%. In the test, data of passengers get on and get off are separated and collected in different excel files to apply the extraction feature. The features used are Mean, Median, Standard Deviation, Kurtosis, and Skewness. The Support Vector Machine Linear Kernel method succeeds in classifying data of passengers get on and get off with an average accuracy of 90%.

Keyword: Passengers, Bus, Internet of Things, Support Vector Machine
