## **Abstract**

In the past few years, road with damaged conditions still often found in various places. Damaged roads can hamper activities and endanger the safety of road users. To deal with road damage, it is necessary to do a road condition monitoring which is conducted by the government record the damaged roads, so that road reparation can be done quick as possible. Therefore, maintaining the quality of road to be in a good condition is needed. The aim of this research is to build a system that can classify roads based on their eligibility. Support Vector Machine (SVM) classifications method was used in this study to classify roads based on its eligibility. The process of implementing the SVM method was done using 300 road surface data that contains good/smooth and damage quality of road. The final results of this study is SVM model can classify road surface data into two classes with average accuracy of 93%. This approach was expected to help the government in monitoring the road so that road reparation can be done as quick as possible.

Keywords: classification, road quality, SVM, correlation features.