**Application of Machine Learning for Fuel Consumption Modelling of Trucks**

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**Summary :**

This paper Support Vector Machine (SVM),Random Forest (RF), and Artificial Neural Network (ANN) models have been developed for the purpose and their performance compared. Fleet managers use telematic data to monitor the performance of their fleets and take decisions regarding maintenance of the vehicles and training of their drivers. The data, which include fuel consumption, are collected by standard sensors (SAE J1939) for modern vehicles. Together, these data can be used to develop a new fuel consumption model, which may help fleet managers in reviewing the existing vehicle routing decisions, based on road geometry.

**Merits:**

SVM

* It is effective in cases where the number of dimensions is greater than the number of samples and also it uses a subset of training points in the decision function (called support vectors), so it is also memory efficient.

**Demerits:**

SVM

* It doesn’t perform well when we have large data set because the required training time is higher.
* It does not execute very well when the data set has more sound i.e. target classes are overlapping.