**CSE 523 Machine Learning Winter 2022**

Progress Report :

**Vehicle Detection using HOG-SVM**

Group Name :

**FOUR**

**Date: 2nd March, 2022**

Group Members -

| Darsh Patel | AU1940150 |
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**1) Tasks Performed in the week**

* Last week, we achieved an accuracy of only 50% using SVM, so our goal was to increase this performance metric significantly using other classification models and ensemble models for multiclass classification

**2) Outcomes of the tasks performed**

* We have changed some parameters in HIstogram of Oriented Gradients in hope of better optimization and accuracy, but we are still at the same accuracy.
* Better accuracy in ensemble methods as compared to the performance of a single classification model

**3) Tasks to be performed in the upcoming week**

* Optimization of multiclass classification for reducing training cost and time
* Learn more about deep learning methods for object detection
* Researching about Lane Departure