**ABSTRACT**

Every year many people lose their lives due to fatal road accidents around the world and drowsy driving is one of the primary causes of road accidents and death. Fatigue and micro sleep at the driving controls are often the root cause of serious accidents. Most of the traditional methods to detect drowsiness are based on behavioral aspects while some are intrusive and may distract drivers, while some require expensive sensors. Therefore, a light-weight, real time driver’s drowsiness detection system is developed and implemented. The system reads video from camera and detects driver’s face in every frame by using ensemble of regression trees algorithm. The system is capable of detecting facial landmarks, computes Eye Aspect Ratio (EAR) and Eye Closure Ratio (ECR) to detect driver’s drowsiness.