



**KONGUNADU COLLEGE OF ENGINEERING AND TECHNOLOGY  
(AUTONOMOUS)  
NAMAKKAL- TRICHY MAIN ROAD, THOTTIAM, TRICHY**

**DEPARTMENT OF INFORMATION TECHNOLOGY**

**MINI PROJECT-I**

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**BATCH MEMBERS : KATHIRVEL T (621321205022)**

**SANTHOSH M (621321205048)**

**SHAHIN ABDUL RAZACK T (621321205051)**

**PROJECT GUIDE : Dr.R.SATHYA, M.E., Ph.D**

**PROJECT TITLE : Real Time Driver Drowsiness Detection for an Intelligent Transportation System**

**ABSTRACT :**

Driver drowsiness is a critical issue contributing to road accidents and fatalities worldwide. The Real time driver drowsiness detection for an intelligent transportation system can detect the driver drowsiness in real time, enhancing transportation and road safety. To address this problem, a robust and efficient Driver Drowsiness Detection System is proposed. The primary objective of this system is to detect signs of driver drowsiness and issue timely alerts to prevent potential accidents. The proposed approach involves some image preprocessing techniques like data collection, noise reduction and feature extraction. Face recognition is determined by using Haar Cascade algorithm and the utilization of machine learning algorithms like SVM to process eye movement in real-time video streams. This system uses eye landmarks which determine the EAR (Eye Aspect Ratio ratio) to check whether the driver is drowsy. To make this system user friendly by adding Graphical user Interface (GUI) using Tkinter. This proposed model will predict with better accuracy rate.

