# REAL TIME EYE DETECTION AND TRACKING METHOD FOR DRIVER ASSISTANCE SYSTEM

#### A PROJECT REPORT

#### Submitted by

ACHUDAN. T.S (Reg. No.201402001) GOBINATH. N (Reg. No. 201402031) KIRUBAKARAN. K (Reg. No. 201402053)

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(An Autonomous Institution affiliated to Anna University Chennai)



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# **BONAFIDE CERTIFICATE**

AND TRACKING METHOD FOR DRIVER ASSISTANCE SYSTEM is the bonafide work of ACHUDAN T.S.(201402001), GOBINATH N.(201402031), KIRUBAKARAN K. (201402053) who carried out the research under my supervision. Certified further, that to the best of my knowledge the work reported here in does not form part of any other project report or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

Mr. A. Sivaprakash, M.E., Supervisor, Assistant Professor (Sr.gr), Department of Electrical and Electronics Engineering, Mepco Schlenk Engineering College, Sivakasi. **Dr. N.Senthil Kumar**, M.E., Ph.D., Head of the Department, Senior Professor, Department of Electrical and Electronics Engineering, Mepco Schlenk Engineering College, Siyakasi.

Submitted for viva-voce Examination held at MEPCO SCHLENK ENGINEERING COLLEGE, SIVAKASI (AUTONOMOUS) on ......

**Internal Examiner.** 

**External Examiner.** 

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### **Abstract**

Drowsiness and fatigue of automobile drivers reduce the driver's abilities of vehicle control, natural reflex, recognition and perception. Such diminished vigilance level of drivers is observed at night driving or overdriving, causing accident and pose severe threat to society. Therefore it is very much necessary in automobile industry to incorporate driver assistance system that can detect drowsiness and fatigue of the drivers. This project presents a non-intrusive prototype computer vision system for monitoring a driver's vigilance in real time. Eye tracking is one of the key technologies for future driver assistance systems since human eyes contain much information about the driver's condition such as gaze, attention level, and fatigue level. One problem common to many eye tracking methods proposed so far is their sensitivity to lighting condition change. This tends to significantly limit their scope for automotive applications. This project describes real time eye detection and tracking method that works under variable and realistic lighting conditions.

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