

# A Proposed System for SMART CAR using Android Application

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## ABSTRACT

From the beginning of the artificial intelligence there was a desire of having automated intelligent car. Numbers of experiments have been done and some of them were very much successful. As a result now we have intelligent smart car. In this we are going to handle the car using android application. The implementation of the system will be done using android application for android devices. In this paper we have tried to discuss a new idea for an autonomous transportation system- a complete solution.

**Keywords :** Artificial Intelligence, Smart Car, Android Mobile, Mobile Application

## I. INTRODUCTION

Smart Car is the next generation SMART CAR powered by automation. Our project focuses on providing various "SMART" in-vehicle features that contribute significantly in increasing usage convenience for drivers by providing maximum level of automation, thereby requiring almost no human intervention. SMART car has several features that are aimed at providing maximum automation for every driver. It allows each driver to experience a unique sense of belonging to the vehicle. This has been achieved through the implementation of friendly android application user interfaces.

## II. METHODS AND MATERIAL

### 1. Literature Survey

#### **Paper 1: THE SMART CAR PROJECT: A CASE STUDY IN COMPUTER-MEDIATED CONTROL**

**Author's- O. Daniel Gott**

The purpose of this project was to create a mobile robot that operates in real-time with a mediated control system to increase the robot's autonomy. The robot operates remotely through a transmitter, which sends a signal to a receiver that passes the signal to a microprocessor that executes a control algorithm. The

microprocessor outputs control signals to drive and steer the robot.

The implementation of this system will be done using android application for Tablet PC's. The front end will be developed using JAVA, Android and at the backend MySQL database will be used.

#### **Paper 2: A Survey Of Intelligent Vehicle Application Worldwide.**

**Author's: Richard Bishop, USA.**

The main aim behind this system is that it provide warning to the driver (collision warning). Then systems which take partial control of the vehicle, either for steady-state driver assistance or as an emergency intervention to avoid collision. The systems which take full control of vehicle operation like vehicle automation. Driver assistance systems include functions such as adaptive cruise control, lane-keeping, precision docking and vehicle automation systems include low speed automation.

### 2. Existing System

Currently there is a system with some application like avoid collision, Intelligent braking system, Assistance in turning, Lane detection and change. In our proposed system we are adding some more features like start-stop engine/lock-unlock door using android application, speed adaption, night vision sensor. This

additional features will help user to drive car or operate car efficiently.

### 3. Limitations

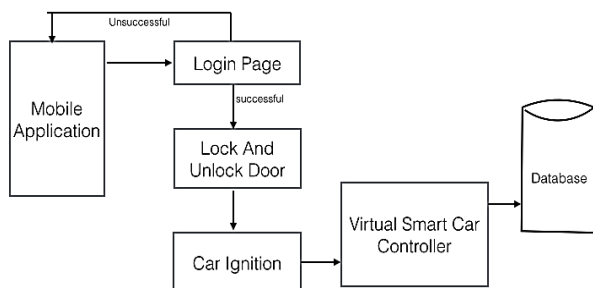
In existing system as specified the application like collision detection and Lane detection and change this application can cause the accident in the night. The one single move of a driver can cause horrifying accident. The Lane detection and change should work in the bad weather also to avoid collision. In our system we came with solution for above limitations.

## III. RESULTS AND DISCUSSION

### Proposed Work

In our proposed system we are adding some more features like start-stop engine/lock-unlock door using android application, speed adaption, night vision sensor, Automatic WindShield Wipers. In our system we are going to operate the car by android application where we first give the individual car with username and password with correct username and password the user can access the all of the features of the car like start-stop engine and lock-unlock door. This additional features will help user to drive car or operate car efficiently.

### System Architecture



## IV. CONCLUSION

By implementing this system it will help the user to drive more efficiently and comfortably. This proposal gives a view to a complete automation of the Virtual Smart Car System. We think that with a full automated Virtual Smart Car the dream of having the automated society will come to true. Automated Virtual Smart Car will be one major step in that dream come true. By

using multiple sensors effectively we can achieve the automated car, which will relief the peoples.

## V. REFERENCES

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