

Smart Security System for Vehicles

Reshma Limkar¹ Manisha Bhanvase² Aditi Kulkarni³

^{1,2,3}Department of Electronic and Telecommunication Engineering

^{1,2,3}Karmyogi Engineering College, Dr Babasaheb Ambedkar University, Lonere, Maharashtra, India

Abstract— In the designed system we can fluently communicate with our vehicle from anywhere with the help of GSM and we can command our vehicle according to our need via communication to avoid theft of our vehicle. The being security system is rested on buzzer and is a single word system that barrels we fluently stolen. The designed system “Smart Security System for Vehicle” is rested on OTP, being transferred to the proprietor registered number, the proprietor has to enter the OTP to turn ON the ignition system, and the OTP is arbitrary so it can’t be stolen by another person. If ever OTP is cracked by someone than proprietor can fluently stop the vehicle from anywhere with the help of mobile phone. Also, the vehicle proprietor can fluently trace the position of his/ her vehicle from anywhere with the help of GPS.

Keywords: GSM, GPS, 4x4 Keypad, Microcontroller, OTP

I. INTRODUCTION

Now day’s machine thefts are adding at an intimidating rate each over the world. So to escape vehicles from the stealers also, we’re taken a design to develop “Smart Security System for Vehicle”. The idea of this design comes from social responsibility towards society. Due to irresponsibility of the present security system, which is rested on buzzer system and it can be fluently removable by the theft. The desire to live a better life is adding day by day. The new technologies have surfaced in nearly every field like assiduity, medical, telecommunication, and aviation and now it has also entered in machine. Incremental from their busy any agitated schedule, mortal beings want to guard their vehicle by a click to button on a mobile phone.

II. THEORY AND CALCULATION

The Vehicle Theft Protection system was developed, to stopping vehicle theft. As part of the program, the associations commissioned a public check of grown-ups to determine areas where consumers demanded the most education regarding vehicle theft protection. The on- line check revealed that 67 percent of motorcycle possessors who responded are at a high threat for theft.

Following are the orders of vehicle theft

Theft of an unattended vehicle without a crucial The junking of a situated vehicle moreover by breaking and entry, followed by hotwiring or other tampering styles to start the vehicle, or differently towing. In London, the police say that of the periodic auto thefts are now from high tech OBD (Onboard Diagnostic Port) crucial cloning accoutrements (available online) and bypass immobilizer simulators.

Opportunistic theft the junking of a vehicle that the proprietor or driver has left unattended with the keys visibly present, occasionally footling. Alternately, some buses offered for trade are stolen during a “test drive”. A “test drive” may also give an implicit pincher with sapience into where

the vehicle keys are stored, so that the pincher may return latterly to steal the vehicle.

Carjacking Refers to the taking of a vehicle by force or trouble of force from its proprietor or driver. In utmost places, this is the most serious form of vehicle theft, since assault also occurs and the system of taking over the vehicle is basically a thievery, a more serious form of theft.

Fraudulent theft Illegal accession of a vehicle from a dealer through fraudulent transfer of finances that the dealer will eventually not admit or through the use of a loan attained under false pretenses. Numerous vehicles stolen via fraud are resold snappily later. Using this approach, the pincher can still shirk discovery and continue stealing vehicles in different authorities. Auto reimbursement and Auto dealership companies are also defrauded by auto stealers into renting, dealing, backing, or leasing those buses with fake identification, checks, and credit cards.



Fig. 1: final prototype of our project

III. RESULTS

We’ve taken substantially three objects for our design. All the objects had been fulfilled successfully and therefore we are suitable to design a completely secured system. The designed system is shown in Fig. 3. Following are the issues of our design work First is to make the vehicle vital for which as we turn on the system, we get an arbitrary OTP after entering that OTP our ignition system will get turns on and there's also a communication an TV screen that “ vehicle is ready for

Alternate ideal is to tracing the position of the vehicle. For this we’ve to shoot a command * GPS# via Communication from the registered mobile number. As the designed system get to know this command it’ll shoot the equals of position along with google chart link in reply of command.

Third ideal is to stop the vehicle. For this proprietor have to shoot the command * STOP# via communication from the registered mobile number.

Now there may be similar condition takes place like the purloiner can remove the circuit from the vehicle so for this we had make a close circle system in which if the circle isn't close than also the ignition system won't turn ON.

IV. CONCLUSIONS

In the designed system we can fluently communicate with our vehicle from anywhere with the help of GSM and we can command our vehicle according to our need via communication to avoid robbery of our vehicle. All the being security system is grounded on buzzer and is a single word system that can be fluently removable. In our design OTP is transferred to the proprietor mobile number and the same OTP is used to turn ON the ignition system. The word generated is arbitrary so it can't be stolen by another person. Also the vehicle proprietor can fluently trace the position of vehicle from anywhere with the help of GPS. Eventually we can say that a completely secured system for a vehicle has been designed by us and all the objects taken has been fulfilled successfully.

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