CHITKARA UNIVERSITY

DICE DEPARTMENT OF INTERDISCIPLINARY COURSES IN ENGINEERING

Digital Electronics and Computer Architecture Laboratory

Class Group: 23 Section: B Project Group (PG): 18

Project Abstract

Project Title: Self Driving Car

Project Category:

Microcontroller Based	
Non-Microcontroller Based	
Only Software Based	
Others	

Abstract: Autonomous vehicles have been invented to increase the safety of transportation users. These vehicles can sense their environment and make decisions without any external aid to produce an optimal route to reach a destination. Even though the idea sounds futuristic and if implemented successfully, many current issues related to transportation will be solved, care needs to be taken before implementing the solution. This paper will look at the pros and cons of implementation of autonomous vehicles. The vehicles depend highly on the sensors present on the vehicles and any tampering or manipulation of the data generated and transmitted by these can have disastrous consequences, as human lives are at stake here. Various attacks against the different type of sensors on-board an autonomous vehicle are covered.

Application Area(s) of Project: Fewer People Will Own Cars: ...

- **Brand Loyalties Will Shift From Models to Services: ...**
- **City Layouts Will Change Drastically: ...**

Technology Stack:Autonomous cars rely on sensors, actuators, complex algorithms, machine learning systems, and powerful processors to execute software.Batch Details:

Name of Students	Roll No.	Project Guide (Name and Signature)	Approved By (Signature with Date)
Shreya Gagneja	2310992591	*"(if guidance is taken from M.Tech Faculty, then write his/her name and take signature, otherwise write your lab faculty name)"*	*"(Lab faculty Name and Signature with date)"*
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