#### A Project on

# Design and Implementation of Smart Highway Using Arduino, RFID & GSM Technology

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Department of Electrical & Electronic Engineering UTTARA UNIVERSITY

# Design and Implementation of Smart Highway Using Arduino, RFID & GSM Technology

A thesis report submitted to the department of Electrical and Electronic Engineering, Uttara University for partial fulfillment of the degree of B.Sc in Electrical and Electronic Engineering. Course Code: EEE 400, Course Name: Thesis/Project

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#### **ABSTRACT**

There has been an alarming rise in road accidents, significantly highway accidents, in many countries including Bangladesh over the past few years. Nearly 1.3 million people die in road crashes each year, on average 3287 deaths a day globally. To reduce the number of accidents, it is important, making analysis the causes & behavior of accident and the highway more safer by introducing the latest technology in the communication of road & vehicle.

This paper discusses the present scenarios of highway accident in Bangladesh and figure out some reasons behind the accidents. Real time notification between driver and road is a major issue to discuss and need a smart automatic technique to design this system.

In this paper, vehicle speed notification system for Smart highway as a solution to solve the over speed problem and reducing road accident, are discussed. The number of accidents caused by over speed, can be reduces by giving auto-feedback to the driver about the road status. Also in this paper, discuss About how we can make security system for vehicles and presengers by using GSM technology for highway vehicles, and how to Control highways accident & roads traffic. Intregrating the Arduino, RFID &GSM technology, a prototype device is designed, implemented and tested for highwayin this project.

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