

SOCIAL RELEVANT PROJECT

Some innovative projects presented by CSE and Civil Engg. Department

CSE DEPARTMENT

1. CREDIT CARD FRAUD DETECTION

The Credit Card Fraud Detection Problem includes modeling past credit card transactions with the knowledge of the ones that turned out to be fraud. This model is then used to identify whether a new transaction is fraudulent or not. Our aim here is to detect 100% of the fraudulent transactions while minimizing the incorrect fraud classifications.

1. The data set is highly skewed, consisting of 492 frauds in a total of 284,807 observations. This resulted in only 0.172% fraud cases. This skewed set is justified by the low number of fraudulent transactions.
2. The dataset consists of numerical values from the 28 'Principal Component Analysis (PCA)' transformed features, namely VI to V28. Furthermore, there is no metadata about the original features provided, so pre-analysis or feature study could not be done.
3. The 'Time' and 'Amount' features are not transformed data.
4. There is no missing value in the dataset.

2. WOMEN SECURITY

Women's security is a critical issue in today's world and it's very much needed for every individual to the acting over such an issue. This document describes a GPS and GSM based "women security system" that provides the combination of GPS device as well as provide alerts and messages in an emergency situation. Whenever somebody is in trouble they might not have so much time, all that they have to do is open this application with an internet connection to it and shake the phone to send the messages. Our system provides a realizable, cost effective solution to problem detection.

Now days due to recently happened cases such as rape by drivers or colleagues, burglary etc., women security, especially women security has become the foremost priority of the world. System uses the Global Positioning System (GPS) technology to find out the location of women. The information of women position provided by the device can be viewed on Google maps using Internet or specialized software. The IT companies are looking forward to the security problem and require a system that will efficiently evaluate the problem of women security working in night shifts, traveling alone. We focus on the proposed model that can be used to deal with the problem of security issue of women using GPS and GSM based tracking system.

3. FOOD WASTE CONTROL SYSTEM

This project is used to manage wastage foods in a useful way. Every day the people are wasting lots of foods. So, we must reduce that food wastage problem through online. If anyone has wastage food, they are entering their food quantity details and their address in that application and then the admin maintains the details of food donator.

The donator can create the account and whenever they are having wastage food, they can login and give request to the admin. And the admin also maintains the buyer (orphanage, poor peoples, ...) details too. After the admin view the donator request and give the alert message like time to come and collect the food.

And the admin collects foods from donator through their nearby agent then provide to nearest orphanages or poor people. After receiving the food from the agent by admin and give alert message to that donator. If the donator needs any detail about the orphanage with helping thought, they can give request to the admin and collect the orphanage details.

This project is food redistribution is an enormously successful social innovation that tackles food waste and food poverty. The user's details are maintained confidential because it maintains a separate account for each user.

4. HOME AUTOMATION SYSTEM USING Wi-Fi MODULE

This project presents a design and prototype implementation of new home automation system that uses WiFi technology as a network infrastructure connecting its parts. The proposed system consists of two main components; the first part is the server (web server), which presents system core that manages, controls, and monitors users' home.

Users and system administrator can locally (LAN) or remotely (internet) manage and control system code. Second part is hardware interface module, which provides appropriate interface to sensors and actuator of home automation system.

Unlike most of available home automation system in the market the proposed system is scalable that one server can manage many hardware interface modules as long as it exists on WiFi network coverage. System supports a wide range of home automation devices like power management components, and security components.

The proposed system is better from the scalability and flexibility point of view than the commercially available home automation systems.

5. DOCTOR APPOINTMENT APP

In today's world if someone wants to book a Doctor's Appointment we need to call in clinic or personally go to that place and book the appointment. This consumes precious time of the patient. Also, if the doctor cancels his/her schedule, the patient does not come to know about it unless he/she goes to the clinic. The patient will book the appointment through his/her mobile phone. The doctor will come to know the number of patients he has to attend whole day. The system will save patient's as well as doctor's time. It will save the receptionist's paper work. The system will prove to be useful for doctor as he can check his appointments whenever and from wherever he wants from his mobile phone. The objective of this project is to build a system that will ease the process of booking appointment of the doctor.