

**CATALOGUE OF B.E. PROJECT REPORTS
BATCH 2009 - 2013**

BRANCH - CMPN

ABSTRACTS

LIBRARY AND INFORMATION RESOURCE CENTRE
ST. FRANCIS INSTITUTE OF TECHNOLOGY (ENGG. COLLEGE)
BORIVALI WEST, MUMBAI 400103

Introduction

The Library and Information Resource Centre team is happy to bring out this catalogue listing B. E. Project Reports submitted by the 2009-2013 batch students to the Institute. This document covers abstracts of 27 projects submitted by 2009-13 batch students and are listed in alphabetical order under each year by the project title. Each entry of the project provides the bibliographical details, such as authors, title, page numbers, year of submission, supervisor name, keywords (wherever applicable) and abstracts. Accession Numbers have been provided to enable the user to locate a specific entry in this catalogue.

Hope you will find this document useful. We would be happy to have your comments and suggestions, if any, to improve this catalogue further.

Updated on: 27/03/2014
Library and Information Resource Centre Team

Table of Contents

1. Blog Aggregator by Nimisha Shah, Megha Thomas and Mansi Watve.
2. Blog Mining and Sentiment Analysis by Neha Patel, Hiloni Savadia and Mansi Shah
3. Business Intelligence for BEST through Optimal Route Suggestion Using Key Performance Indicators by Mangesh Bhangare, Aditya Shinde, Ajay Siva Santosh
4. Car Simulation using hand gestures as input by Vivek Varshney, Nitinkumar Pandey, Elizabeth Barcey
5. Cloud Computing for smart phones by Chirag Chauhan, Sanah Moidutty, Pankaj Pandey
6. Compression System for mobile phones by Abhiyash Jain, Rohit Mayya, Vaibhav Wayabase
7. Dynamic Weather Theme For Android Phone by Parth Patel, Fabian Fernandes, Eric Fernandes
8. E-Learning Podcast by Brian D,souza, Nixon Raphy and Isha Shah
9. Face Detection And Tracking In Real Time For Using Face As Mouse by Varun Hegde, Brian Moniz and Tobin Pereira
10. Face Mouse using motion detection by Kaustubh Rane and Siddhartha Shashidharam
11. GPS Tracker by Anurag Yadav, Fabian Fernandes and Rohit Pandita
12. Green Town Mayor by Nathan D'lima, Jaison Joseph and Anirudh Prabhu
13. Intrusion Detection System by Lydell D'cunha, Manali Gonsalves and Willison Lopes
14. Location Based Profile Manager by Pratik Kasat, Janjo Jose and Tushar Sukhiga
15. Location Based Local Bus Route Information Provider by Manan Lalji, Winall Lopes and Akshay Raje
16. Location Sharing in GPS using Public Key Cryptography by Resha D'souza, Akshay Khot and Gaurav Tendolkar
17. Mechanized Waiter by Tejal F. Carwalo, Silviya P. Dodti, Monica Gomes
18. Medical Decision Support System by Trevor Lewis, Dominic D,souza and Prashanth Tellis
19. My Nutritional Guide by Donita Almeida, Sanika D'cruz and Melinda Gomes
20. Remote Assistance for Desktop using Bluetooth by Ken Fernandes, Neil Gonsalves and Saakshi Malhotra
21. Secure business transactions using encryption and decryption by Nulufer D'mello, Rini Palamittam and Prajakta Pereira
22. Security enhancement using motion detection by Blossom Lopes, Stephina Machado and Cynthia Tuscano
23. Share Room by Deeksha Shetty and Shweta Shetty
24. Speech Recognition by Prateek Nikhare, Vidhi Parikh and Viral Parikh
25. Smart Browser by Kunal Barde, Mayank Bhanderi, Rohan More and Jinali Sheth
26. Stock Market Prediction by Jerry Dabre, Aldrin Rodrigues and Pranjali Rodrigues
27. Television Control Using Hand Gestures by Manan Shah, Zil Shah and Siddhesh Popat

1. Title: **BLOG AGGREGATOR**

Author: Nimisha Shah 63
 Megha Thomas 75
 Mansi Watve 78

Project guide: Ms. Snehal Kulkarni

Keywords:

Abstract: With growing online presence with respect to blogging which is a great way of sharing and gaining knowledge, we understand a need to collect a group of blogs under a single application. Objective and scope of the project: The goal of the project is to develop a web application which would collect posts from different blog URLs and display under some screen. This collection of blogs or posts would enable a group of students, teachers and professionals to share and read blog knowledge in a more organized manner. Methodology: Application would ask blog URLs of all the users / group of people who are interested to get their respective blogs under one umbrella. There would be one admin module to control/manage bloggers. Admin would be responsible for aggregating various blogs. A XML parser would be designed to read and aggregate different blogs. Technology: The above project is implemented through 'Ruby on Rails' open source technology.

Acc. No. PR 890 / CMPN 246

2. Title: **BLOG MINING AND SENTIMENT ANALYSIS**

Author: Neha Patel 50
 Hiloni Savadia 59
 Mansi Shah 62

Project guide: Mr. Rajkumar Shende

Keywords:

Abstract: The development of social media, internet, services and blogs has provided a medium to users to share their views and ideas about products and services. Hence web blogs have become an important source of information and rich area for investigation for opinion mining. Web blogs are full of un-indexed and unprocessed text that reflects the opinions people. Many people make their choices by taking suggestions of other people into Account. In this study, we propose a blog mining system that will extract comments from web blogs and that will show users what others think about that product or service.

Acc. No. PR 892 / CMPN 248

3. Title: **Business Intelligence for BEST through Optimal Route Suggestion Using Key Performance Indicators**

Author: Mangesh Bhangare 02
 Aditya Shinde 68
 Ajay Siva Santosh 71

Project guide: Ms. Bidisha Roy & Mr. M.B Nikam

Keywords:

Abstract: Currently city all around world have their own public transport system. They collect large amount of information but does not use it, this must be address for growth of any city. In our home city of Mumbai public transport in city of Mumbai and it suburbs is manage by BEST (Brihan Mumbai Electric Supply & Transport Undertaking own by Greater CityCouncil of Mumbai. Our aim is to provide them a solution to optimize their overall

resource by providing useful information to them by application of data mining on their Data. As BEST generate a large amount of raw data by its operation in city. Our main aim is overall optimization of all routes in city and its suburbs. We are considering a set of key performance indicators to be used to give route suggestions such as number of buses that should operate on that particular route at different times of day, any new suggestion of bus routes considering number of passengers. In that area and presence of any existing bus route in same area. Set of key performance indicators to be used are bus type, average bus, KMs run, Vehicle utilization per KM, Pass Carried on route, Earnings, Fixed cost, Variable cost Collected monthly. From all these parameters more optimized route suggestions as part of Business Intelligence can be given to the BEST for long-term sustainability and to provide better service to people of the city of Mumbai.

Acc. No. PR 878 / CMPN 234

4. Title: **CAR SIMULATION USING HAND GESTURES AS INPUT**

Author: Vivek Varshney 77
Nitinkumar Pandey 45
Elizabeth Barcey 02

Project guide: Mrs. Dakshata Panchal

Keywords:

Abstract: We envision to add more natural and humanly ways to interact with edutainment and computer gaming applications in general. This requires mixed-reality setups and ever-higher levels of immersive human-computer interaction. Here, we focus on the automatic recognition of natural human hand gestures recorded by a stationary camera. To study the feasibility of our approach, we chose a car simulation with 3-D graphics that employs camera-detected infrared 3D depth and hand gestures as its sole game controls. Our implementation prototype is based on Unity3D game engine for the graphics display and Microsoft Kinect for hand gesture recognition. We aim to show very promising results in practice regarding game appeal, player satisfaction, extensibility, ease of such I/O interaction, and – last but not least – sufficient accuracy of the real-time gesture recognition to allow for smooth game control. An initial qualitative performance evaluation confirms these notions and provides further support for our setup.

Acc. No. PR 875 / CMPN 231

5. Title: **CLOUD COMPUTING FOR SMARTPHONES**

Author: Chirag Chauhan 07
Sanah Moidutty 39
Pankaj Pandey 46

Project guide: Mr. Rajkumar Shende

Keywords:

Abstract: The number of smart phone users and mobile application offerings are growing rapidly. A smart phone is expected to offer pc-like functionality, but there are limitations of processing power, memory and battery life of current smart phones. So to avoid the limitations, we are developing Virtual Smartphone over IP system that allows users to create virtual Smartphone images in the cloud. Users can easily and freely tap into the power of the data center by installing the desired mobile applications remotely in one of these images. Because the mobile applications are controlled remotely, they are not constrained by the limit of processing power, memory and battery life of a physical smart phone.

Acc. No. PR 888 / CMPN 244

6. Title: **COMPRESSION SYSTEM FOR MOBILE PHONES**

Author: Abhiyash Jain 27
 Rohit Mayya 38
 Vaibhav Wayabase 79

Project guide: Mr. Rajkumar Shende

Keywords:

Abstract: Data compression involves encoding information using fewer bits than the original representation. Compression can be either is lossy or lossless. Lossless compression reduces bits by identifying and eliminating statistical redundancy. No information is lost in lossless compression. Lossy compression reduces bits by identifying marginally important information and removing it. The process of reducing the size of a data file is popularly referred to as data compression, although it's formal name is source coding (coding done at the source of the data, before it is stored or transmitted). When you have a file containing text, there can be repetitive words or combination of words that use up space unproductively or there can be images whose data information occupies to much space. Compression is useful here because it helps reduce resources usage, such as data storage space or transmission capacity.

Acc. No. PR 883 / CMPN 239

7. Title: **Dynamic Weather Theme For Android Phone**

Author: Parth Patel (51)
 Fabian Fernandes (19)
 Eric Fernandes (18)

Project guide: Mrs. Kavita Sonawane

Keywords:

Abstract: "Dynamic Weather Theme For Android Phone" is a type of application that works on a mobile device using the Android operating system. The application works as a wallpaper – providing the background image for the home screen—but also works as a conventional application since it can provide user-interaction with the touch screen (allowing the image to change dynamically, for example) and access other hardware and software features within the device (accelerometer, GPS, network access, etc.). What is it? Customizing, Personalizing and Branding home screen elements on mobile devices. Live Wallpapers, Widgets, and Themes etc... Opportunity Offers Brands, Advertisers and Marketers a new to increase their brand awareness and increase mobile impressions. Just Because You Can..... Doesn't mean you should. Understand the space before jumping in. Learn More When it comes to bringing your application to life, who you partner with can make all the difference. How to Increase Mobile Impressions Through Personalization on Android.

Acc. No. PR 868 / CMPN 224

8. Title: **E-Learning Podcast**

Author: BRIAN D'SOUZA 092007
 ISHA SHAH 092014
 NIXON RAPHY 092039

Project guide: PROF. SUMITHA HARIDAS

Keywords:

Abstract: With on-set of online training tutorials, training can begin anytime and anywhere without the hassle of attending a traditional classroom environment that entails travelling to an offsite location and following someone else's schedule. Our project, E-learning Podcast, came about from the need of a secure Media Player on Android Operating system. The basic idea of this project is to make an audio-video player on Android Operating System to meet

the customized needs of the company, which delivers such Lecture Series at affordable costs. Android Applications such as You Tube, Rock-Lite player provide us with media options, however they have some limitation like support for various format and play-list etc.,. These players even lack security, and make all the videos distributive over the internet which endangers the proprietary rights of some videos or Lecture Series. We look forward to provide security as our prime concern in developing our Audio-Video Player. This player will be based on the SOAP web service. The E - learning podcast will be implementing authentication module to authenticate its users for downloading new videos, subscription module for making payments possible via Google Wallet, It will support 3 types of network connection, namely EDGE, Wi-Fi, 3G.

Acc. No. PR 867 / CMPN 223

9. Title: Face Detection And Tracking In Real Time For Using Face As Mouse

Author: Varun Hegde (33)

Brian Moniz (43)

Tobin Pereira (52)

Project guide: Mr Shamsuddin S. Khan

Keywords:

Abstract: Face detection has always been a vast research field in the computer vision world, considering that it is the backbone of any application that deals with the human face. Researchers did not spare any effort or imagination in inventing and evolving methods to localize, extract, and verify faces in images. This project aims to present an application that is capable of replacing the traditional mouse with the human face as a new way to interact with the computer. Facial features (nose tip and eyes) are detected and tracked in real-time to use their actions as mouse events. The coordinates and movement of the nose tip in the live video feed are translated to become the coordinates and movement of the mouse pointer on the user's screen. The left/right eye blinks fire left/right mouse click events. The only external device that the user needs is a webcam that feeds the program with the video stream.

Acc. No. PR 871 / CMPN 227

10. Title: FACE MOUSE USING MOTION DETECTION

Author: RANE KAUSTUBHCHANDRAKANT 56

SIDDHARTHA SHASHIDHARAN 70

Project guide: PROF. SHAMSUDDIN.S.KHAN

Keywords:

Abstract: We present a simple prototype system for real time tracking of a human face. This system uses a simple yet a effective Face tracking algorithm. The general requirements of a real time tracking algorithm – it should be computationally inexpensive, should possess the ability to perform in different environments and should be able to start and initialize itself with minimum knowledge about the environment, are well addressed by the elliptical head tracking algorithm. The objective of this project is to create an alternative user interface uniquely using real time video of the user's face captured using an off-the-shelf web-camera. The position of the head is tracked and converted into two-dimensional coordinates on a computer screen; additionally, it is intended to enable the recognition of a deliberate blink in order that this could be considered as a command from a user.

Acc. No. PR 884 / CMPN 240

11. Title: **GPS Tracker**

Author: Anurag Yadav 22
 Fabian Fernandes 86
 Rohit Pandita 89

Project guide: Mrs. Snehal Kulkarni

Keywords:

Abstract: Though tracking using GPS (Global Position System) has been around for a while, it is only now that certain system is becoming available to the general public. GPS tracking is the ultimate fleet management tool. We can find some GPS system, for instances: “Simple position logging system” and “real time tracking system”. A tracking system uses GPS to automatically track and record fleets field activities. Activity is recorded by modules attached to each device, and moment is tracked wireless nationwide. Radio and cell phone are indispensable, but neither can offer companies the benefit of the GPS or radio vehicle tracking .The ability to know at any moment exactly where your companies device are!

Acc. No. PR 887 / CMPN 244

12. Title: **Green Town Mayor**

Author: Nathan D’Lima 12
 Jaison Joseph 37
 Anirudh Prabhu 54

Project guide: Mr. Shamsuddin S. Khan

Keywords:

Abstract: Environmental degradation is the plague that is affecting the world today. Eco Management and enhancement has never been more critical. Efforts are being made by Governments, Social groups and Environment conscious people to sensitize the average individual about the impending disaster of Environmental degradation. Real world problems are often felt to be somebody else’s problems. By transferring the real world problems to the virtual world the player experiences the gravity of the situation first hand, as he/she is forced to solve the problems of environmental degradation faced by his/her virtual town. This game, through the concept of infotainment aspires to help average individuals of all age groups to understand the importance of environment protection and enhancement and learn to lead an ecofriendly life. While the game is simple to play, the learning process is facilitated because all the available solutions to protect the Environment will be researched and implemented in the game. Players and spectators will subconsciously learn various methods to protect the environment. A Green-o-meter will keep track of how green and efficient the player manages the household.The main aim of the game is to imbibe environmental values in the player so that he or she can apply these same values to everyday life.

Acc. No. PR 891 / CMPN 247

13. Title: **INTRUSION DETECTION SYSTEM**

Author: MANALI GONSALVES 092022
 LYDELL DCUNHA 092014
 WILISON LOPES 092033

Project guide: PROF. Varsha Nagpurkar

Keywords:

Abstract: Intrusion Detection System is a system in which malicious activity performed by any user or program is logged and can be viewed later by the admin. In order to implement the same, a website will be developed as a part of the project, such that different users have different levels of security. Any user trying to break any of the security rules will be logged into the system into honeypots.The project is a base project for developing a honeypot related

subsystem. The honeypot will be major aspect of the project. The user is unaware of this logging of activities. As a part of the project, a web site will be developed where users can buy or sell different things. Different users will have different levels of access to the system. The project will focus on the security of the system. The implementation of the project is particularly useful in today's world where security is of primary concern. The project explains exactly the implementation of honeypot related system for a website. As the admin is able to get the information of work being done by any user, he can actively track if any malicious activity is being performed which an automated system might have skipped. The admin can hence find out new ways how an attacker can possibly break into the system and can then fix the loop hole in the system if found. This is particularly useful considering the increasing number of security threats on the web.

Acc. No. PR 886 / CMPN 242

14. Title: Location Based Profile Manager

Author: Pratik Kasat 28
 Janjo Jose 30
 Tushar Sukhiya 72

Project guide: Ms. Bidisha Roy

Keywords:

Abstract: With the paradigm shift of applications from desktop to hand held devices, the number of operating systems or platforms emerging, are enormous. LOCATION BASED PROFILE MANAGER is the application that uses GPS to find the locations and assign a profile. Using GPS, the application keeps track and changes your profile when you enter or exit the saved locations eg. Suppose a person visits a mall and he changes his profile to silent, his activity and location will be tracked and when again he visits same mall his phone will automatically be turned to silent mode. This application can be of great use when a user wants to ensure his phone is always in Silent/vibrate mode at work place. Or when user forgets to change the profile while moving between places. It can also be helpful while user is at home and don't carry the phone along, hence the profile must be audible enough.

Acc. No. PR 897 / CMPN 235

15. Title: LOCATION BASED LOCAL BUS ROUTE INFORMATION PROVIDER

Author: MANAN LALAJI 36
 WINALL LOPES 33
 AKSHAY RAJE 55

Project guide: PROF. SHAMSUDDIN KHAN

Keywords:

Abstract: BEST Bus Services, along with the Local Suburban Train Services, is the largest mode of transport in Mumbai. However, BEST does not have a system using which the commuters can know information like the buses plying to a bus stop, The destinations that a particular bus goes to and other useful information like travel time, fare, distance etc. LOCATION BASED LOCAL BUS ROUTE INFORMATION PROVIDER recognizes the bus stop the user is at and provides him the list of buses he can board from that bus stop. User can also input a destination from a list of destinations and see the buses that take him to the destination from the automatically selected source. The application can provide the user useful information like buses plying to the bus stop, different destinations the user can reach by boarding bus from that stop, time required to travel between two stops and fares to respective destinations. Once the user reaches the bus stop the application recognizes the bus stop and provides the information about the bus stop instantly. We have used AGPS as the approach idea for location tracking. The platform used for development is Android Operating

System, as described is been proven as the best operating system for a context-aware.

Acc. No. PR 889 / CMPN 245

16. Title: **Location Sharing in GPS using Public Key Cryptography**

Author: Gaurav A. Tendolkar (13)
Resha L. D'souza (25)
Akshay U. Khot (35)

Project guide: Dakshata Panchal

Keywords:

Abstract: Location sharing services are becoming increasingly popular. Although many Location sharing services allow users to set up privacy policies to control who can access their location, the use made by service providers remains a source of concern. Ideally, location sharing providers and middleware should not be able to access users' location data without their consent. Our aim is to propose a new location sharing protocol called Longitude that eases privacy concerns by making it possible to share a user's location data blindly and allowing the user to control who can access her location, when and to what degree of precision. The underlying cryptographic algorithms are designed for GPS-enabled mobile phones. We describe and evaluate our implementation for the Android mobile phone.

Acc. No. PR 885 / CMPN 241

17. Title: **MECHANIZED WAITER**

Author: Tejal F. Carwalo 06
Silviya P. Dodti 14
Monica Gomes 21

Project guide: G. Anuradha

Keywords:

Abstract: We all are aware about the waiting time in hotels and restaurants especially on a week end. The reason behind being the exhaustive time taken by the waiters in taking the orders, placing orders and delivery of eatables. This gave us an insight about the improved of such a manual system. When we keep browsing or playing with our mobiles during that waiting period, why can't we use technology to make orders. This was the ignition behind the proposed project. The system aims at replacing the existing manual system which is time consuming by making use of the mobile phones with the help of Bluetooth technology and named as "Mechanized waiter". Bluetooth is an open wireless protocol for exchanging data over short distances from fixed and mobile devices, creating personal area network (PANs). It was originally conceived as a wireless alternative to RS232 data cables. It can connect several devices, overcoming problems of synchronization. In "Mechanized Waiter" the customer will first place the order to the waiter. Waiter has to send the order to the respective counters via his mobile using the Bluetooth technology. For the Bluetooth enabled devices the communication range is 10 meter. If the distance is more than 10 m, signal will be received on the nearest Bluetooth device and from there it will be send to the respective counter. Invariably since the range of restaurants is less than or equal to 10 M, blue tooth should be the most viable option. Now counter will send response signal to the respective waiter about the order. The system will also display an approximate waiting time before the customers are seated in a dining table.. The proposed system is much faster than the existing system and beneficial.

Acc. No. PR 874 / CMPN 230

18. Title: **MEDICAL DECISION SUPPORT SYSTEM**

Author: Trevor Lewis (17)
Dominic D'Souza (24)
Prashanth J. Tellis (66)

Project guide: Ms. G. Anuradha

Keywords:

Abstract: A large amount of data gets collected in hospitals, pathology labs etc. This data is used only for operational purposes and its potential for providing vital insights into the trends and prevailing conditions remains largely unutilized. Also, its usage for classifying tumors etc. remains largely unexplored. The advantage for mining this information can prove very beneficial for an institution like a hospital, clinic, pathology lab etc. This work presents a methodology building a system for a medical institution customized for its needs and designed as per its features to help physicians gain qualitative knowledge from accumulated data and expert knowledge. The proposed system aims to classify a tumor as benign or malignant using Hybrid Inference Systems which combine Incremental Learning Fuzzy Neural Networks and Fuzzy Expert Systems to get the advantage of accuracy as well as understandability. The system will have input as Wisconsin Breast Cancer Data and will provide analysis of data using the concepts of neural networks, fuzzy expert systems and genetic algorithms, for clustering, rule generation and optimization respectively. The system comprises five main modules: an Incremental Learning Fuzzy Neural Network to cluster and classify the data, a Fuzzy Expert System to generate linguistic rules, an ILFN2Rule module to map neural network parameters to human understandable linguistic rules, a Rule2ILFN module to incorporate new expert knowledge into the system and a Decision Explanation Module to classify the data and explain the decision.

Acc. No. PR 880 / CMPN 236

19. Title: **MY NUTRITIONAL GUIDE**

Author: Donita Almeida 01
Sanika D'Cruz 10
Melinda Gomes 22

Project guide: Ms. Dakshata Panchal

Keywords:

Abstract: A healthy and balanced diet is important for normal growth and development. A healthy diet needs to supply the nutrients your body needs for maintenance, growth, immunity and repair. It supplies energy that drives these systems without overburdening your body, and requires eating a wide variety of foods from each food group. We should avoid relying on dietary supplements and other artificial nutrient sources, because our body uses nutrients in food more effectively. While maintaining a healthy diet is of utmost importance, off late the rise in obesity makes it a greater concern. Presently, one in 6 women and one in 5 men are overweight in India. Indeed, there is a dire need to trim these obesity figures which are bulging dangerously at a staggering 70 million in India. Motivated by these facts we set out to make „My Nutritional Guide“ which is the perfect companion towards building a healthier lifestyle. This application strives at generating the optimal diet plan for an individual keeping in mind their disorders. A humble effort to make a change in the rising obesity, this application strives to be the ideal aid for all those in search for a healthier lifestyle.

Acc. No. PR 876 / CMPN 232

20. Title: **REMOTE ASSISTANCE FOR DESKTOP USING BLUETOOTH**

Author: Ken Fernandes 21
Neil Gonsalves 25
Saakshi Malhotra 35

Project guide: Ms. Safa Hamdare

Keywords:

Abstract: The project 'Remote assistance for desktop using Bluetooth' employs two affordable and easily available technologies, Java and Bluetooth wireless technology. It requires a mobile phone that is Java enabled having a Bluetooth connection and a desktop computer with Java software installed in it accompanied by a Bluetooth connection. In case of no Bluetooth connection one can use a Bluetooth dongle. It is based on the Client-Server Protocol. The mobile phone acts as the client side and the desktop computer will act as the server side. The client sends a request to the server to connect to it. The server will acknowledge the sent request and then the devices are connected. The application is made in J2ME since it has a Bluetooth API. The end application is such that a user will be able to control his desktop from a mobile phone connected by this application. The basic functionalities of a mouse are all being implemented. The application does not need any expensive purchases as both a java enabled mobile phone and basic computer are quite affordable today. Even the Bluetooth dongle is not expensive. Thus the project is very economical to use even at an industry level as it will help in scaling down company costs.

Acc. No. PR 881 / CMPN 237

21. Title: **SECURE BUSINESS TRANSACTIONS USING ENCRYPTION AND DECRYPTION**

Author: Nulufer D'mello 13
Rini Palamittam 44
Prajakta Pereira 52

Project guide: Ms. Varsha Nagpurkar

Keywords:

Abstract: Information is a very important aspect of every business organization. The very existence of various businesses can be attributed to the information that the organization is dealing with. Therefore, information is a very crucial element for the successful running of any business in today's world. Information and data can be of a very sensitive nature. Unauthorized access to this kind of data can interfere with the confidentiality of data. Once the access to such data has been gained, the data can be corrupted or manipulated with which will result in loss of integrity. Many times, important personal information transmitted over the internet can be accessed and used by attackers for personal benefit or to cause harm to the sender or the receiver. The primary focus of our project is to enable secure business transaction over the internet using various encryption techniques. In our project, we enable a clients seeking services to throw open his tender on our website. The interested contractors can thereafter send their quotations to the respective client after which the client will respond back to the contractor. Our project aims at protecting the data being exchanged between the clients and the contractors by implementing data encryption methods and data hiding.

Acc. No. PR 893 / CMPN 249

22. Title: **SECURITY ENHANCEMENT USING MOTION DETECTION**

Author: Blossom Lopes 31
Stephina Machado 34
Cynthia Tuscano 76

Project guide: Ms. Pradnya Rane

Keywords:

Abstract: The basic idea behind this project is to stop the intruder to getting into the shop once the shop has been closed. Motion can be detected by measuring change in speed or vector of an object in the field of view. This can be achieved either by mechanical devices that physically interact with the field or by electronic devices that quantifies and measures in the given environment. When motion detection is accomplished by natural organisms, it is called motion perception. The web camera motion detector is fantastic home/office based security device which can be used at other such small places where security is a matter of concern. The project is based on advanced security system through software which includes hardware such as webcam, cell phone and alarm to detect motion.

Acc. No. PR 872 / CMPN 228

23. Title: Share-Room

Authors: Deeksha Shetty 66

Shweta Shetty 67

Project Guide: Mr. R.K. Shende

Abstract: The vast majority of file sharing systems use a dedicated file server for storage and access. This architecture includes a file server which provides the necessary files (documents, images, video files etc.) to the clients (other systems connected to it on the network.). But when it comes to accessing the files, there are a few problems faced in such systems that may lead to irreparable failures. Too many requests from the clients may lead to congestion. Client-Server architecture is not as robust and if the server fails, the whole network goes down. Maintenance of the server is another issue. Hence to provide a support to the file server system we introduce a GUI based application for transfer of files as well as folders on client request over a LAN.

We introduce a desktop application in order to lessen the overhead on the file servers in the existing file sharing and access system. And to provide a support for such systems by existing simultaneously on the terminals with the traditional file sharing and access system.

ShareRoom is a user end application used for communication on existing LAN infrastructure which is designed to run on minimal user end resources. The project is targeted to reduce the load on file servers in any organization by providing a server less connection for file transfer. This can also be used for simple message transfer throughout the LAN in text format. It is a pop up style LAN Messenger and uses TCP/IP (UDP) and is user friendly and a lightweight application. Best utilization of resources and load balancing are its major features. The software is designed in Java and Java Swing supported by Windows XP and higher.

Acc. No. PR 869 / CMPN 225

24. Title: Speech Recognition

Author: Prateek Nikhare 42

Vidhi Parikh 48

Viral Parikh 49

Project Guide: Ms. Pradnya Rane

Abstract: Speech Recognition is the ability of a computer to recognize general, naturally flowing utterances from a wide variety of users. Speech Recognition allows you to provide input to an application with your voice. Speech recognition, or speech-to-text, involves capturing and digitizing the sound waves, converting them to basic language units or phonemes, constructing words from phonemes, and contextually analysing the words to ensure correct spelling for words that sound alike.

It is helpful for all computer users but mainly it allows physically Challenged people to work independently. Text to speech conversion is mainly helpful for people suffering from

dyslexia i.e. having reading disability. In order to recognize voice correctly person will have to speak word or sentence twice. For the first time word or sentence gets stored in database and then for the second time if that particular word or sentence is spoken, then it scans database and recognizes word correctly. It can also perform action on the basis of given command. This Application can also be synchronized with Mailing System, example: Gmail.

Acc. No. PR 870 CMPN 226

25. Title: Smart Browser

Author: Kunal Barde 3

Mayank Bhanderi 4

Rohan More 41

Jinali Sheth 68

Project Guide: Ms. Bidisha Roy

Abstract: The mobile phones are increasingly used to access different kind of information other than just to make voice calls. However, browsing large web pages which is not adapted for small-screen viewing is still very inconvenient. Web browsers are emerging which try to solve the interaction problems that occur when small-screen devices are used to access web pages designed for large screen viewing. This paper presents the results of the usability study in which users' mobile web browsing experience was evaluated in comparison to desktop Web browsing. The results indicate the users' performance was poor on mobile browser as users expected similar experience as on desktop; however for some users familiarity of web on desktop helped instead to navigate easily on mobile browser. The main problem participants had was difficulty of locating the content in long narrow page, which in turn caused extensive scrolling. This research suggests some improvement for mobile web browser and important consideration in designing mobile friendly websites that could help limit a lot of scrolling and increase the readability.

Acc. No. PR 877 CMPN 233

26. Title: STOCK MARKET PREDICTION

Author: Jerry Dabre 09

Aldrin Rodrigues 57

Pranjali Rodrigues 58

Project guide: Mrs. G. Anuradha

Keywords:

Abstract: Stock markets are complex. Their dramatic movements, unexpected booms and crashes, dull all traditional tools of prediction. Stock price prediction is a problem that requires online adaptive systems with high accuracy performance. The major concern of the study is to develop a system that can predict future prices in the stock markets by taking samples of past prices. The main purpose of forecasting in financial markets is to estimate future trends and to reduce risks of decision making. The model elicits, from historical data price, some of the rules which govern the market, and shows that rules which are drawn from a particular stock are to some extent independent of that stock, and can be generalized and applied to other stocks regardless of specific time or industrial field. Our system imports historical stock data of specific companies from the yahoo finance website. The data consisting of the volume and the closing price is stored in a database. This database is used in formulating the cluster centers of the input data. The membership values pertaining to these cluster centers are calculated. Finally the prediction system predicts the future values using the adaptive neuro-fuzzy inference system.

Acc. No. PR 873 / CMPN 229

27. Title: Television Control Using Hand Gestures

Author: Manan Shah (58)
Zil Shah (61)
Siddhesh Popat (63)

Project guide: Ms. Safa Hamdare

Keywords:

Abstract: We study how a viewer can control a television set remotely by hand gestures. We address two fundamental issues of gesture based human computer interaction. How can one communicate a rich set of commands without extensive user training and memorization of gestures and how can the computer recognize the commands in a complicated visual environment? Our solution to these problems exploits the visual feedback of the television display. The user uses only one gesture: the open hand, facing the camera. He controls the television by moving his hand. On the display, a hand icon appears which follows the user's hand. The user can then move his own hand, to adjust various graphical controls with the hand icon. The open hand presents a characteristic image which the computer can detect and track. We perform a normalized correlation of a template hand to the image to analyze the user's hand. A local orientation representation is used to achieve some robustness to lighting variations. This system uses a computer, a web camera, a micro-controller, relay driver, a television and a remote control. The graphical overlays appear on the computer screen, although they could be mixed with the video to appear on the television. The computer controls the television set through serial port commands to an electronically controlled remote control.

Acc. No. PR 882 / CMPN 238

Project Guide Index:

Name of the Project Guide	Serial Number
Bidisha Roy	3, 14, 25
Dakshata Panchal	4, 16, 19
G. Anuradha	17, 18, 23
Kavita Sonavane	7
Pradnya Rane	22, 24
Rajkumar Shende	2, 5, 6, 23
Safa Hamdare	20, 24
Shamsuddin Khan	9, 10, 12, 15
Snehal Kulkarni	1, 11
Sumitha Haridas	8
Varsha Nagpurkar	13, 21