

MES COLLEGE OF ENGINEERING, KUTTIPPURAM
DEPARTMENT OF COMPUTER APPLICATIONS
20MCA245 – MINI PROJECT

PRO FORMA FOR THE APPROVAL OF THE THIRD SEMESTER MINI PROJECT

(Note: All entries of the pro forma for approval should be filled up with appropriate and complete information. Incomplete Pro forma of approval in any respect will be rejected.)

Mini Project Proposal No : 1
(Filled by the Department)

Academic Year : 2020-2022
Year of Admission : 2020

1. Title of the Project : MY Privacy MY Decision
2. Name of the Guide : Mr. Balachandran K P
3. Number of the Student: UMMU HABEEBA T
4. Student Details (in BLOCK LETTERS)
5. Name Roll Number Signature

1. UMMU HABEEBA MES20MCA-2058 

Date: 15/04/22

Approval Status : Approved / Not Approved

Signature of
Committee Members

Comments of The Mini Project Guide

Dated Signature

Initial Submission : _____

First Review : _____

Second Review : _____

Comments of The Project Coordinator

Dated Signature

Initial Submission: _____

First Review _____

Second Review _____

Final Comments :

Dated Signature of HOD

My Privacy My Decision: Control of PhotoSharing on Online Social Networks

UMMU HABEEBA T

INTRODUCTION

Photo sharing is an attractive feature which popularizes Online Social Networks (OSNs). Unfortunately, it may leak users' privacy if they are allowed to post, comment, and tag a photo freely. We attempt to address this issue and study the scenario when a user shares a photo containing individuals other than himself/herself (termed co-photo for short). To prevent possible privacy leakage of a photo, we design a mechanism to enable each individual in a photo be aware of the posting activity and participate in the decision making on the photo posting. For this purpose, we need an efficient facial recognition (FR) system that can recognize everyone in the photo. However, more demanding privacy setting may limit the number of the photos publicly available to train the FR system. To deal with this dilemma, our mechanism attempts to utilize users' private photos to design a personalized FR system specifically trained to differentiate possible photo co-owners without leaking their privacy. We also develop a distributed consensus method to reduce the computational complexity and protect the private training set. We show that our system is superior to other possible approaches in terms of recognition ratio and efficiency. Our mechanism is implemented as a proof of concept Android application on social app. The power-law distribution is caused by the preferential attach process, in which the probability of a user A connecting to a user B is proportional to the number of B's existing connections.

OBJECTIVES

A survey was conducted in to study the effectiveness of the existing countermeasure of un-tagging and shows that this countermeasure is far from satisfactory users are worrying about offending their friends when un-tagging. As a result, they provide a tool to enable users to restrict others from seeing their photos when posted as a complementary strategy to protect privacy. However, this method will introduce a large number of manual tasks for end users.

PROBLEM DEFINITION

Users care about privacy are unlikely to put photos online. Perhaps it is exactly those people who really want to have a photo privacy protection scheme. To break this dilemma, we propose a privacy-preserving distributed collaborative training system as our FR engine. In our system, we ask each of our users to establish a private photo set of their own. We use these private photos to build personal FR engines based on the specific social context and promise that during FR training, only the discriminating rules are revealed but nothing else. With the training data (private photo sets) distributed among users, this problem could be formulated as a typical secure multiparty computation problem. Intuitively, we may apply cryptography technique to protect the private photos, but the computational and communication cost may pose a serious problem for a large OSN.

To break this dilemma, we propose a privacy-preserving distributed collaborative training system as our FR engine. In our system, we ask each of our users to establish a private photo set of their own. We use these private photos to build personal FR engines based on the specific social context and promise that during FR training, only the discriminating rules are revealed but nothing else. We propose to use multiple personal FR engines to work collaboratively to improve the recognition ratio. Specifically, they use the social context to select the suitable FR engines that contain the identity of the queried face image with high probability. This data isolation property is the essence of our secure collaborative learning model and the detailed security analysis.

BASIC FUNCTIONALITIES

Modules Description:

Functions Of Users

1. View users
2. View Complaints
3. View Reviews







Functions of user

- ✦ Registration
- ✦ Login
- ✦ View profile
- ✦ Edit Profile
- ✦ Search for friends
- ✦ Sent friend request
- ✦ View friend request and confirm
- ✦ Sent post
 - Includes face recognition
 - Face Classifier algorithm
 - Masking Filling face portions
 - Sent notification to those persons who are in the post
- ✦ View notification from system and approve/reject post
- ✦ Set privacy settings

SOFTWARE REQUIREMENT SPECIFICATION

Hardware Specifications

The selection of hardware is very important in the existence and proper working of any software. Then selection hardware, the size and capacity requirements are also important.

 Processor	:	Intel Pentium Core i3 and above
 Primary Memory	:	4GB RAM and above
 Storage	:	320 GB hard disk and above
 Display	:	VGA Color Monitor
 Key Board	:	Windows compatible
 Mouse	:	Windows compatible

Software Specifications

One of the most difficult task is selecting software for the system, once the system requirements is found out then we have to determine whether a particular software package fits for those system requirements. The application requirement:

Front end	:	python
Back end	:	MySQL
Operating system	:	windows 7 or above
IDE	:	Pycharm

ANDROID

Hardware Requirements

A mobile phone with **Android** operating system

Version: Android 2.2 or above

RAM : 1GB

Software Requirements:

Platform - WINDOWS/ANDROID/LINUX

Front End - Java, XML (Android Development Tool)

IDE - Android Studio or Eclipse

PRO FORMA FOR THE APPROVAL OF THE THIRD SEMESTER MINI PROJECT

(Note: All entries of the pro forma for approval should be filled up with appropriate and complete information. Incomplete Pro forma of approval in any respect will be rejected.)

Mini Project Proposal No : <u>2</u> (Filled by the Department)

Academic Year	:	<u>2020-2022</u>
Year of Admission	:	<u>2020</u>

1. Title of the Project : E-Baby Cradle

2. Name of the Guide : Mr.Balachandran KP

3. Number of the Student:

UMMU HABEEBA T

4. Student Details (in BLOCK LETTERS)

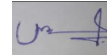
5. Name

Roll Number

Signature

1. UMMU HABEEBA

MES20MCA-2058



Date:15/04/22

Approval Status : Approved / Not Approved__

Signature of
Committee Members

Comments of The Mini Project Guide

Dated Signature

Initial Submission :

First Review :

Second Review :

Comments of The Project Coordinator

Dated Signature

Initial Submission:

First Review

Second Review

Final Comments :

Dated Signature of HOD

Automatic E-Baby Cradle Swing based on Baby Cry

UMMU HABEEBA T

INTRODUCTION

Parents in the present world are busy in their professional life, so they do not get sufficient time to take care of their babies. It may be expensive for the household to afford a nanny. Today's woman has to manage home along with their office work simultaneously. After long working hours, they have to take care of the home along with the baby. They may not get enough time to swing the cradle manually and sooth the baby. Moreover, in today's life style, it is very difficult even for the housewives to sit nearby their infants and sooth them whenever they cry.

There is a need to develop a new low cost indigenous electronic cradle because the existing cradles are imported and costly. This paper presents the design and implementation of a new indigenous low-cost E-Baby Cradle that swings automatically when baby cries, for this it has a cry analyzing system which detects the baby cry voice and accordingly the cradle swings till the baby stops crying. There is a toy, that will be ON automatically. If the baby doesn't stop crying a message is send to parent's android phone. The speed of the cradle can be controlled as per the user need. The system has inbuilt alarm that indicates two conditions—first when the mattress is wet, which is an important parameter to keep the baby in hygienic condition, second when baby does not stop crying with in a stipulated time, which intimated that baby needs attention. This system helps parents and nurses to take care of babies without physical attention.

OBJECTIVES

Looking after babies is hard problem worldwide. Babies are the future of society. This system emphasizes the importance of child care. Our system is economical and user friendly and very useful for working parents. The system is designed to help parents and nurses in infants care. The design aims at following points:

1. Cradle starts swinging automatically when baby cry and swings till the baby stops crying.
2. Sounds an alarm when mattress gets wet.
3. Sounds an alarm if baby cries for more than a stipulated time indicating that baby needs attention.

PROBLEM DEFINITION

Products like Why Cry – Baby Cry Analyzer Monitor, Wireless Baby Crying Detector with Parental Alarm, Cry translator etc. are available in the market which have many drawbacks and fails to perform according to their actual purpose of development. All of the above have disadvantages like:

- The alarm is sound based, need to be in the range to hear the alarm
- No self-soothing system included
- Expensive
- Do not detect the crying of a baby

BASIC FUNCTIONALITIES

The design aims at following points:

1. Cradle starts swinging automatically when baby cry and swings till the baby stops crying.
2. Sounds an alarm when mattress gets wet.
3. Sounds an alarm if baby cries for more than a stipulated time indicating that baby needs attention.
4. Play songs by recognising the face of baby(emotion based music system)

SOFTWARE REQUIREMENT SPECIFICATION

HARDWARE SPECIFICATION

The selection of hardware is very important in the existence and proper working of any software. Then selection hardware, the size and capacity requirements are also important.

■ Processor	:	Intel Pentium Core i3 and above
■ Primary Memory	:	4 GB RAM and above
■ Storage	:	80 GB hard disk and above
■ Display	:	VGA Colour Monitor
■ Key Board	:	Windows compatible
■ Mouse	:	Windows compatible

SOFTWARE SPECIFICATION

One of the most difficult tasks is selecting software for the system, once the system requirements is found out then we have to determine whether a particular software package fits for those system requirements. The application requirement:

■ Front end	:	Android XML
■ Back end	:	MYSQL
■ Operating system	:	windows 7 and above
■ IDE	:	PyCharm, Android Studio
■ Software	:	SqlYOG

(Note: All entries of the pro forma for approval should be filled up with appropriate and complete information. Incomplete Pro forma of approval in any respect will be rejected.)

Mini Project Proposal No : 3
(Filled by the Department)

Academic Year : 2020-2022
Year of Admission : 2020

1. Title of the Project : House Price Prediction Using Machine Learning And Neural Networks
2. Name of the Guide : Mr. Balachandran KP
3. Number of the Student: UMMU HABEEBA T
4. Student Details (in BLOCK LETTERS)
5. Name Roll Number Signature

1. UMMU HABEEBA MES20MCA-2058 

Date: 15/04/22

Approval Status : Approved / Not Approved

Signature of
Committee Members

Comments of The Mini Project Guide

Dated Signature

Initial Submission : _____

First Review : _____

Second Review : _____

Comments of The Project Coordinator

Dated Signature

Initial Submission: _____

First Review _____

Second Review _____

Final Comments :

Dated Signature of HOD

House Price Prediction Using Machine Learning And Neural Networks

UMMU HABEEBA T

INTRODUCTION

Data is at the heart of technical innovations, achieving any result is now possible using predictive models. Machine learning is extensively used in this approach. Machine learning means providing valid dataset and further on predictions are based on that, the machine itself learns how much importance a particular event may have on the entire system based on its pre-loaded data and accordingly predicts the result. Various modern applications of this technique include predicting stock prices, predicting the possibility of an earthquake, predicting company sales and the list has endless possibilities. For our research project, we have considered Mumbai as our primary location and are predicting real-time house prices for various localities in and around Mumbai. We have used parameters like 'square feet area', 'no. of Bedrooms', 'No of Bathrooms', 'Type of Flooring', 'Lift availability', 'Parking availability', 'Furnishing condition'. We have taken into account a verified dataset with diversity so as to give accurate results for all conditions. We have used various algorithms explained below in various combinations and the weight for each algorithm is given based on the accuracy percentage. After evaluating for various test runs we conclude that instead of an individual algorithm a series of algorithms yields better results.

OBJECTIVES

Real estate is the least transparent industry in our ecosystem. Housing prices keep changing day in and day out and sometimes are hyped rather than being based on valuation. Predicting housing prices with real factors is the main crux of our research project. Here we aim to make our evaluations based on every basic parameter that is considered while determining the price. We use various regression techniques in this pathway, and our results are not sole determination of one technique rather it is the weighted mean of various techniques to give most accurate results. The results proved that this approach yields minimum error and maximum accuracy than individual algorithms applied. We also propose to use real-time neighborhood details using Google maps to get exact real-world valuations.

PROBLEM DEFINITION

A system that aims to provide an accurate prediction of housing prices has been developed. The system makes optimal use of Linear Regression, Forest regression, Boosted regression. The efficiency of the algorithm has been further increased with use of Neural networks. The system will satisfy customers by providing accurate output and preventing the risk of investing in the wrong house. Additional features for the customer's benefit can also be added to the system without disturbing its core functionality. A major future update could be the addition of larger cities to the database, which will allow our users to explore more houses, get more accuracy and thus come to a proper decision.

BASIC FUNCTIONALITIES








Our dataset comprises of various essential parameters and data mining has been at the root of our system. We initially cleaned up our entire dataset and also truncated the outlier values. Further, we weighed each parameter based on its importance in determining the pricing of the system and this led us to increase the value that each parameter withholds in the system. We shortlisted 3 different machine learning algorithms and tested our system with different combinations

that can guarantee best possibly reliability of our results [9]. Even after that, we followed a unique approach to increase the accuracy, our survey led to a conclusion that the actual real estate value also depends on nearby local amenities such as railway station, supermarket, school, hospital, temple, parks etc. And now we propose our unique approach that can counter this need. We use Google maps API and based on locality search we narrow down on a radius of 0.5 km. Now if we find any such public places in the circle we increase the value of the property correspondingly. We carried this out with manual examples and this gave us tremendous results in terms of accuracy in prediction

SOFTWARE REQUIREMENT SPECIFICATION





Hardware Specifications

The selection of hardware is very important in the existence and proper working of any software. Then selection hardware, the size and capacity requirements are also important.

 Processor	:	Intel Pentium Core i3 and above
 Primary Memory	:	4GB RAM and above
 Storage	:	320 GB hard disk and above
 Display	:	VGA Color Monitor
 Key Board	:	Windows compatible
 Mouse	:	Windows compatible
 standard camera		

Software Specifications

One of the most difficult task is selecting software for the system, once the system requirements is found out then we have to determine whether a particular software package fits for those system requirements. The application requirement:

 Front end	:	python
 Back end	:	MySQL
 Operating system	:	windows 7 or above
 IDE	:	Pycharm

