गुरु घासीदास विश्वविद्यालय
(केन्द्रीय विश्वविद्यालय अधिनियम 2009 क्र. 25 के अंतर्गत स्थापित केन्द्रीय विश्वविद्यालय)
कोनी, बिलासपुर – 495009 (छ.ग.)

Guru Ghasidas Vishwavidyalaya
(A Central University Established by the Central Universities Act 2009 No. 25 of 2009)
Koni, Bilaspur – 495009 (C.G.)

Department	: Computer Science and Information	
Academic Year: 2021-22		
Sr. No.	**Programme Code**	**Name of the Programme**
01.	MSc(CS) 401	Major Project

Following students have carried out their Project work/ Internship/ Field Project/Industrial Training for the academic session 2021-22

Si.No.	Name of the Students	Page No ……. To ……..
1	Prasanna jaiswal	2-4
2	Jyotish Kumar	5-7
3	Nokhil rawat	8-10
4	Garima Kashyap	11-13
5	Durga Rajput	14-16
6	Aanchal Kashyap	17-19
7	Adarsh Nayak	20-22
8	Anuradha Bahgat	23-25

गुरु घासीदास विश्वविद्यालय
(केन्द्रीय विश्वविद्यालय अधिनियम 2009 क्र. 25 के अंतर्गत स्थापित केन्द्रीय विश्वविद्यालय)
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Guru Ghasidas Vishwavidyalaya
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Koni, Bilaspur – 495009 (C.G.)

9	Sangeeta Kurrey	26-28
10	Renuka Thakur	29-31
11	Chanchal Gaharwar	32-34
12	Pushkar Patil	35-37
13	Preeti Dadsena	38-40
14	Shreya Jaiswal	41-43
15	Jagriti Sahu	44-46
16	Devendra Malakar	47-49
17	Tushar kashyap	50-52

HEAD
DEPT OF CSIT
G.G.V. BILASPUR (C.G.)

GURU GHASIDAS VISHWAVIDYALAYA, KONI, BILASPUR (C.G)

DEPARTMENT OF COMPUTER SCIENCE AND INFORMATION TECHNOLOGY
SESSION: 2022-2023
(A Central University Established by the Central Universities Act, 2009 No.25 of 2009)

A PROJECT REPORT ON
"HEART ATTACK PREDICTION"
'Submitted in partial fulfillment of the requirement for the
Award of the degree MSC'
Master of Computer Science
(Session: 2022-2023)

SUBMITTED BY
PRASANNA JAISWAL
Roll No: 21071115
Enrollment No: GGV/21/05310
MSC 4th Semester

UNDER THE GUIDENCE OF:

Dr. Rajwant Singh Rao
(Prof. Dept of CSIT)
Guru Ghasidas Central University

SUBMITTED TO:

PROF. A.K. SAXSENA
(HOD OF CSIT DEPT.)
Guru Ghasidas Central University

GURU GHASIDAS VISHWAVIDYALAY, BILASPUR (C.G)

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY
SESSION: 2022-2023
(A Central University Established by the Central Universities Act, 2009 No.25 of 2009)

CERTIFICATE OF THE GUIDE

This is to certify that the project entitled **"Heart Attack Prediction Using Machine Learning"** is a record of work carried out by **Prasanna Jaiswal, Enroll. No. : GGV/21/05310 & roll no.: 21071115** under my guidance and supervision for the award of the Degree of **MSC at GURU GHASIDAS CENTRAL UNIVERSITY BILASPUR (C.G.)**

To the best of my knowledge and belief of the project

¬ Embodies the work of the candidate him/herself, and has not been submitted for theaward of any degree.
¬ Has duly been completed.
¬ Full fills the requirement of the Ordinance relating to the M.Sc. degree of the University
¬ Is up to the desired standard in respect of contents and is being referred to the examiners.

(Signature of the Guide)

Dr. Rajwant Singh Rao
(Prof. Dept of CSIT)

Recommendation of the Department

The Project work as mentioned above by here by being recommended and forwarded for examination and evaluation.

(Signature of the head of Department with seal)
Prof. A.K. Saxena
(H.O.D. of CSIT Department)

ABSTRACT

Machine Learning (ML) is transforming the industries from delivering normal products to deliver intellect products. Large sets of data points are analysed by the computers and the relationship modelling is applied in a predictive way in real time to obtain accurate results. Machine Learning is adopted in healthcare problems for increasing efficiencies, saving money, and saving lives. The cost of medical treatment is reduced and the healthcare processes are optimized throughout the organization with the support of ML. ML improves healthcare delivery and patient health. Machine learning improves diagnosis and treatment options, also empowers individuals to take control of their health. Diagnosis advancements, predictive healthcare, medicines, and helping patients through ML interface produces better results. Heart Disease relates to many numbers of medical complications related to the heart.

The correct prediction of heart disease can prevent life threats, and incorrect prediction can prove to be fatal at the same time. In this paper different machine learning algorithms and deep learning are applied to compare the results and analysis of the UCI Machine Learning Heart Disease dataset. The dataset consists of 14 main attributes used for performing the analysis.

Key Words: Machine Learning, Heart Disease Prediction, Heart Disease Classification, Heart Attack Prediction, Heart Attack Classification, Support Vector Machine, Random Forest, Gradient Boosting, XGBoost, CatBoost, Deep Learning.

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

GURU GHASIDAS VISHWAVIDYALAYA, KONI, BILASPUR (C.G.)

Session: 2021-23

A

PROJECT REPORT

ON

FAKE NEWS DETECTION SYSTEM

BY

JYOTISH KUMAR

Enrollment No: - GGV/18/5130

M.Sc. IVth Semester (Computer Science)

The partial fulfillment of the requirement for the award of the degree

MASTER OF SCIENCE (COMPUTER SCIENCE)

UNDER THE GUIDENCE OF:
DR. PUSHPLATA PUJARI
(ASST. PROF. OF CSIT)

SUBMITTED TO:
PROF. A.K. SAXSENA
HOD (CSIT DEPT.)

1

CERTIFICATE

This is to certify that the project title **"FAKE NEWS DETECTION SYSTEM"** carried out by **JYOTISH KUMAR, (Enroll No: GGV/18/5130)** under my guidance and supervision for award of the degree **Master of Science** in faculty of **Computer Science & IT of Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.), India.**
To the best of my knowledge and belief the project: -

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1. Fulfills the requirements of the ordinance relating to B.Sc. /M.Sc. Degree of the University.

2. Is up to the standard in respect of content and language for being referred to the examiners.

Project Guide   **External Examiner**   **Head of Dept.**

4

ABSTRACT

In our modern era where the internet is ubiquitous, everyone relies on various online resources for news. Along with the increase in the use of social media platforms like Facebook, Twitter, etc. news spread rapidly among millions of users within a very short span of time. The spread of fake news has far-reaching consequences like the creation of biased opinions to swaying election outcomes for the benefit of certain candidates. Moreover, spammers use appealing news headlines to generate revenue using advertisements via click-baits. In this paper, we aim to perform binary classification of various news articles available online with the help of concepts pertaining to Artificial Intelligence, Natural Language Processing and Machine Learning. We aim to provide the user with the ability to classify the news as fake or real and also check the authenticity of the website publishing the news.

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

GURU GHASIDAS VISHWAVIDYALAYA, KONI, BILASPUR (C.G.)

Session: 2022-23

A

PROJECT REPORT

ON

DEVELOPMENT OF AN ONLINE BANKING PORTAL

BY

NIKHIL RAWAT

Enrollment No: - GGV/18/5158

M.Sc. IVth Semester (Computer Science)

The partial fulfillment of the requirement for the award of the degree

MASTER OF SCIENCE (COMPUTER SCIENCE)

UNDER THE GUIDANCE OF:	SUBMITTED TO:
RAJWANT SINGH RAO	PROF. A.K. SAXSENA
(ASST. PROF. OF CSIT)	HOD (CSIT DEPT.)

CERTIFICATE

s is to certify that the project title **"DEVELOPMENT OF AN ONLINE BANKING RTAL FOR STUDENTS"** carried out by **NIKHIL RAWAT, (Enroll No: GV/18/5158)** under my guidance and supervision for award of the degree **Master of** ience in faculty of **Computer Science & IT of Guru Ghasidas Vishwavidyalaya,** aspur (C.G.), India.

the best of my knowledge and belief the project: -

nbodies the work of the candidate himself has duty been completed in specified e.

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11|08|2023

roject Guide   External Examiner   Head of Dept.

ABSTRACT

This project is aimed at developing an Online Banking for customer. The system is an online application that can be accessed throughout the organization and outside as well with proper login provided.

The project has been planned to be having the view of distributed architecture, with centralized storage of the database. The application for the storage of the data has been planned. Using the constructs of Oracle 10g and all the user interfaces have been designed using the JAVA. The database connectivity is planned using the "Database" methodology. The standards of security and data protective mechanism have been given a big choice for proper usage. The application takes care of different modules and their associated reports, which are produced as per the applicable strategies and standards that are put forwarded by the administrative staff.

The entire project has been developed keeping in view of the distributed client server computing technology, in mind. The specification has been normalized up to 3NF to eliminate all the anomalies that may arise due to the database transaction that are executed by the general users and the organizational administration. The user interfaces are browser specific to give distributed accessibility for the overall system. The internal database has been selected as Oracle 10g.The basic constructs of table spaces, clusters and indexes have been exploited to provide higher consistency and reliability for the data storage. The Oracle 10g was a choice as it provides the constructs of high-level reliability and security. The total front end was dominated using the HTML 5. At all proper levels high care was taken to check that the system manages the data consistency with proper business rules or validations. The database connectivity was planned using the latest "Database connection" technology provided by Oracle. The authentication and authorization were crosschecked at all the relevant stages. The user level accessibility has been restricted into two zones namely.

GURU GHASIDAS VISHWAVIDYALAYA, KONI, BILASPUR (C.G.)

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

Session: 2021-23

A
PROJECT REPORT
ON
ONLINE BLOOD DONATION MANAGEMENT SYSTEM

The partial fulfillment of the requirement for the award of the degree

MASTER OF SCIENCE (COMPUTER SCIENCE)

UNDER THE SUPERVISION OF:

Dr. SHRABANTI MANDAL

(ASSOCIATE PROFESSOR)

DEPT. OF CSIT

SUBMITTED BY:

GARIMA KASHYAP

Roll No.- 21071110

Enroll no.- GGV/21/05308

CERTIFICATE

This is to certify that the **Garima Kashyap** bearing roll no. **21071110** Enrollment no. **GGV/21/05308** has developed software project entitled **"Online Blood Donation Management System"** for major project as fulfillment for the award of the degree of **Master of Science in Computer Science (M.Sc.(CS))**.

Head of the Department

Prof. A. K. Saxena

CSIT Dept.

Under the Supervision of

Dr. Shrabanti Mandal

CSIT Dept.

ABSTRACT

The purpose of Online Blood Bank Management System is to automate the existing manual system by the help of computerized equipment and computer software, fulfilling their requirements, so that their valuable data can be stored for a longer period with easy accessing and manipulation. Blood transfusion safety is a relevant and significant public health issue. Since most blood banks are still in paper-based system, various disadvantages are experienced by various stakeholders, which endanger the lives of patients and deter the healthcare system. As such, the researchers aimed to design, develop, and implement an Online Blood Bank Management System (OBBMS).

Blood Bank Management System, can lead to error free, secure, reliable and fast management system. It can assist the user to concentrate on their other activities rather to concentrate on the record keeping. Thus, it will help organization in better utilization of resources. The organization can maintain computerized records without redundant entries.

Therefore, with the use of online blood bank management system, blood transfusion process is safe and secured. Threats on improper blood donor documentation, or misplaced records will be totally eradicated. Also, processes involving recording about blood donors, blood bag collection, storage, and inventory will be systematized and organized, hence, improving the healthcare management for blood banks.

DEPARTMENT OF COMPUTER SCIENCE AND

INFORMATION TECHNOLOGY

GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR

(A Central University Established by the Central Universities Act, 2009 No. 25 of2009)

Session 2022-23

A Major Project On

"LUNG CANCER CLASSIFICATION WITH   DIFFERENT MACHINE

LEARNING ALGORITHMS"

GUIDED BY: -   **SUBMITTED BY: -**

DR. GIRISH KUMAR SIR   *DURGA RAJPUT*

Associate professor   *M.Sc. CS 4th sem.*

Department of CSIT   *ROLL NO.-21071109*

CERTIFICATE

THIS IS TO CERTIFY THAT **DURGA RAJPUT** BEARING **ROLL NO. 21071109 ENROLLMENT NO. GGV/21/05307 HAS** DEVELOPED SOFTWARE PROJECT ENTITLED **"LUNG CANCER CLASSIFICATION WITH DIFFFERENT MACHINE LEARNING ALGORITHMS"** FOR MAJOR PROJECT AS FULFILLMENT FOR THE AWARD OF THE DEGREE OF **MASTER OF COMPUTER SCIENCE (MSc. (CS)).**

Dr. GIRISH KUMAR SINGH

ASSOCIATE PROFESSOR

CSIT DEPARTMENT

GURU GHASIDAS

CENTRAL UNIVERSITY

KONI, BILASPUR(C.G.)

ABSTRACT

Lung cancer is the most prevailing cancer and the leading cause of cancer related deaths throughout the world. Early detection of lung cancer can increase the survival rate of cancer patients. In United States, current statistics shows that about 1 out of 4 cancer deaths are from lung cancer among both men and women than other cancers. The goal of this study is to develop machine-learning models that can detect malignant lung. Lung Cancer is the form of cancer that has caused the most deaths in both men and women throughout the world. Most of the researchers analysed the lung cancer dataset using algorithms to find the cluster among the small cell or non-small cell lung cancer in various stages.

Key Words: - Lung Cancer Diagnosis, Logistic Regression, Nearest Neighbour, Support Vector Machines, Decision Tree Algorithm, Random Forest Algorithm.

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

GURU GHASIDAS VISHWAVIDYALAYA, KONI, BILASPUR (C.G.)

Session: 2021-22

A

PROJECT REPORT

ON

*DEVELOPMENT OF A FACE RECOGNITION

BASED ATTENDANCE SYSTEM *

BY

Aanchal Kashyap

Enrollment No: - GGV/18/5083

M.Sc. IVth Semester (Computer Science)

The partial fulfillment of the requirement for the award of the degree

MASTER OF SCIENCE (COMPUTER SCIENCE)

UNDER THE GUIDENCE OF:	**SUBMITTED TO:**
DR. SUSHMA JAISWAL	**PROF. A.K. SAXSENA**
(ASST. PROF. OF CSIT)	**HOD (CSIT DEPT.)**

CERTIFICATE

This is to certify that the project title "DEVELOPMENT OF A FACE RECOGNITION BASED ATTENDANCE SYSTEM" Carried out by Aanchal Kashyap, (Enroll No: GGV/18/5083) under my guidance and supervision for award of the degree Master of Science in faculty of Computer Science & IT of Guru Ghasidash Vishwavidyalaya, Bilaspur (C.G.), India.

To the best of my knowledge and belief the project: -

Embodies the work of the candidate himself has duty been completed in specified time.

1. Fulfills the requirements of the ordinance relating to M.Sc. Degree of the University.

2. Is up to the standard in respect of content and language for being referred to the examiners.

Project Guide

External Examiner
11/08/2023

Head of Dept.

ABSTRACT

In today's highly automated and interconnected world, technological advancements such as image processing, and machine learning have been rapidly evolving, transforming various systems to achieve more precise and efficient outcomes. A significant example of this transition can be observed in the realm of attendance management, which has evolved from traditional paper-based methods, such as signature sheets, to cutting-edge facial recognition systems.

This project aims to develop a comprehensive embedded class attendance system utilizing facial recognition to determine whether a person's face belongs to a specific student in the designated class. The system's foundation relies on implementing a machine learning algorithm through Python programming language, making use of either the computer or laptop's built-in camera or an external camera connected to the system. The core technique for facial recognition in this system is based on the Local Binary Patterns (LBPs) algorithm.

By harnessing the power of machine learning and image processing, the proposed attendance system is expected to offer numerous benefits over traditional methods. Firstly, it eliminates the need for manual paperwork, saving time and resources for both students and administrators. Secondly, the system enhances accuracy and reliability, reducing the chances of fraudulent attendance practices. This improvement is crucial, especially in educational settings, where precise attendance records are essential for tracking academic progress and monitoring students' overall performance.

The use of facial recognition technology through LBPs algorithm ensures efficient face detection and verification, making it suitable for real-time applications. As the system will be implemented using Python, it also benefits from the extensive libraries and tools available within the language's ecosystem, further enhancing its flexibility and potential for future updates.

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

GURU GHASIDAS VISHWAVIDYALAYA, KONI, BILASPUR (C.G.)

Session: 2022-23

A

PROJECT REPORT

ON

"MOVIE RECOMMENDER SYSTEM"

BY

ADARSH NAYAK

Enrollment No: - GGV/21/05301

M.Sc. IVth Semester (Computer Science)

The partial fulfillment of the requirement for the award of the degree

MASTER OF SCIENCE (COMPUTER SCIENCE)

UNDER THE GUIDENCE OF:
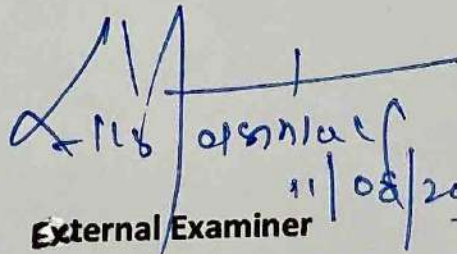DR. SUSHMA JAISWAL
(ASST. PROF. OF CSIT)

SUBMITTED TO:
PROF. A.K. SAXSENA
HOD (CSIT DEPT.)

CERTIFICATE
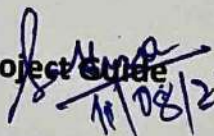
This is to certify that the project title "**MOVIE RECOMMENDER SYSTEM**" carried out by **ADARSH NAYAK, (Enroll No: GGV/21/05301)** under my guidance and supervision for award of the degree **Master of Science** in faculty of **Computer Science & IT of Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.), India.**

To the best of my knowledge and belief the project:-

Embodies the work of the candidate himself has duty been completed in specified time.

1. Fulfills the requirements of the ordinance relating to M.Sc. Degree of the University.

2. Is up to the standard in respect of content and language for being referred to the examiners.

Project Guide
11/08/23

External Examiner
11/08/2023

Head of Dept.

Abstract

Recommender System is a tool helping users find content and overcome information overload. It predicts interests of users and makes recommendation according to the interest model of users.

The original content-based recommender system is the continuation and development of collaborative filtering, which doesn't need the user's evaluation for items. Instead, the similarity is calculated based on the information of items that are chose by users, and then make the recommendation accordingly. With the improvement of machine learning, current content-based recommender system can build profile for users and products respectively. Building or updating the profile according to the analysis of items that are bought or visited by users. The system can compare the user and the profile of items and then recommend the most similar products. So this recommender method that compare user and product directly cannot be brought into collaborative filtering model. The foundation of content-based algorithm is acquisition and quantitative analysis of the content. As the research of acquisition and filtering of text information are mature, many current content-based recommender systems make recommendation according to the analysis of text information.

This paper introduces content-based recommender system for the movie website. There are a lot of features extracted from the movie, they are diversity and unique, which is also the difference from other recommender systems. We use these features to construct movie model and calculate similarity. We introduce a new approach for setting weight of features, which improves the representative of movies. Finally we evaluate the approach to illustrate the improvement.

Keywords: recommender system, content-based, similarity, movie

GURU GHASIDAS VISHWAVIDYALAYA, KONI, BILASPUR (C.G)

DEPARTMENT OF COMPUTER SCIENCE AND INFORMATION TECHNOLOGY
SESSION: 2022-2023

A PROJECT REPORT ON
"SNAKE CLASSIFICATION (COBRASHOT)"

'Submitted in partial fulfillment of the requirement for the
Award of the degree MSC'
Master of Computer Science
(Session: 2022-2023)

SUBMITTED BY
ANURADHA BHAGAT
Roll No: 21071106
Enrollment No: GGV/21/05304
MSC 4th Semester

UNDER THE GUIDENCE OF:

Dr. Ratnesh Prasad Srivastava
(Prof. Dept of CSIT)
Guru Ghasidas Central University

SUBMITTED TO:

PROF. A.K. SAXSENA
(HOD OF CSIT DEPT.)
Guru Ghasidas Central University

GURU GHASIDAS VISHWAVIDYALAY, BILASPUR (C.G)

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY
SESSION: 2022-2023
(A Central University Established by the Central Universities Act, 2009 No.25 of 2009)

CERTIFICATE OF THE GUIDE

This is to certify that the project entitled **"Snake Classification (COBRASHOT)"** is a record of work carried out by **Anuradha Bhagat, Enroll. No. : GGV/21/05304 & roll no.: 21071106** under my guidance and supervision for the award of the Degree of **MSC at GURU GHASIDAS CENTRAL UNIVERSITY BILASPUR (C.G.)**

To the best of my knowledge and belief of the project
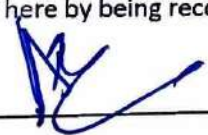
¬ Embodies the work of the candidate him/herself, and has not been submitted for the award of any degree.
¬ Has duly been completed.
¬ Full fills the requirement of the Ordinance relating to the M.Sc. degree of the University
¬ Is up to the desired standard in respect of contents and is being referred to the examiners.

(Signature of the Guide)

Dr. Ratnesh Prasad Srivastava
(Prof. Dept of CSIT)

Recommendation of the Department

The Project work as mentioned above by here by being recommended and forwarded for examination and evaluation.

(Signature of the head of Department with seal)
Prof. A.K. Saxena
(H.O.D. of CSIT Department)

ABSTRACT

Snakes are curved, limbless, warm blooded reptiles of the phylum serpents. Any characteristics, including head form, body shape, physical appearance, texture of skin and eye structure, might be used to individually identify nonvenomous and venomous snakes, that are not usual among non-experts peoples. A standard machine learning methodology has also been used to create an automated categorization of species of snake dependent upon the photograph, in which the characteristics must be manually adjusted. As a result, a Deep convolutional neural network has been proposed in this paper to classify snakes into two categories: venomous and non-venomous. A set of data of 1766 snake pictures is used to implement seven Neural network with our proposed model. The amount of photographs even has been increased by utilizing various image enhancement techniques. Ultimately, the transfer learning methodology is utilized to boost the identification process accuracy

even more.

Key Words: Machine Learning, Classification of Snake Images, Deep Learning, Artificial Intelligence, Computer Vision.

GURU GHASIDAS VISHWAVIDYALAYA, KONI, BILASPUR (C.G)

DEPARTMENT OF COMPUTER SCIENCE AND INFORMATION TECHNOLOGY
SESSION: 2022-2023
(A Central University Established by the Central Universities Act, 2009 No.25 of 2009)

A PROJECT REPORT ON
"EMPLOYEE MANAGEMENT SYSTEM"
'Submitted in partial fulfillment of the requirement for the
Award of the degree MSC'
Master of Computer Science
(Session: 2022-2023)

SUBMITTED BY
SANGEETA KURREY
Roll No: 21071119
Enrollment No: GGV/21/05313
MSC 4th Semester

UNDER THE GUIDANCE OF:

AKHILESH SHRIVAS
(Assistant Professor Dept of CSIT)
Guru Ghasidas Central University

SUBMITTED TO:

PROF. A.K. SAXSENA
(HOD OF CSIT DEPT.)
Guru Ghasidas Central University

GURU GHASIDAS VISHWAVIDYALAY, BILASPUR (C.G)

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY
SESSION: 2022-2023
(A Central University Established by the Central Universities Act, 2009 No.25 of 2009)

CERTIFICATE OF THE GUIDE

This is to certify that the project entitled **"Employee Management System"** is a record of work carried out by **Sangeeta Kurrey, Enroll. No. : GGV/21/05313 & roll no.: 21071119** under my guidance and supervision for the award of the Degree of **MSC at GURU GHASIDAS CENTRAL UNIVERSITY BILASPUR (C.G.)**

To the best of my knowledge and belief of the project

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¬ Has duly been completed.
¬ Full fills the requirement of the Ordinance relating to the M.Sc. degree of the University
¬ Is up to the desired standard in respect of contents and is being referred to the examiners.

(Signature of the Guide)

Akhilesh Shrivas
(Assistant Professor Dept of CSIT)

Recommendation of the Department

The Project work as mentioned above by here by being recommended and forwarded for examination and evaluation.

(Signature of the head of Department with seal)
Prof. A.K. Saxena
(H.O.D. of CSIT Department)

Abstract

Employee Management System Project is an essentially software designed to keep track of employee information in any company. It stores data such as their employees' personal information. The goal of "Employee Management System" is to create a work center scheduling system. Scheduling is a technology that makes the process of informing activities and notifications in the company where it is implemented simple and even online.

The employee management system project gives managers a better idea of their employees and helps them plan and manage their work hours in order to cut costs and boost productivity. It gives appropriate directions and supervisions for employees. It also secures and manages information that are important to the employees including personal and work-related info

DEPARTMENT OF COMPUTER SCIENCE AND INFORMATION TECHNOLOGY

GURU GHASIDAS VISHWAVIDYALAY, BILASPUR

(A Central University Established by the Central Universities Act, 2009 No. 25 of 2009)

A Major Project Report ON
"BRAIN TUMOR PREDICTION "
(MASTER OF COMPUTER SCIENCE)
Session 2021-23

UNDER THE SUPERVISION OF

Asst. Prof. PRASHANT VAISHNAV

Dept. of CSIT

Guru Ghasidas University Bilaspur (C.G.)

SUBMITTED BY:

RENUKA THAKUR

Enroll No. GGU/21/05312

Roll No. 21071118

MSc (CS) 4th Sem.

CERTIFICATE OF THE GUIDE

his is to certify that the project entitled "**BRAIN TUMOR DETECTION**" is a record
work carried out by **RENUKA THAKUR (E.roll. No.- GGV/21/05312)** under my
uidance and supervision for the award of the Degree of **MSc (CS) (MASTER OF
OMPUTER SCIENCE), Guru Ghasidas Central University Bilaspur (C.G.).** To
e best of my knowledge and belief of the project
)   Embodies the work of the candidate himself, and has not been submitted for the
      award of any degree.
)   Has duly been completed.
)   Fulfills the requirement of the Ordinance relating to the MSc.(CS) degree of the
      University and
)   Is up to the desired standard in respect of contents and is
ing referred to the examiners .

(Signature of the Guide)

Asst.Prof. PRASHANT VAISHNAV

(Dept. of CSIT.)

Recommendation of the Department

The Project work as mentioned above by here by being recommended and forwarded for

examination and evaluation.

(Signature of the head of Department with seal)

Prof. A.K. SAXENA

HOD Dept. of CSIT

ABSTRACT

Brain tumor being one of the deadliest diseases at a very advance stage identification is a very difficult activity in early adulthood. But now development has been made with various machine learning algorithms. Currently the issue of artificial brain tumor detection is of great concern. To detect a patient's brain tumor, we consider patient data such as MRI images of a patient's brain. Here, our question is whether or not the tumor is present in brain patients. It is very important to detect tumors at the baseline level for a patient's healthy life. Much research is being done to identify certain forms of brain tumors and to improve identification performance. In this project, we predict the magnitude of brain tumors using different Convolutionary Neural Network algorithms (VGG16, VGG19, InceptionV3, Efficientnet-B2

etc) that provides us with reliable results. Key Words: Brain tumor; Kaggle; convolutional neural network; MRI images; Machine Learning.

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

GURU GHASIDAS VISHWAVIDYALAYA, KONI, BILASPUR (C.G.)

Session: 2021-22

A

PROJECT REPORT

ON

ANIMAL CLASSIFICATION USING MACHINE LEARNIG

BY

CHANCHAL GAHARWAR

Enrollment No: - GGV/21/05305

M.Sc. IVth Semester (Computer Science)

The partial fulfillment of the requirement for the award of the degree

MASTER OF SCIENCE (COMPUTER SCIENCE)

UNDER THE GUIDENCE OF:
DR. RATNESH PRASAD SRIVASTAVA
(ASSO. PROF. OF CSIT)

SUBMITTED TO:
PROF. A.K. SAXSENA
HOD (CSIT DEPT.)

1

CERTIFICATE

This is to certify that the project title **"ANIMAL CLASSIFICATION USING MACHINE LEARNING"** carried out by **CHANCHAL GAHARWAR, (Enroll No: GGV/21/05305)** under my guidance and supervision for award of the degree **Master of Science** in faculty of **Computer Science & IT of Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.), India.**
To the best of my knowledge and belief the project: -

Embodies the work of the candidate himself has duty been completed in specified time.

- Fulfills the requirements of the ordinance relating to M.Sc. Degree of the University.

- Is up to the standard in respect of content and language for being referred to the examiners.

.Project Guide   Internal Examiner   External Examiner   Head

3

ABSTRACT

A real-world animal biometric system which detects and describes animal life in image and video is an emerging subject in machine vision. These systems provide computer vision approaches for the classification of animals. A novel method for animal face classification based on one of the popular convolutional neural networks (CNN) features. We are using CNN in this project which can automatically extract features, learn and classify them. The proposed method can also be used in other areas of image classification and object recognition. The experimental results show that automatic feature extraction in CNN is better compared to other simple feature extraction techniques (both local- and appearance-based features. It shows that the proposed technique has a positive effect on classification accuracy.

Using deep learning to study household animals' demeanor and body language, we can find out if they are sick or not and provide necessary help in time. In order to achieve this goal, we need to start with animal species classification. In this project I will train one of the deep learning models, VGG, to distinguish between images of dog, cat, horse, spider, butterfly, chicken, sheep, cow, squirrel, elephant. After using the Transfer Learning from VGG-16, the accuracy can increase from 80% to over 95%. Then two ways of visualizing the model outputs

5

GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR (C.G)

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

SESSION: 2021-2023

(A Central University Established by the Central Universities Act, 2009 No.25 of 2009)

A PROJECT REPORT ON

"Work Life Balance System"

'Submitted in partial fulfilment of the requirement for
the Award of the degree of M.Sc'

Master of Computer Science

SESSION: 2021-2023

SUBMITTED BY
Pushkar Patil
Roll No: 21071117
Enrollment No: GGV/18/5059
M.Sc 4 th Semester

SUBMITTED TO

Prof. A.K. Saxena
(HOD of CSIT Dept)
GURU GHASIDAS CENTRAL
UNIVERSITY BILASPUR (C.G.)

UNDER THE GUIDANCE OF

Dr. Babita Majhi
(Assistant Professor of CSIT Dept)
GURU GHASIDAS CENTRAL
UNIVERSITY BILASPUR (C.G.)

GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR (C.G)

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

SESSION: 2021-2023

(A Central University Established by the Central Universities Act, 2009 No.25 of 2009)

CERTIFICATE OF THE GUIDE

This is to certify that the project entitled "Work Life Balance System" is a record of work carried out by Pushkar Patil, Enrollment. No. : GGV/18/5059 & roll no.: 21071117 under my guidance and supervision for the award of the Degree of M.Sc at GURU GHASIDAS CENTRAL UNIVERSITY BILASPUR (C.G.)

To the best of my knowledge and belief the project
- ❖ Embodies the work of the candidate him/herself, and has not been submitted for the award of any degree.
- ❖ Has duly been completed.
- ❖ Full fills the requirement of the Ordinance relating to the M.Sc. degree of the University
- ❖ Is up to the desired standard in respect of contents and is being referred to the examiners.

Babita Majhi 11|8|2023
(Signature of Project Guide)
Dr. Babita Majhi
Assistant Professor
Dept. of CSIT

(Signature of H.O.D)
Prof.A.K.SAXENA
H.O.D
Dept. of CSIT

INTRODUCTION

WHAT IS WORK-LIFE BALANCE ? :-

Work-life balance is about effectively managing the juggling act between paid work and the other activities that are important to people. It's not about saying that work is wrong or bad, but that work shouldn't completely crowd out the other things that matter to people like time with family, participation in community activities, voluntary work, personal development, leisure and recreation.

The 'right' balance is a very personal thing and will change for each person at different times of his or her lives. For some people the issue is being able to get into work or find more work rather than having too much work. There is no 'one size fits all' solution.

A balanced life is one where we spread our energy and effort - emotional,intellectual, imaginative, spiritual and physical - between key areas of importance. The neglect of one or more areas, or anchor points, may threaten the vitality of the whole.

Work-life balance advantages:-

A good work-life balance can enable staff to feel more in control of their working life and lead to:

- ❖ increased productivity
- ❖ less instances of sickness and absenteeism
- ❖ a happier, less stressed workforce
- ❖ staff feeling valued and that their personal and/or family life is important
- ❖ improvements in employee mental health and well-being
- ❖ more engaged staff
- ❖ greater employee loyalty, commitment and motivation
- ❖ staff less likely to leave

BREAST CANCER CLASSIFICATION USING MACHINE LEARNING

A Project Report Submitted for Session
2022-2023

In partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE (COMPUTER SCIENCE)

BY

PREETI DADSENA
Enrollment No. GGV/21/05311
Roll No. 21071116
M.Sc. IVth. Semester (Computer Science)

UNDER THE GUIDANCE OF:
Asst. Prof. AMITESH KUMAR JHA
(CSIT DEPT.)

SUBMITTED TO:
Prof. A.K. SAXSENA
HOD (CSIT DEPT.)

Department of Computer Science and Information Technology
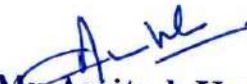## Guru GhasidasVishwavidyalaya, Bilaslpur-495009(C.G.), India

August 2023

Department of Computer Science and Information Technology
Guru GhasidasVishwavidyalaya, Bilaslpur-495009(C.G.), India

CERTIFICATE

This is to certify that **Preeti Dadsena** bearing roll no. 21071116 enrollment no. **GGV/21/05311** has developed software project entitled **"Breast Cancer Classification Using Machine Learning"** for major project as fulfillment for the award of the degree of **Master of Science(Computer Science).**

Mr. Amitesh Kumar Jha
Supervisor
Assistance Professor
CSIT DEPARTMENT
Guru Ghasidas Vishwavidyalaya,
Bilaspur(C.G.)

Prof. A. K. Saxsena
Head of the Department
CSIT DEPARTMENT
Guru Ghasidas Vishwavidyalaya,
Bilaspur(C.G.)

ABSTRACT

Breast cancer is one of the most common cancer and is causing a huge number of deaths in women. The high incidence and mortality of breast cancer is due to its considerably low accuracy of diagnosis. In this paper, we explore machine learning models that can be applied to help increasing the accuracy of the diagnosis of breast cancer. The main problem of the project is to detect breast cancer based on a set of features calculated from a digitized image of the Fine Needle Aspiration (FNA) of a breast mass from a patient. We present the diagnosis models using traditional machine learning models. Classic machine learning models including Logistic Regression, Nearest Neighbour, Support Vector Machine, etc. are tested on the Breast Cancer Wisconsin dataset. Additionally, we applied feature selection and neural network model to improve the performance of the system. This paper demonstrates that machine learning models can be used for an automatic diagnosis for breast cancer.

DEPARTMENT OF COMPUTER SCIENCE AND INFORMATION TECHNOLOGY

GURU GHASIDAS VISHWAVIDYALAYA, KONI, BILASPUR (C.G.)

Session:2021-23

A
PROJECT REPORT ON

"CLUSTERING MUSIC GENRES"

USING MACHINE LEARNING (PYTHON)
BY
SHREYA JAISWAL(M.Sc.CS IVth SEMESTER)

The partial fulfillment of the requirement for the award of the degree M.SC.(Computer science)

UNDER THE GUIDANCE OF: **SUBMITTED TO:**

VIVEK KUMAR SARATHE   **PROF.A.K.SAXSENA**

(ASST.PROF.OF CSIT)   **HOD (CSIT DEPT.)**
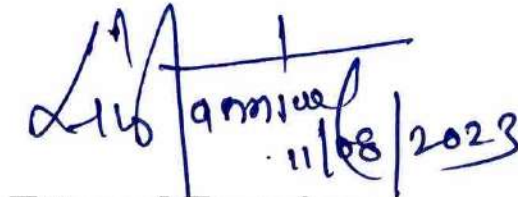
CERTIFICATE

This is to certify that the project title "**CLUSTERING MUSIC GENRES**" carried out by **SHREYA JAISWAL,** under my guidance and supervision for award of the degree **Master of Science** in faculty of **Computer Science & Information technology** of **Guru Ghasidas Vishwavidyalaya,Bilaspur (C.G.).**

To the best of my knowledge and belief the project:-

Embodies the work of the candidate herself has been completed in specified time.

1.Fulfill the requirements of the ordiance relating to B.Sc/M.Sc. degree of the university.

2. Is up to the standard in respect of content and language for being referred to the examiners.

Project Guide   **External Examiner**   **Head of Dept.**

<u>ABSTRACT</u>

Music streaming services like Spotify have changed the way consumers listen to music. Understanding what attributes make certain songs trendy can help services to create a better customer experience as well as more Seffective marketing efforts. We performed cluster analysis on Top 100 Trending Spotify Song of 2017, with ten attributes, including danceability, energy, loudness, speechiness, acousticness, instrumentalness, Liveness, valence, tempo, and duration. The results show that music structures with high danceability and low instrumentalness increase the popularity of a song and lead them to chart-topping success.

GURU GHASIDAS VISHWAVIDYALAYA, KONI, BILASPUR (C.G.)

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

Session: 2021-23

A PROJECT REPORT

ON

"Paying Guest Accommodation System"

The partial fulfillment of the requirement for the award of the degree

MASTER OF SCIENCE (COMPUTER SCIENCE)

UNDER THE SUPERVISION OF:

Dr. SHRABANTI MANDAL

(ASSOCIATE PROFESSOR)

CSIT DEPT.

SUBMITTED BY:

JAGRITI SAHU

ROLL NO.- 21071111

ENROLL NO.- GGV/21/05309

CERTIFICATE

This is to certify that the Jagriti Sahu bearing roll no. **21071111** Enrollment no. **GGV/21/05309** has developed software project entitled **"Paying Guest Accomodation System"** for major project as fulfilment for the award of the degree of Master of Science in Computer Science (M.Sc.(CS)).

Head of the Department

Prof. A. K. Saxena

CSIT Dept.

Under the Supervision of

Dr. Shrabanti Mandal

CSIT Dept.

ABSTRACT

As the name specifies "PAYING GUEST ACCOMODATION SYSTEM" is a software developed for managing various activities in the PG.

User need to specify their requirement the system will match the user requirement with the

Details in the database and after finding the match the required details are given to the user.

The system will have an Admin page from which he can add details about the rooms. This will reduce the effort required by the new students and existing student in searching room and other useful things.

Identification of the drawbacks of the existing system leads to the designing of computerized system that will be compatible to the existing system with the system which is more user friendly and more GUI oriented. We can improve the efficiency of the system, thus overcome the drawbacks of the existing system.

·Less human error

·Strength and strain of manual labour can be reduced

· High security

·Data redundancy can be avoided to some extent

·Data consistency

·Easy to handle

·Easy data updating

·Easy record keeping

·Backup data can be easily generated

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

GURU GHASIDAS VISHWAVIDYALAYA, KONI, BILASPUR (C.G.)

Session: 2021-23

A

PROJECT REPORT

ON

RICE CLASSIFICATION USING MACHINE LEARNIG

BY

DEVENDRA MALAKAR

Enrollment No: - GGV/21/05306

M.Sc. IVth Semester (Computer Science)

The partial fulfillment of the requirement for the award of the degree

MASTER OF SCIENCE (COMPUTER SCIENCE)

UNDER THE GUIDENCE OF:	SUBMITTED TO:
DR. GIRISH KUMAR	PROF. A.K. SAXSENA
(ASSO. PROF. OF CSIT)	HOD (CSIT DEPT.)

Dr. Sanjeev Karmakar
11/08/2023
External Examiner

ABSTRACT

Rice is main food crops that all human consumes in all over the world, especially in Asian countries. It is primarily classified according to its grain shape, color etc. This paper presents the use of machine vision system for the grain classification. Machine vision has been used in a most application of grain classification to differentiate rice varieties based on special features such as shape, length, chalkiness, color and internal damage of rice. RGB color model, histogram, edge detection are some ways which have been used before to differentiate and analyzed the rice grains.In this paper also discussing and suggesting methods classifyfive varieties of rice and it also finds the percentage of purity of rice grains using the image processing technique based on several features such as grain color and shape using VGG19 CNN model.

Key Words: Rice classification, image processing, VGG19, convolutional neural network; Deep Learning, Machine Learning.

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

GURU GHASIDAS VISHWAVIDYALAYA, KONI, BILASPUR (C.G.)

Session: 2021-22

A

PROJECT REPORT

ON

DEVELOPMENT OF MCQ GENERATOR USING NLP

BY

Tushar Kashyap

Enrollment No: - GGV/21/05316

M.Sc. IVth Semester (Computer Science)

The partial fulfillment of the requirement for the award of the degree

MASTER OF SCIENCE (COMPUTER SCIENCE)

UNDER THE GUIDENCE OF:

DR. VIKAS KUMAR PANDEY

(ASST. PROF. OF CSIT)

SUBMITTED TO:

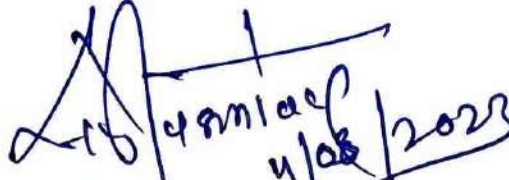**PROF. A.K. SAXSENA**

HOD (CSIT DEPT.)

CERTIFICATE

This is to certify that the project title " DEVELOPMENT OF MCQ GENERATOR USING NLP " Carried out by Tushar Kashyap, (Enroll No: GGV/21/05316) under my guidance and supervision for award of the degree Master of Science in faculty of Computer Science & IT of Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.), India.

To the best of my knowledge and belief the project: -

Embodies the work of the candidate himself has duty been completed in specified time.

1. Fulfills the requirements of the ordinance relating to M.Sc. Degree of the University.

2. Is up to the standard in respect of content and language for being referred to the examiners.

Project Guide   External Examiner   Head of Dept.

ABSTRACT

Examinations and assessments are undergoing a significant transformation, with educational institutions increasingly adopting online examinations. The shift towards objective assessments, particularly Multiple-Choice Questions (MCQs), has become prevalent. However, manually creating numerous MCQs is challenging and time-consuming. Therefore, there is a growing demand for a cost-effective and time efficient automated MCQ generation system.

This report proposes a solution that utilizes the BERT algorithm to summarize the text and perform sentence mapping to generate MCQs. Additionally, the system generates choices for the questions using wordnet, a lexical database for English. BERT's superior performance and ability to process large amounts of data quickly contribute to the system's efficiency in generating MCQs from the provided text.

In simpler terms, this paper suggests a way to automate the creation of MCQs for online exams. It uses advanced algorithms to summarize the text and generate relevant questions. The system also comes up with plausible answer choices for each question. By doing this, it reduces the time and effort required for manual question-setting, making online assessments faster and more efficient.

Moreover, the proposed automated MCQ generation system offers several advantages. It not only saves time and effort for educators and content creators but also ensures the consistency and quality of the generated questions. The use of BERT for text summarization allows the system to capture the most relevant information from the text, resulting in well-formed and meaningful MCQs.

Additionally, the utilization of wordnet for distractor generation ensures that the choices provided are plausible and challenging for students, promoting a more effective assessment of their knowledge. Overall, this system provides a practical and effective solution to meet the evolving demands of online examinations, improving the assessment process and enhancing the overall learning experience.

GURU GHASIDAS VISHWAVIDYALA, BILASPUR (C.G.)

(A Central University Established by the Central universities Act 2009 No. 25 of 2009)

Department of Computer Science and Information Technology

A

Project Report

On

"SATTELITE IMAGE CLASSIFICATION"

BY

SONALI HIRWANI

Enrollment No: GGV/18/5205

Submitted for Partial fulfilment of the requirement for the degree of

Master of Computer Science

UNDER THE GUIDANCE OF: **SUBMITTED TO:**

Dr. Amit Kumar Chandanan   PROF. A.K. Saxena

(Associate Professor)   HOD(CSIT)

CERTIFICATE OF THE GUIDE

==

This is to certify that the project entitled **"SATELLITE IMAGE CLASSIFICATION"** is a record of work carried out by **SONALI HIRWANI** (Enroll No.: GGV/18/5205 (Roll No.: 21071121) under my guidance and supervision for the award of the Degree of **M.Sc., GURU GHASIDAS VISHWAVIDYALAYA A CENTRAL UNIVERSITY BILASPUR (C.G.)**

_____

(Signature of Project Guide)

DR. AMIT KUMAR CHANDANAN

Associate Professor

_____

(Signature of H.O.D)

Prof. A.K. SAXENA

H.O.D

Dept. of CSIT

ABSTRACT

Satellite image classification of green area, water, cloudy and deserts is important for many applications including disaster response, law enforcement, and environmental monitoring. These applications require the manual identification of objects and facilities in the imagery. Because the geographic expenses to be covered are great and the analysts available to conduct the searches are few, automation is required. Yet traditional object detection and classification algorithms are too inaccurate and unreliable to solve the problem. Deep learning is a family of machine learning algorithms that have shown promise for the automation of such tasks. It has achieved success in image understanding by means of convolutional neural networks (CNNs). Also, there has been a massive growth in Deep learning in many fields such as computer vision and natural language processing. But, still there exists a lack of deep review for the datasets and methods available for scene classification from the satellite imagery. This paper focuses on enlightening the concept and evolution of Deep Learning in Satellite image classification.

Key Words: Machine Learning, Classification of Satellite Images, Deep Learning, Artificial Intelligence, Computer Vision.

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

GURU GHASIDAS VISHWAVIDYALAYA, KONI, BILASPUR (C.G.)

Session: 2021-23

A

PROJECT REPORT

ON

REAL ESTATE PRICE PREDICTION

BY

ANJU BHAGAT

Enrollment No: - GGV/18/5013

The partial fulfilment of the requirement for the award of the degree

MASTER OF SCIENCE (COMPUTER SCIENCE)

UNDER THE GUIDANCE OF :
PROF. A.K. SAXENA
HOD(CSIT)

SUBMITTED TO:
PROF. A.K. SAXENA
HOD(CSIT)

CERTIFICATE OF THE GUIDE

This is to certify that the project entitled "REAL ESTATE PRICE PREDICTION" is a record of work carried out by ANJU BHAGAT(Enroll No.: GGV/18/5013)   (Roll No.: 21071104) under my guidance and supervision for the award of the Degree of   M.Sc., GURU GHASIDAS VISHWAVIDYALAYA A CENTRAL UNIVERSITY BILASPUR (C.G.)

(Signature of H.O.D)

Prof. A.K.SAXENA

H.O.D

Dept. of CSIT

ABSTRACT

The real estate sector is an important industry with many stakeholders ranging from regulatory bodies to private companies and investors. Among these stakeholders, there is a high demand for a better understanding of the industry operational mechanism and driving factors. Today there is a large amount of data available on relevant statistics as well as on additional contextual factors, and it is natural to try to make use of these in order to improve our understanding of the industry.

Many methods have been used in the price prediction like a hedonic regression in this I am trying to predict the predict the real estate price for the future using the machine learning techniques with the help of the previous works. I have used the random forest, multiple regression and more algorithms with different tools to predict the house price So, it would be helpful for the people, so they will aware of both current and future situations, so it may avoid them in making mistakes.

The chosen techniques include Decision Tree Regressor, Gradient Boosting Regressor, Linear Regression, Random Forest Regressor.

DEPARTMENT OF COMPUTER SCIENCE AND INFORMATION TECHNOLOGY

GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR

(A Central University Established by the Central Universities Act, 2009 No. 25 of 2009)

A Major Project Report ON

"CRYPTO CURRENCY PREDICTION USING MACHINE LEARNING"

(MASTER OF COMPUTER SCIENCE)

Session 2021-23

UNDER THE SUPERVISION OF

MR. ABHISHEK PATEL

Assistant Professor

Dept. of CSIT

Guru Ghasidas University

Bilaspur (C.G.)

SUBMITTED BY:

SONALIKA PAINKRA

Enroll No. GGU/21/05315

Roll No. 21071122

MSc. (CS) 4th Sem.

CERTIFICATE OF THE GUIDE

This is to certify that the project entitled **"CRYPTO CURRENCY PREDICTION USING MACHINE LEARNING"** is a record of work carried out by **SONALIKA PAINKRA (Enroll No.-GGV/21/05315)** under my guidance and supervision for the award of the Degree of **MSc. (CS)** (MASTER OF COMPUTER SCIENCE), **Guru Ghasidas Central University Bilaspur (C.G.).** To the best of my knowledge and belief of the project

i)   Embodies the work of the candidate himself, and has not been submitted for the award of any degree.

ii)   Has duly been completed.

iii)   Fulfills the requirement of the Ordinance relating to the **MSc. (CS)** degree of the University and

iv)   Is up to the desired standard in respect of contents and is being referred to the examiners.

(Signature of the Guide)

Mr. Abhishek Patel

(Dept. of CSIT)

Recommendation of the Department

The Project work as mentioned above by here by being recommended and forwarded for examination and evaluation.

(Signature of the head of Department with seal)
Prof. A.K. SAXENA
HOD Dept. of CSIT

ABSTRACT

Bitcoin is one of the most popular and valuable cryptocurrency in the current financial market, attracting traders for investment and thereby opening new research opportunities for researchers. Countless research work shave been performed on Bitcoin price prediction with different machine learning prediction algorithms. For there search: relevant features are taken from the dataset having strong correlation with Bitcoin prices and random data chunks are then selected to train and test the model. The random data which has been selected for model training, may cause unfitting outcomes thus reducing the price prediction accuracy. Here, a proper method to train a prediction model is being scrutinized. The proposed methodology is then applied to train a simple Long Short Term Memory (LSTM) model to predict the bitcoin price for the upcoming 5 days. When the LSTM model is trained with a suitable data chunk, thus identified, sustainable results are found for the prediction. In the end of this paper, the work culminates with future improvements. Key Words: Bitcoin, Cryptocurrency, Machine Learning,   Price Prediction, LS.

GURU GHASIDAS VISHWAVIDYALAYA,

BILASPUR (CG.)

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

SESSION: 2021-2023

A PROJECT REPORT ON

" FASHION OBJECT PREDICTION"

UNDER THE GUIDANCE OF

PROF. A.K. SAXENA SIR

(HOD)

Department of Computer Science & Information Technology

GURU GHASIDAS CENTRAL UNIVERSITY BILASPUR (C.G.)

SUBMITTED BY

ANCHAL GUPTA

Enroll No:-GGV/21/05302

Roll No:-21071103

M.Sc. 4th Semester

CERTIFICATE OF THE GUIDE

This is to certify that the project entitled **"FASHION OBJECT PREDICTION"** is a record of work carried out by **ANCHAL GUPTA** (Enroll No.: GGV/21/05302) (Roll No.: 21071103) under my guidance and supervision for the award of the Degree of **M.Sc., GURU GHASIDAS VISHWAVIDYALAYA A CENTRAL UNIVERSITY BILASPUR (C.G.)**

(Signature of Project Guide)

PROF. A.K. SAXENA SIR

DEPT. OF CSIT

(Signature of H.O.D)

PROF. A.K. SAXENA SIR

DEPT. OF CSIT

ABSTRACT

The Fashion-MNIST clothing classification problem is a new standard dataset used in computer vision and deep learning.

Recently, deep learning has been used extensively in a wide range of domains. A class of deep neural networks that give the most rigorous effects in solving real-world problems is a Convolutional Neural Network (CNN). Fashion businesses have used CNN on their e-commerce to solve many problems such as clothes recognition, clothes search and recommendation. A core step for all of these implementations is image classification. However, clothes classification is a challenge task as clothes have many properties, and the depth of clothes categorization is highly complicated.

Although the dataset is relatively simple, it can be used as the basis for learning and practicing how to develop, evaluate, and use deep convolutional neural networks for image classification from scratch. This includes how to develop a robust test harness for estimating the performance of the model, how to explore improvements to the model, and how to save the model and later load it to make predictions on new data.