

PRINCIPAL



**St. Joseph's College of
Arts & Science For Women**
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Krishnagiri Dist - 635 126.
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Ref.:

Date :



St. Joseph's College of Arts
and Science for Women,
HosurKrishnagiri (Dist),
Tamil Nadu, India



REST Publisher,
Kaveripattanam
Krishnagiri (Dist),
Tamil Nadu, India Hosur,

MEMORANDUM OF UNDERSTANDING (MoU)

This Memorandum of Understanding (hereinafter called as the 'MOU') is entered into on
the year Twenty January Twenty Twenty (20.01.2020),
Between

St. Joseph's College of Arts & Science for Women, Mookandapalli, Sipcot, Hosur, the first
party, (Hereinafter referred to as 'first party').

AND

REST Publisher is registered under the Ministry of Micro, Small, and Medium
Enterprises with registration no UDYAM-TN-11-0033967. REST Labs is established on 28
February 2010, we are Publishing books, book series and Journals to develop Research Database
for the Researchers. (Hereinafter referred to as 'second party').

MEMORANDUM OF UNDERSTANDING (MOU)

S. Arockiarani

Sr. Dr. I. Arockiarani



Dr. Ramachandran

Dr. Ramachandran

This Memorandum of Understanding (MOU) is entered into on [20.01.2020], between **REST Publisher** (hereinafter referred to as "Rest Publications") represented by its director, as the second party and **St. Joseph's College of Arts and Science for Women, Hosur** (hereinafter referred to as **SJC**) represented by its Secretary & Principal, **Sr. Dr. I. Arockiarani**, as the first party.

PURPOSE

Whereas

- a) **REST Publisher** (hereinafter referred to as "**REST Publisher**") REST Publisher is registered under the Ministry of Micro, Small, and Medium Enterprises with registration no UDYAM-TN-11-0033967. REST Labs is established on 28 February 2010, We are Publishing books, book series and Journals to develop Research Database for the Researchers.
- b) REST Publisher is an ISO 9001: 2015 certified Publishing house for quality Management systems. REST Publisher is sponsored by REST Trust which is registered under the Government of India with vide number 43/2009 in the year 2009.

Whereas

- a) **St. Joseph's College of Arts and Science for Women, Hosur, Tamil Nadu** (hereinafter referred as "**SJC**") is a minority Christian college affiliated to Periyar University, Salem and managed by the FSPM Sisters, Coimbatore. We adhere to our motto "Knowledge Purifies and Charity Enhances", and empower young women with knowledge, skills, holistic approach and enable them to face the present society. The college offers various UG, PG and Research programmes.
- b) **SJC** is desirous to associate with REST Publisher on various areas as discussed in the purview of this MoU, which will be mutually beneficial to both institutions.

That, relying on the principle of good faith, by virtue of which they will carry out all the possible actions for their due fulfilment,

And relying also on their common bonds and concerns, they state their interest in strengthening their relationships through academic cooperation, and for this end they are of one accord in entering this MoU.

THEREFORE, THIS MEMORANDUM OF UNDERSTANDING WITNESSES AS

FOLLOWS

S. I. Arockiarani

Sr. Dr. I. Arockiarani



Dr. Ramachandran

Dr. Ramachandran

1. OBJECTIVE:

The parties agree that the objective of the present MoU is to establish a collaborative relationship between REST Publisher and SJC with respect to publishing articles, papers and books.

2. METHOD FOR ACHIEVING THE OBJECTIVES:

In order to achieve the afore mentioned objectives, both parties, in mutual agreement, shall collaborate and work that will specify the commitments each of them is to make for the accomplishment.

3. PUBLICATION AND COPYRIGHT

Each party and its designated and willing member or constituent will maintain ownership of its existing intellectual property rights prior to this collaboration. All copyrights for the publication of the manuscripts submitted to the REST Publisher will be vested with it even after the termination of this MoU.

4. BRANDING

Both can use each other's logo for branding purpose even on the website or any other promotional efforts.

5. CONFLICT RESOLUTION:

Any dispute resulting from the interpretation or application of this Agreement shall be settled through direct negotiation and common agreement by the persons delegated to such end by each Institution. Either party may propose to the other a modification of the Agreement at any time in writing.

6. TERM:

a). This MOU shall be effective for a period of five (5) years from the date of execution of this agreement and shall be automatically renewed thereafter for another five (5) years unless a written notice to terminate or amend these agreements given to the other party six (6) months in advance.

b). It is expressly agreed that neither party shall be liable for damages that they might cause each other as a result of a forceful suspension of a collaboration program. Causes for forceful suspension must be explicitly set forth in the action plans.

c). This agreement may, at any time during its period of validity, be terminated by either party upon one month's prior notice to the other in writing.

Sr. Dr. I. Arockiarani

Sr. Dr. I. Arockiarani



Dr. Ramachandran

Dr. Ramachandran

7. CONFIDENTIALITY:

- a) Each of the parties accepts and declares that information from the other party is of confidential nature, is the exclusive property of the latter and has been or will be disclosed to the former solely with the purpose of enabling the full accomplishment of the present Agreement. For this reason, every piece of information provided by one party to the other before signing this Agreement and/or during its performance must be kept confidential and therefore may not be disclosed to any third parties.

8. AMENDMENTS:

- a) The parties may amend or amplify this Agreement through agreements in writing to that effect. Said amendments or additions will be binding on the signatories as of the date of their signature. The parties may not assign, in whole or in part, the performance of the present MoU to any third party, except through prior and express authorization in writing by both of them. And since both parties are in agreement regarding the content of the present document, and as a token of conformity, we sign it in two counterparts, both of which will be considered originals.

AGREED:



Dr. Ramachandran

Chief Editor

Rest Publisher



Witnesses



Sr. Dr. I. Arockiarani

Secretary and Principal

**St. Joseph's College of Arts and
Science for Women, Hosur.**



Vice Principal

**St. Joseph's College of Arts and
Science for Women, Hosur.**



Sr. Dr. I. Arockiarani



Dr. Ramachandran



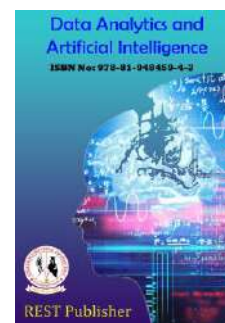
Data Analytics and Artificial Intelligence

Vol: 3(2), 2023

REST Publisher; ISBN: 978-81-948459-4-2

Website: <http://restpublisher.com/book-series/daai/>

DOI: <https://doi.org/10.46632/daai/3/2/7>



Software Defect Prediction Using Machine Learning Techniques

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Abstract. Software defect prediction provides development groups with observable outcomes while contributing to industrial results and development faults predicting defective code areas can help developers identify bugs and organize their test activities. The percentage of classification providing the proper prediction is essential for early identification. Moreover, software-defected data sets are supported and at least partially recognized due to their enormous dimension.

Keywords: defect prediction, machine learning methods, quality software.

1.INTRODUCTION

Nowadays developing a software system is a difficult process that involves planning, analyzing, designing, implementing, testing, in targeting, and maintenance. A software engineer's work is developing a system in time with a limited budget which is done in the planning phase. While doing the development process we can have a few defects like not proper design, where the logic is poor, data handling is improper, etc. and these defects cause errors which lead to re-do the work, increasing in development and cost of maintenance. These all are responsible for the decrease in customer satisfaction. In this point of view, faults are grouped based on sternness, corrective and advance actions are taken as per the sternness defined. Problem Statement In the past decade, humans have progressively focused on software-based systems in which software quality is regarded as the most critical element in user functionality. Because of the vast production of application software, software quality remains an unresolved problem that gives inadequate output for industrial and private applications. Designs of defect prediction are commonly utilized by industries and Such models help in predicting faults, estimating effort testing software reliability, hazard analysis, etc. during the growth stage. Proposed Work: We propose an efficient system, which belongs to the traditional machine learning concept. A dataset is used to train the model hence less execution time and also yield efficient results. One of typically using traditional machine algorithm. Advantages: More Efficient, High accuracy.

2.LITERATURE SURVEY

Integrated Approach to Software Defect Prediction: Software defect prediction provides action able outputs to software teams while contributing to industrial success. Empirical studies have been conducted on software defect prediction for both cross project and within-project defect prediction. However, existing studies have yet to demonstrate method of predicting the number of defects in an upcoming product release. This paper presents such a method using predictor variables derived from the defect acceleration, namely, the defect density, defect velocity, and defect introduction time, and determines the correlation of each predictor variable with the number of defects. We report the application of an integrated machine learning approach based on regression models constructed from These predict or variables. An experiment was conducted on ten different data sets collected from the PROMISE repository, containing 22838 instances. There gression model constructed as a function of the average defect velocity achieved an adjusted R-square of 98.6%, with a p -value of < 0.001 . The average defect velocity is strongly positively correlated with the number of defects, with a correlation coefficient of 0.98. Thus, it is demonstrated that this technique can provide a blue print for program testing to enhance the effectiveness of software development activities.

A Review on Software Defect Prediction Techniques Using Product Metrics: Presently, complexity and volume of software systems are increasing with a rapid rate. In some cases it improves performance and brings efficient outcome, but unfortunately in several situation sit leads to elevated cost for testing, meaning less outcome and inferior quality, even there is no trust worthiness of the products. Fault prediction in software plays a vital role in enhancing the software excellence as well asit helps in software testing to decrease the price and time. Conventionally, to describe the difficulty

and calculate the duration of the programming, software metrics can be utilized. To forecast the amount of faults in module and utilizing software metrics, an extensive investigation is performed. With the purpose of recognizing the cause's which importantly enhance the fault prediction models related to product metrics, this empirical research is made. This paper visits various software metrics and suggested procedures through which software defect prediction is enhanced and also summarizes those techniques.

3.SYSTEM DESIGN AND MODELING

System Architecture design-identifies the overall hyper media structure for the Web App. Architecture design is tied to the goals establish for a Web App, the content to be presented, the users who will visit, and then aviation philosophy that has been established. Content architecture, focuses on the manner in which content objects and Structured for presentation and navigation. Web App architecture, addresses the manner in which the application is structure to manage user interaction, handle internal processing tasks, effect navigation, and present content. Web App architecture is defined within the context of the development environment in which the application is to be implemented.

Flowchart: It is important to complete all tasks and meet deadlines. There are many project management tools that are available to help project managers manage their tasks and schedule and one of the mis the flowchart. A flow chart is one of the seven basic quality tools used in project management and it displays the actions that are necessary to meet the goals of a particular task in the most practical sequence. Also called as process maps, this type of tool displays a series of steps with branching possibilities that depict one or more inputs and transforms them to outputs. The advantage of flowcharts is that they show the activities involved in a project including the decision points, parallel paths, branching loops as well as the overall sequence of processing through mapping the operational details within the horizontal value chain. Moreover, this particular tool is very used in estimating and understanding the cost of quality for a particular process.

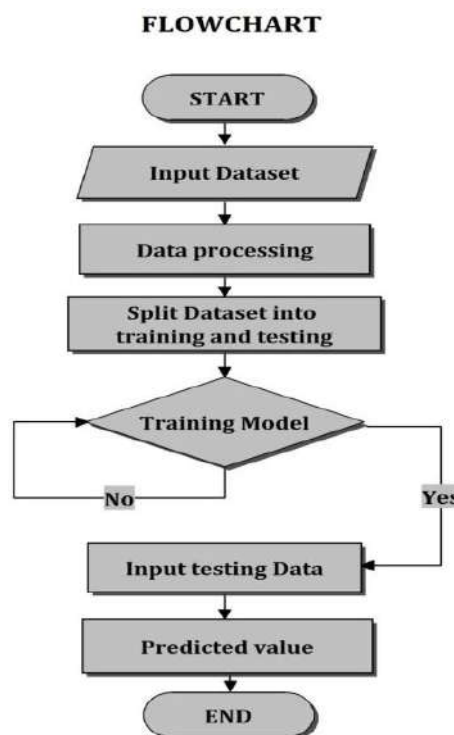


FIGURE 1. Flowchart

4.MODULES

Data collection and preprocessing: In this module data are uploading in top and as data frame and it will enter into pre-processing to correct the missing data.

Training data and testing data split: Once data are preprocessed this system has to split data into division training data and testing data. Usually training should be large for accurate result.

Training process methodology: In this method the training data set with label has give to any one of the machine learning technique like random forest, this module will extract the feature from the label data keep it ready prediction process.

Prediction methodology: In this method the test data without label has to give prediction model which generate using training method this prediction module accept the test data and process. Finally it will give the prediction for Features.

Data visualization: This method uses matplotlib python tool for producing graph from training data as well as testing data set.

5. ANALYSIS

In this final phase, we will test our classification model on our prepared data set and also measure the performance on our dataset. To evaluate the performance of our created classification and make it comparable to current approaches, we use accuracy to measure the effectiveness of classifiers. After model building, knowing the power of model prediction on a new instance, is very important issue. Once a predictive model is developed using the historical data, one would be curious as to how the model will perform on the data that it has not seen during the model building process. One might even try multiple model types for the same prediction problem, and then, would like to know which model is the one to use for the real-world decision making situation, simply by comparing them on their prediction performance (e.g., accuracy). To measure the performance of a predictor, there are commonly used performance metrics, such as accuracy, recall etc. First, the most commonly used performance metrics will be described, and then some famous estimation methodologies are explained and compared to each other. "Performance Metrics for Predictive Modeling In classification problems, the primary source of performance measurements is a coincidence matrix (classification matrix or a contingency table)". Above figure shows a coincidence matrix for a two-class classification problem. The equations of the most commonly used metrics that can be calculated from the coincidence matrix are also given in Figure 2.

		True Class	
		Positive	Negative
Predicted Class	Positive	True Positive Count (TP)	False Positive Count (FP)
	Negative	False Negative Count (FN)	True Negative Count (TN)

FIGURE 2. coincidence matrix

$$\begin{aligned}\text{True Positive Rate} &= \frac{TP}{TP + FN} \\ \text{True Negative Rate} &= \frac{TN}{TN + FP} \\ \text{Accuracy} &= \frac{TP + TN}{TP + TN + FP + FN} \\ \text{Precision} &= \frac{TP}{TP + FP} \\ \text{Recall} &= \frac{TP}{TP + FN}\end{aligned}$$

FIGURE 3. Confusion matrix and formulae

As being seen in above figure, the numbers along the diagonal from upper-left to lower-right represent the correct decisions made, and the numbers outside this diagonal represent the errors. "The true positive rate (also called hit rate or recall) of a classifier is estimated by dividing the correctly classified positives (the true positive count) by the total positive count. The false positive rate (also called a false alarm rate) of the classifier is estimated by dividing the incorrectly classified negatives (the false negative count) by the total negatives. The overall accuracy of a classifier is estimated by dividing the total correctly classified positives and negatives by the total number of samples. The architecture of a convnet is analogous to that of the connectivity pattern of Neurons in the Human Brain and was inspired by the organization of the Visual Cortex. Individual neurons respond to stimuli only in a strict region of the visual field known as the Receptive Field. A collection of such fields overlap to cover the entire visual area.

Flexibility: Sometimes we just don't want to use what is already there but we want to define something of our own (for example a cost function, a metric, a layer, etc.). Although Keras2 has been designed in such a way that you can implement almost everything you want but we all know that low-level libraries provide more flexibility. Same is the case with TF. You can tweak TF much more as compared to Keras.

Functionality: Although Keras provides all the general purpose functionalities for building Deep learning models, it doesn't provide as much as TF. Tensor Flow offers more advanced operations as compared to Keras. This comes very handy if you are doing a research or developing some special kind of deep learning models.

Threading and Queues: Queues are a powerful mechanism for computing tensors asynchronously in a graph. Similarly, you can execute multiple threads for the same Session for parallel computations and hence speed up your operations.

Debugger: Another extra power of TF. With Tensor Flow, you get a specialized debugger. It provides visibility into the internal structure and states of running Tensor Flow graphs. Insights from debugger can be used to facilitate debugging of various types of bugs during both training and inference.

Control: The more control you have over your network, the better understanding you have of what's going on with your network. With TF, you get such a control over your network. You can control what ever you want in your network. Operations on weights or gradients can be done like a charm in TF.

Numpy: Numpy, which stands for Numerical Python, is a library consisting of multidimensional array objects and a collection of routines for processing those arrays. Using NumPy, mathematical and logical operations on arrays can be performed. This tutorial explains the basics of NumPy such as its architecture and environment. It also discusses the various array functions, types of indexing, etc. An introduction to Matplotlib is also provided. All this is explained with the help of examples for better understanding. Numpy is a Python package. It stands for 'Numerical Python'. It is a library consisting of multidimensional array objects and a collection of routines for processing of array.

Numeric: the ancestor of NumPy, was developed by Jim Hugunin. Another package Numarray was also developed, having some additional functionality. In 2005, Travis Oliphant created NumPy package by incorporating the features of Num array into Numeric package. There are many contributors to this open source project.

Operations using Num Py Using Num Py, a developer can perform the following operations.

- Mathematical and logical operations on arrays.
- Fourier transforms and routines for shape manipulation.
- Operations related to linear algebra. Num Py has in-built functions for linear algebra and random number generation.

Num Py A Replacement for Mat Lab. Num Py is often used along with packages like SciPy and Matplotlib (plotting library). This combination is widely used as a replacement for Mat Lab, a popular platform for technical computing.

6. CONCLUSION

The main goal of this research is to forecast software problems using information-mining techniques. Additionally, this area has become an important area of research where a variety of techniques have been investigated to improve the effectiveness of identifying software flaws or foreseeing vulnerabilities. The problem of classification accuracy for large datasets was handled with using feature reductions and classification. For the purpose of identifying program defects, the neural network classification method is employed. The results of the research show that the suggested strategy is effective. If there is no approach for selecting features and anytime the strategies for selecting features are used, there is no discernible variance in classifier accuracy. While there is no set of features and when the methods for choosing the function are being employed, there is a gap in the classifiers accuracy. As a result, it is seen that applying feature selection strategies reduces the time and space difficulties for defect prediction without lowering prediction accuracy.

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MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding (hereinafter called as the 'MOU') is entered into on the year Twenty-One February Twenty Twenty (21.02.2020),

Between



AR RESEARCH PUBLICATIONS

And



St. JOSEPH'S COLLEGE OF ARTS AND SCIENCE FOR WOMEN, HOSUR

MEMORANDUM OF UNDERSTANDING (MOU)

This Memorandum of Understanding (MOU) is entered into on [21.02.2020], between **A R RESEARCH PUBLICATIONS** (hereinafter referred to as "AR Publications") represented by its Director, as the first party and **St. Joseph's College of Arts and Science for Women, Hosur** (hereinafter referred to as **SJC**) represented by its Secretary & Principal, **Sr. Dr. I. Arockiarani**, as the second party.

PURPOSE

Whereas

- a) **AR RESEARCH PUBLICATIONS** (hereinafter referred to as "**AR Publications**") is a 10 years 6 months old Proprietorship Firm incorporated on 01-Jun-2013, having its registered office located at 3/186, Arrp, Govindpuri, Muradnagar, Gali No-3, Modinagar, Uttar Pradesh. The major activity of A R Research Publication is Services: Sub-classified into Publishing activities and is primarily engaged in the Publishing of journals and periodicals.

For A R Research Publications

Proprietor

AR RESEARCH PUBLICATIONS
Editor-in-Chief


21/02/2020

Sr. Dr. I. Arockiarani
Secretary & Principal



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b) AR RESEARCH PUBLICATIONS is desirous to associate with SJC on various areas as discussed in the purview of this MoU, which will be mutually beneficial to both organizations.

Whereas

a) St. Joseph's College of Arts and Science for Women, Hosur, Tamil Nadu (hereinafter referred as "SJC") is a minority Christian college affiliated to Periyar University, Salem and managed by the FSPM Sisters, Coimbatore. We adhere to our motto "Knowledge Purifies and Charity Enhances", and empower young women with knowledge, skills, holistic approach and enable them to face the present society. The college offers various UG, PG and Research programmes.

b) SJC is desirous to associate with AR RESEARCH PUBLICATIONS on various areas as discussed in the purview of this MoU, which will be mutually beneficial to both institutions.

That, relying on the principle of good faith, by virtue of which they will carry out all the possible actions for their due fulfilment,

And relying also on their common bonds and concerns, they state their interest in strengthening their relationships through academic cooperation, and for this end they are of one accord in entering this MoU.

THEREFORE, THIS MEMORANDUM OF UNDERSTANDING WITNESSES AS FOLLOWS

1. OBJECTIVE:

The parties agree that the objective of the present MoU is to establish a collaborative relationship between AR Publications and SJC with respect to publishing articles, papers and books.

2. METHOD FOR ACHIEVING THE OBJECTIVES:

In order to achieve the afore mentioned objectives, both parties, in mutual agreement, shall collaborate and work that will specify the commitments each of them is to make for the accomplishment.

3. PUBLICATION AND COPYRIGHT

Each party and its designated and willing member or constituent will maintain ownership of its existing intellectual property rights prior to this collaboration.

For A R Research Publication
[Signature]
Proprietor

AR RESEARCH PUBLICATIONS
Editor-in-Chief

[Signature]

Sr. Dr. I. Arockiarani
Secretary & Principal

All copyrights for the publication of the manuscripts submitted to the AR Publications will be vested with it even after the termination of this MoU.

4. BRANDING

Both can use each other's logo for branding purpose even on the website or any other promotional efforts.

5. CONFLICT RESOLUTION:

Any dispute resulting from the interpretation or application of this Agreement shall be settled through direct negotiation and common agreement by the persons delegated to such end by each Institution. Either party may propose to the other a modification of the Agreement at any time in writing.

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- b). It is expressly agreed that neither party shall be liable for damages that they might cause each other as a result of a forceful suspension of a collaboration program. Causes for forceful suspension must be explicitly set forth in the action plans.
- c). This agreement may, at any time during its period of validity, be terminated by either party upon one month's prior notice to the other in writing.

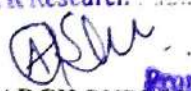
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- a) The parties may amend or amplify this Agreement through agreements in writing to that effect. Said amendments or additions will be binding on the signatories as of the date of their signature. The parties may not assign, in whole or in part, the performance of the present MoU to any third party, except through prior and express authorization in writing by both of them.

And since both parties are in agreement regarding the content of the present document, and as a token of conformity, we sign it in two counterparts, both of which will be considered originals.


AR RESEARCH PUBLICATIONS
Editor-in-Chief


Sr. Dr. I. Arockiarani
Secretary & Principal

AGREED:

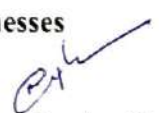



Dr. Atul Sharma (CEO)
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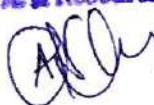

21/2/2020

Sr. Dr. I. Arockiarani
Secretary and Principal
St. Joseph's College of Arts and
Science for Women, Hosur.

Witnesses


Reshu Gupta (Gen. Manager)
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Sr. J. Sagaya Mary
Vice Principal
St. Joseph's College of Arts and
Science for Women, Hosur.

AR Research Publication


Proprietor

AR RESEARCH PUBLICATIONS
Editor-in-Chief


21/02/2020

Sr. Dr. I. Arockiarani
Secretary & Principal

21.02.2020

A Wi-Fi Enabled Android Smart ID System with Fingerprint Authentication

Bobby.S,

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ABSTRACT— In this paper, we plan a framework that takes employees attendance and the attendance records are kept up naturally in an association. Utilizing smart phones like Android Technology the association will have the option to gauge participation effectively by our structured versatile application. The principle objective is, on a keen participation framework where an android gadget will be utilized as a savvy ID card. Likewise, the whole working spot will be a Wi-Fi zone. Along these lines, the association or detachment of the android gadget(Smart ID card) to the switch will decide if a worker is available in the working spot or not. A counter will be there into the framework to tally the aggregate sum of time a representative spends in the working spot. The top-level plan of the framework incorporates stamping participation with the assistance of a unique mark sensor module and the remote correspondence innovation of advanced mobile phone empowers the data to move from the present customer to a remote database server, any place the system extends is accessible. The versatile application we have endeavoured to construct will require interfacing with the web through Wi-Fi (Wireless Fidelity) innovation. In the first place, a representative should be enlisted in the unique mark sensor module and the switch. Representatives will initially need to pursue this and afterward, they can enlist their participation by first signing in with the assistance of a cell phone to the server. In this application, new representatives subtleties can enlist, erase data about a specific worker, alter some data and so on.

Keywords— *AES, Android, Fingerprint sensor module, Smart phones, Web Server, Wi-Fi, Mobile application.*

I.INTRODUCTION

These days, nearly every institution or organization uses very basic methods for tracking attendance and recording working hours. affiliation. Usually, there are two types of the accessible attendance framework.

1) Manual; 2) Automatic.

The framework for the manual comprises the application of paper or book pages when recording attendance, the employee conclude, and managers give the order for precision Because sheets could get damaged or lost, this method might be flawed. Furthermore, the extraction of relevant data as well as the handbook The computation of working time is extremely tiresome. It requires an extra employee to Verify the worker's status and the timing of various workers, which includes overhead costs for the organization. Biometrics are defined as any ensuing quantitative, potent, and specific physical characteristics or unique quality that can be used to identify a person or validate the assertiveness in a person's personality.

Furthermore, it is the science and[1] invention of verification through the estimation of individuals' physiological or characteristics of behavior. An unusual digit impression scanner will be used to



SELECTIVE IMPUTATION TECHNIQUES IN RECOMMENDER SYSTEMS

Mrs. M. Suguna

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ABSTRACT:

The swift advancement of information technology has led to the emergence of online businesses, where things are sold through multiple websites. Recommender systems assist users in choosing worthwhile products. Sparsity is the primary issue with such a system. We suggest a preprocessing mechanism in this paper. and two techniques are applied to impute missing data before the optimal technique is chosen based on time complexity.

Keywords: *Imputation, Singular Value Decomposition, Principal Component Analysis, Recommender System, Collaborative Filtering*

I. INTRODUCTION:

The use of computers and other communications technology for data transmission and manipulation, usually within the framework of a business or other entity, is known as information technology. An analytical technique called data mining (DM) aims to glean valuable information from vast volumes of data. It covers a range of strategies, including preprocessing, and supervised and unsupervised learning techniques. A recommender system gives users recommendations for products to buy. Another name for this kind of system is a suggested system. Generally speaking, recommender systems can be divided into three categories: content-based, collaborative filtering (CF), and hybrid. There are two types of collaborative filtering systems: item-based and user-based.

The ratings provided by users in a user-based CF system are shown as a $(M \times N)$ user-item matrix, the elements of which are the ratings provided by M users for the corresponding N items. The user-item matrix is often sparse. This paper has been organized as follows. Section 2 discusses the related works in detail. Section 3 discusses about data format, row elimination, column elimination, and imputation of missing values. Section 4 discusses the experimental results. Section 5 concludes the analysis. Section 6 specifies the future enhancement.

II. RELATED WORKS:

Basic ideas including data format, CF methodologies, CF tasks like recommendation and prediction, similarity measures, and evaluation metrics utilized in the CF system were



AN OVERVIEW ON FINANCIAL MANAGEMENT TECHNIQUES FOR ORGANIZATION EFFECTIVENESS

Mrs. L. MANJULA

Assistant Professor, Department of Commerce

St. Joseph's College of Arts and Science for Women, Hosur

ABSTRACT

The goal of financial management is to maximize equity shareholders' wealth. While any business's primary goal is to maximize profits, financial management places greater emphasis on allocating profits to equity shareholders. Planning, managing, arranging, and controlling the company's financial resources is known as financial management. Any financial manager's biggest task is to possess in-depth understanding of the acquisition, distribution, and administration of company funds. Any organization's ability to succeed hinges on its ability to manage finances effectively. The focus of this study has been on the different financial management strategies. The information is gathered from data and secondary sources. The document improves the quality of financial management information and gives the reader a comprehensive understanding of the key ideas and methods covered in the field.

Keywords: Finance, procurement, management, efficient, organization, knowledge, wealth.

1. INTRODUCTION

Any business's lifeblood is its finances. Every entrepreneur's goal in the past was to increase profits and grow their company. However, given the current business environment, a company's ability to survive largely rests on how well its stakeholders are doing. The longevity of a business is contingent upon the contentment of all its stakeholders. Therefore, in recent years, financial management has become more and more important. Finance managers possess extensive training and are well-versed in the most recent approaches and strategies to be used in the company's financial operations. The financial managers are able to make the best decisions on the appropriate use of the company's funds thanks to the variety of financial management strategies and procedures employed in this study.



5th International Conference on Research Developments in Arts, Social Science, & Humanities (ASH-2023)

Venue: The Indian Council of Social Science Research, Punjab University Campus, Chandigarh

Date: 30th July 2023

ISBN : 978-93-91535-56-8

THE DEVELOPMENT, EVOLUTION, AND CONTRIBUTIONS OF HUMAN RESOURCE MANAGEMENT

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ABSTRACT.

The Studies confirm that without placing a high priority on human resource development and management (HRM), a high-performance organization (HPO) cannot exist (HRD). Nonetheless, HRM and HRD haven't always been paired well. The progression of HRD from its foundation in human knowledge transference to HRM and current HRD operations shows that organizations' now need to concentrate employee development on flexibility, innovation, and capability due to increased environmental, social, and political pressures. The review that follows demonstrates how crucial HRM and HRD are to organizational leadership. Additionally, the literature reviewed establishes a strong correlation between the qualities of an HPO and the competencies imparted via efficient HRM and HRD cooperation.

Keywords: *high performance organization (HPO), human resource management (HRM), human resource development (HRD)*

I. Introduction

Every business activity, from financial transactions to operational choices and beyond, is centred on an organization's most valuable resource: its people. Therefore, human resources bear a large portion of the blame for an organization's success or failure (de Waal, 2007; Haslinda, 2009). Human resources have worth, but this is not always fully acknowledged. Actually, hiring, paying employees, and the legal aspects of workforce management are often the extent to which human resource development

PRINCIPAL



**St. Joseph's College of
Arts & Science For Women**

Mookandapalli, 'SIPCOT' Hosur Post,
Krishnagiri Dist - 635 126.
Ph.: 04344 - 274453, 98949 05338

Ref.:

Date :

MEMORANDUM OF UNDERSTANDING (MOU)

Between



**ST. JOSEPH'S COLLEGE OF ARTS AND SCIENCE FOR WOMEN,
HOSUR**

(Affiliated to Periyar University, Salem)

And

JEEVITHA BEAUTY ACADEMY, HOSUR

Memorandum of Understanding

is made and entered into

On 03rd Day of May 2021, by and between the

S. Aseckiarani

Suf

St. Joseph's College of Arts and Science for Women, Hosur

St. Joseph's College of Arts and Science for Women, Hosur, Tamil Nadu is a minority Christian college affiliated to Periyar University, Salem, started in the year 2006 and managed by the FSPM Sisters, Coimbatore. The College adheres to the motto "Knowledge Purifies and Charity Enhances", and empowers young women with knowledge, skills and character development.

(FIRST PARTY)

and

Jeevitha Beauty Academy, Hosur

Jeevitha Beauty Academy, Hosur is a highly skill-oriented centre which teaches the basic skills and knowledge required to provide various beauty services, such as skin care, makeup, hair styling and nail art.

(SECOND PARTY)

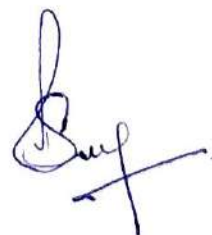
Whereas the First Party and the Second Party have made this Memorandum of Understanding

- Collaborate on the creation of certification programs (related to Beauty Therapy).
- Provide recognized certifications that enhance students' employability and to validate the skills of participants.
- To provide training on skills like threading, clean up, bleach, facial, pedicure, head massage, waxing, facial strokes, skin anatomy, basic bridal makeup, spa and hair care.
- To develop the skills to become an entrepreneur.
- To enhance creativity and confidence by exploring different styles and techniques of beauty treatments.

TERM:

- a) This MOU shall be effective for a period of one (1) year from the date of execution of this agreement unless a written notice to terminate or amend these agreements given to the other party six (6) months in advance.
- b) It is expressly agreed that neither party shall be liable for damages that they might cause each other as a result of a forceful suspension of a collaboration program. Causes for forceful suspension must be explicitly set forth in the action plans.
- c) This agreement may, at any time during its period of validity, be terminated by either party upon one month's prior notice to the other in writing.

S. Arachianani



CONFIDENTIALITY:

Each of the parties accepts and declares that information from the other party is of confidential nature, is the exclusive property of the latter and has been or will be disclosed to the former solely with the purpose of enabling the full accomplishment of the present Agreement. For this reason, every piece of information provided by one party to the other before signing this Agreement and/or during its performance must be kept confidential and therefore may not be disclosed to any third parties.

AMENDMENTS:

The parties may amend or amplify this Agreement through agreements in writing to that effect. Said amendments or additions will be binding on the signatories as of the date of their signature. The parties may not assign, in whole or in part, the performance of the present MOU to any third party, except through prior and express authorization in writing by both of them.

And since both parties are in agreement regarding the content of the present document, and as a token of conformity, we sign it in two counterparts, both of which will be considered originals.

Designated Representatives

For and on behalf of St. Joseph's College of Arts and Science for Women


03/5/2021

Rev. Sr. Dr. I. Arockiarani

Principal

St. Joseph's College of Arts and Science for Women, Hosur

For and on behalf of Jeevitha Beauty Academy

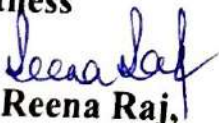

Ms. Sasipriya

Trainer

Jeevitha Beauty Academy

No.2/261-18, Vignesh Nagar,
Kumutha Palli, Hosur

Witness



Dr. Reena Raj,

HOD, Department of Commerce,
St. Joseph's College of Arts and Science for Women, Hosur

PERMISSION LETTER

FROM

Date: 11/08/2021

Dr. Reena Raj,
Head, Department of Commerce,
St. Joseph's College of Arts and Science for Women,
Hosur-635126

TO

The Principal,
St. Joseph's College of Arts and Science for Women,
Hosur-635126

Subject: Permission Letter for Conducting Guest Lecture on Essential Skincare.

Respected Madam,

I kindly request you to grant permission to conduct a Guest Lecture on Essential Skincare for B.Com students. This workshop aims to educate participants on the importance of skincare and provide essential tips and techniques for maintaining healthy and radiant skin. I request you to support and permit us to bring this to reality.

Thanking you,

Yours Sincerely



(Dr.REENA RAJ)

Head and Assistant Professor
Department of Commerce
St. Joseph's College of Arts and Science for Women
SIPCOT, Hosur - 635 126.



PRINCIPAL
ST. JOSEPH'S COLLEGE OF ARTS
& SCIENCE FOR WOMEN
Mookandapalli, Sipcot,
HOSUR - 635 126, Krishnagiri - Dist.

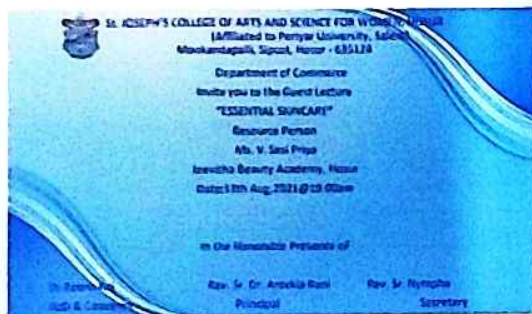


ST. JOSEPH COLLEGE OF ARTS AND SCIENCE FOR WOMEN, HOSUR

DEPARTMENT OF COMMERCE ONE DAY GUEST LECTURE ON ESSENTIAL SKINCARE BY JEEVITHA BEAUTY ACADEMY

REPORT

The Department of Commerce organized a skincare essential for 10 students. The daily life, taking care of one's skin often takes a backseat; however, neglecting skin care can lead to various issues such as acne, premature aging, and dull complexion.



proper skin care can prevent common issues such as breakouts and dryness, ensuring that you look and feel your best at all times.

The students came to know how to be successful skin types can be categorized as oily, dry, combination, or sensitive, Cleansing, Moisturizing, Sun Protection, Exfoliation, Serums and Treatments, Eye Care, Face Masks, Hydration, Healthy Diet and Stress Management. Developing a customized skincare routine tailored to your skin type and concerns is key to

achieving optimal results. Consult with a skincare professional at Jeevitha Beauty Parlor to assess your skin and receive personalized recommendations for products and treatments suited to your needs.



In conclusion, prioritizing skincare is essential for Commerce students to maintain healthy and radiant skin despite their busy schedules. Daily routines and seeking personalized guidance from skincare experts, Commerce students can achieve glowing complexion and confidence that will serve them well in their academic and professional pursuits.



SIGNATURE OF THE HOD:

S. Sasi Priya
Head and Assistant Professor
Department of Commerce
St. Joseph's College of Arts and Science for Women
SIPCOT, Hosur - 635 126.

SIGNATURE OF THE PRINCIPAL:

S. Sasi Priya
PRINCIPAL
ST. JOSEPH'S COLLEGE OF ARTS
& SCIENCE FOR WOMEN
Mookandapalli, SIPCOT,
HOSUR - 635 126, Krishnagiri - Dist.

St. Joseph's College of Arts and Science For Women, Hosur
Department Of Commerce
ESSENTIAL SKINCARE

Attendance with Feedback

S.No	Register No	Name of the Students	Feedback	Signature of the Student
1	20UCM4105	ANISHA SIDDIQ	Useful	Anisha Siddiq
2	20UCM4106	ANJALI N	Good	Anjali N
3	20UCM4107	ANUPAMA NANCY J	Informative	Anupama Nancy
4	20UCM4110	ASFIYA KHANAM S	Useful	Asfiya
5	20UCM4111	ASWANA K	Good	Aswana K
6	20UCM4112	BANDAVYA LAKSHMI D S	Informative	Bandavya Lakshmi D S
7	20UCM4113	BHAVANI B	Useful	B. Bhavani
8	20UCM4114	BHUVANESWARI R	Useful	Bhuvaneshwari R
9	20UCM4115	CHITRA K	Good	K. Chitra
10	20UCM4116	DEEPIKA NAGARAJ	Interactive	Deepika N.


Signature of the HOD

Head and Assistant Professor
Department of Commerce
St. Joseph's College of Arts and Science for Women
SIPCOT, Hosur - 635 126.


Signature of the Principal
PRINCIPAL

ST. JOSEPH'S COLLEGE OF ARTS
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