

# Predicting the Trends of Quality-Oriented Jobs

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**Abstract:-** In this paper, it focus on studying the job prediction using different deep neural network models. To predict the future jobs based on Dataset which contains the previous years job opportunities, locations, packages, eligibility criteria and sectors. It focuses that in future which Technology place a major role to get the quality jobs in several sectors. And also analyse the required knowledge to get a qualified jobs based on eligibility. In future how the graduates get jobs based on their skills with the help of the dataset which collects from the different job sites like first naukri, linkedin, Monster etc. The trends of quality oriented jobs can be analyse and easily predict the future job opportunities by applying machine learning techniques.

job prediction to help them effectively address the aforementioned issues. Job prediction is a classification task using several techniques in machine learning and natural language processing trying to predict a job based on job descriptions including job requirements, knowledge, skills, interests, etc. In this paper, we focus on studying on job descriptions collected specifically from the online finding-job sites. In particular, we are interested in IT job descriptions. The task is presented as follows.

- Input: Given an IT job description collected from the online finding-job sites.
- Output: A predicted job title for this description.

## I. INTRODUCTION

In recent years, the strong development of Information Technology (IT) has led to a variety of job positions as well as the requirements of each type of IT job. With the diversity, students or job seekers find the job suitable for their knowledge and skills accumulated at the school or in the process of working are challenging. Also, the recruitment company must filter the profiles of the candidates manually to choose the people suitable for the position they are recruiting, causing a lot of time while the number of applications could be increased to hundreds or thousands. Therefore, we would like to study the task of IT

## II. PROPOSED SYSTEM

This illustrates that predict the job opportunities, vacancies in the upcoming years based on the dataset collects from the different job sites or job portals like linked in, monster, first naukri etc. The dataset contains the details of maximum 10000 companies .All the data are classified based on the company and job roles. To predict the scope in a job after 5 years. It shows the level of vacancies and opportunities in a visual format with low, moderate and high.

The ability to predict the future jobs for the future generation students based on their skills, eligibility and their graduations.

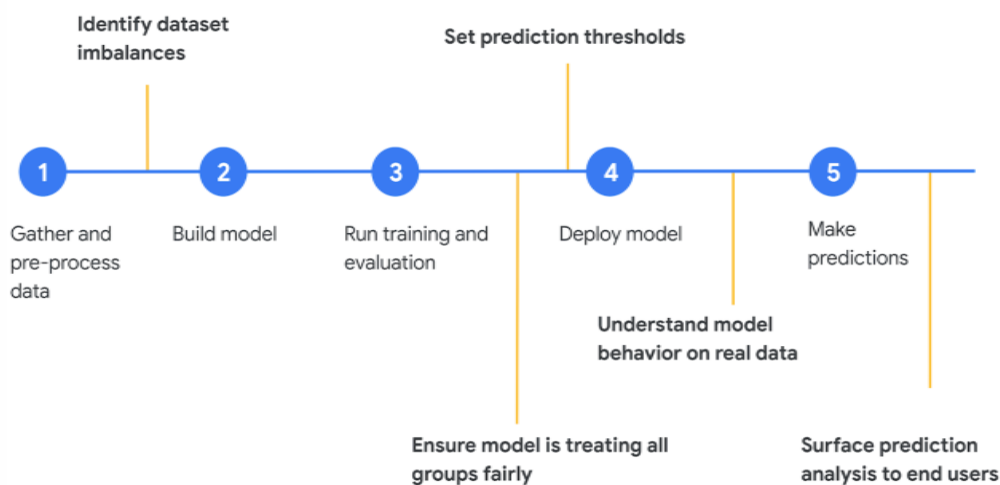


Fig 1

### III. DESCRIPTION

The first step is to collect the dataset from the various job sites .All the details are gathered and preprocessed. Dataset are separated based on the companies. Then the model has been created and built with the help of machine learning technique. The model is used to predict the future jobs after 5 years. The inputs given to the built model are job title, current vacancies, layoff percentage, new job opportunities of various companies. Before deploy the model ensures that the model treats all the groups fairly. Deploy the model and set the prediction process. The output of the prediction process is the job opportunities and shows the level of vacancies with low, moderate and high.

### IV. METHODOLOIES

➤ *Machine Learning*

**Machine learning** is an application of artificial intelligence that provides the ability to automatically learn and works based on the learning. It works automatically without the human interactions. It focuses on the development of computer programs based on the accessed data and learn automatically.

➤ *Weka Tool*

Weka is a collection of machine learning algorithms for data mining tasks. Weka tool is used to predict the future based on the datasets. **Weka** contains regression, classification and visualization.

➤ *K-NN Algorithm*

K nearest neighbors is a simple algorithm that can store all classified data based on the similarity. It is a non-parametric technique and used in statistical analysis and estimation, pattern recognition in early days.

The K-Nearest Neighbors algorithm is a simple and easy to implement machine learning algorithm that can be used to solve the classification problems.

➤ *Dataset*

In this paper, we use the dataset for IT job prediction . This dataset consists of maimum 10,000 companies details which contains job titles, current vacancies, layoff percentage, new job opportunities. And also contains the eligibility criteria, packages based on the job roles and the previous year data which are collected from the different job sites. The dataset should be balanced one. The process of collecting the dataset is a difficult task because the dataset should be clear to run the built model.

➤ *Experiments*

To predict the quality oriented jobs based on the locations, sectors and eligibility criteria. This includes to predict the future trending technologies and required knowledge for the particular jobs, to predict that how many of them have jobs and how many of them doesn't get the jobs, in future how the graduates get jobs based on their skills with the help of the dataset which collects from the different job sites like first naukri, linkedin, Monster etc.An Overview is explained in figure 2.

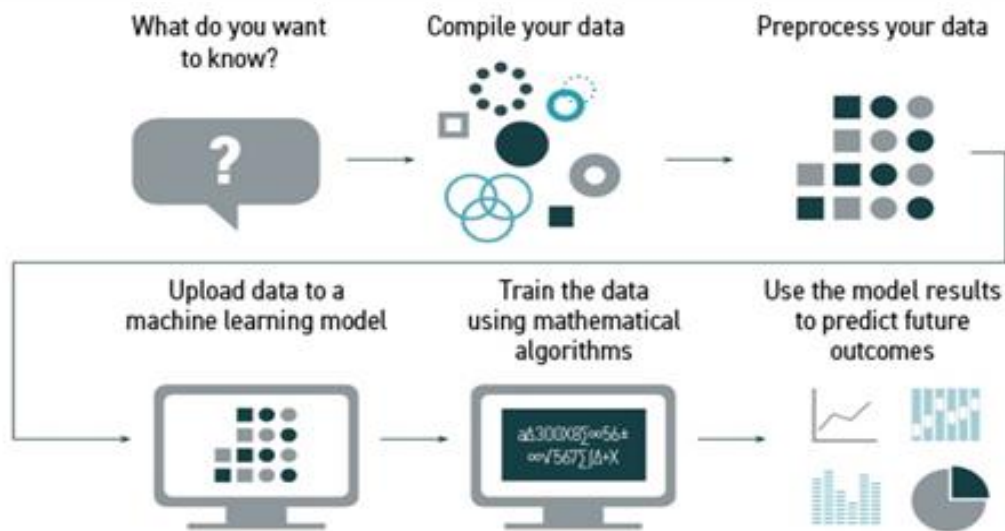


Fig 2:- Predicting process

The process of machine learning requires patience to test the models rapidly because the model wants to learn themselves. If there is any error occurred while processing the identified bugs should be cleaned. Otherwise there is a change in result and drastically given the different outcomes. If the modal runs several times and the bugs were cleared then the result may accurate.

The process of compiling the data requires an understanding of what input given to the modal. The modal has been tested repeatedly and the errors are identified. The identified errors were cleaned and the model has ready to deploy. The predicting process has been started and the result will be visualized based on the given input. The performance of the accurate result is based on the clear dataset and perfect inputs.

## V. CONCLUSION

The research on Predicting the outcomes for future job opportunities is complex and more amount of data requires from the various job sites and companies. From the experimental results of k nearest neighbors algorithm and the model built using machine learning algorithm, it proposed that the algorithm is a simple and effective model and we proved that that this method is the best performance for predicting the future job opportunities. It achieved that the best dataset were used to predict.

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