**AI for Hiring Approach**

In this project, the placement data of “**Nehru Group of Institutes, Coimbatore”**college (Tier-2) is being collected and put for analysis.

The survey was conducted in order to find out how many students get recruited through on campus placement.

It was found that around 50 to 55% students from Tier II colleges in India are placed as per AICTE report. Please find the links and data set for your review.

<https://www.peoplestrong.com/india-skills-report-2019-47-engineering-graduates-employable-ap-leads-with-highest-employability-rate/>

<https://www.collegedekho.com/news/campus-placements-management-engineering-students-statistics-15132/>

<https://www.aicte-india.org/sites/default/files/AICTE-CII-Survey-Report-2018_1.pdf>

**1)** **Data Analysis and EDA**:

The data contains fields like Department name, college name, Gender, Marks scored by students in SSC, HSSC, UG and PG. It was analyzed and cleaned properly.

Here, marks were being arranged in percentage format as in many places they were in C.G.P.A. Also, null values were being filled using forward and backward fill.

**2)** **Adding new feature**:

New feature named ‘**Eligible**’ was created with criteria that if the aggregate of student’s percentage in UG and PG is greater than or equal to 60%, then they are eligible for on-campus placement.

**3)** **Removing Outliers**:

Outliers were present in UG and PG by using boxplot. They were being removed.

**4)** **Defining Predictor variables and target variables**:

* Predictor variables were Department, Gender, UG and PG.
* Target variable was Eligible.

**5)** **Using Label Encoder**:

To convert categorical data to numerical.

**6)** **Designing Model**

Three algorithms were used which gave following results.

1. XGBoost Classifier: Accuracy and precision scores are 98.5%
2. Random Forest Classifier: Accuracy and precision scores are 99%
3. Gradient Boosting Classifier: Accuracy and precision scores are 99%

**Future Approach**:

The following points can also be considered to improve the placement activity in Tier-2 colleges:

1. Conducting Skill development programs (technical , management and communication skills) and exams from first year to final year to train the students for answering and cracking the interviews.
2. Organizing field trips in the industry so that college is well known in industry circle like Manufacturing, Packaging, Constructions, IT, Electronic, R & D centres, Aeronautics etc. Collect the data of the student’s who have gone for field trips every year.
3. Increasing the alumni association in the college and conduct regular meetups atleast 5 times in a year with different alumni.
4. Collecting the data related with collaboration (MoU) of industry-academia. If the collaboration is not done, request colleges to do the same.