## E - Recruitment using ML

Why we need it:

Using huge chunk of data, advent of technologies and using the power of computing, we need to improve personalizing and customizing the experience of employees. Based on data and need of hour, we can improve the experience of TA department. Hence very first step on this direction is how we can reduce their manual efforts. E recruitment is an emerging category of HR technology designed to reduce — or even remove — time-consuming activities like manually screening resumes.

Project Description:

One of the biggest challenges facing HR professionals today is finding the best talent to hire. This task has proven burdensome in the past, in part due to inefficient manual tasks that plague the recruiting process and the lack of access to the right data to make informed decisions. In fact, per research conducted by LinkedIn, 46% of recruiters and hiring managers have identified "finding the right candidate" as the biggest hurdle in hiring today. To tackle these challenges, new technology companies are rapidly emerging in the HR tech ecosystem with robust solutions that use Big Data, predictive analytics, and AI to automate and improve everything in the recruitment process from job advertising and resume screening to applicant engagement, scheduling, and recruiting by text. These new tools offer us ways to help overcome the limitations and biases inherent in recruiting with automated processes that are hyper-responsive to market data, complex metrics, and even budget constraints.

Hence this project is to find out on very fist problem, where we would like to find out a solution to match job requisition with candidate’s resume.

Benefits of using AI in recruitment:

Burdensome

1. Saving recruiters time by automating high volume tasks
2. Improvement in quality of hire through standardizing job matching

## Approach:

Our Approach would be two -fold Similarity & Relevance i.e.

1. Finding the similarities between Job Description & Resume
2. Finding the relevance between JD & Resume by abstraction

For finding similarity, we will use the below techniques (not exhaustive)

* Converting all resume format to text.
* Building models to extract entity information’s\ summarization.
* Cluster the resume to reduce volume.
* Use public libraries to create skill corpus
* Use similarity models with Job description extraction to find similar resumes and rank them

For Abstraction of essential information for finding higher relevance, we would employ and explore

* NLP techniques
* Some advance analytics techniques