

# PROJECT REPORT FINAL

## AI Recruiter- Shortlist A Suitable Candidate For A Specific Job Role( Machine Learning).

Team Blackswans –

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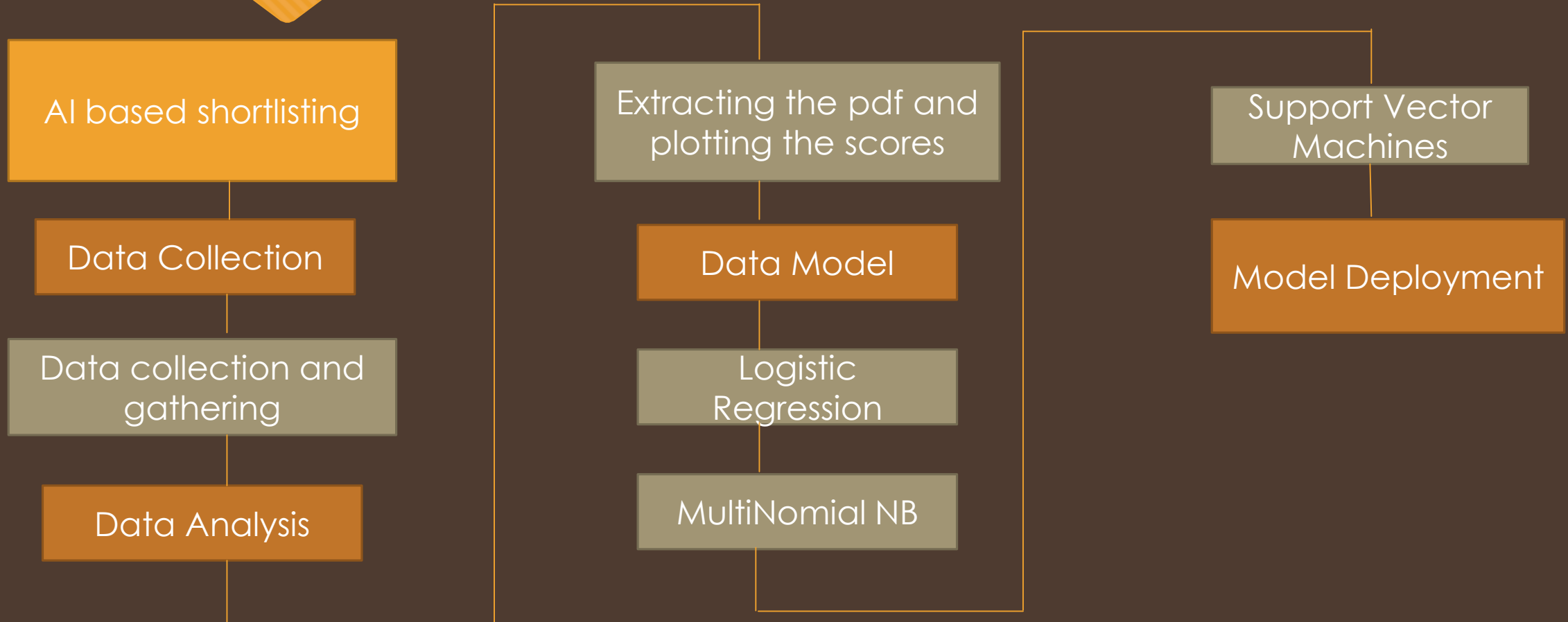
# INTRODUCTION

- Recruiters from a company receive thousands of applications for a particular role in a company and there are multiple roles in a single organization. Hence the need for automation of this task is very much needed at the moment so that the right person is selected for the job.
- As it must be clear from the name, I will work on building an AI based recruiting system which will help simplify the recruiting process of HRs and all other form of recruiters by providing an AI based shortlisting model. It may sound very biased but actually the final selection will be done by a real human only. My model will only help the recruiter in the initial shortlisting process to gain the necessary idea about the nature of the candidate who has applied for it and help him/her ease the intial shortlisting process.

# LITERATURE SURVEY

- Existing Problem - Recruiters of different companies receive thousands of applications for one particular role and while some of them are suitable candidates, majority of them are underqualified and sometimes overqualified for that particular job role. Hence a CV based shortlisting with the help of Machine learning will speed up this process, Computer will be able to process tens of thousands of resumes very quickly and will help in easy and fast shortlisting for the final round.
- Proposed Solution - The solution I propose is a simple one and a very efficient one. Judge the nature of a candidate based on their CV. We will be using 5 parameters on basis of which we will give them scores, the parameters are OCEAN( O - Openness, C - Conscientiousness, E- Extraversion, A- Agreeableness, N - Neuroticism)

# BLOCK DIAGRAM



# COMPARISON

## Advantages

- This Model will ease and really speed up the recruitment process for various recruiters such as HRs, talent Acquisition managers.
- Other than the speed up concept, it's code can be modified very easily to cater to different company's need. Like some software companies may require the candidate to have cleared GSOC or have a certain udacity nanodegree, then it can search from tens of thousands of those thereby reducing human error.

## Disadvantages

- The only disadvantage i feel is that if the candidate fails to have proper and true information on his CV then only this model can have an scope of failure.
- The gap of human and machine will always be there because best judging of a person's nature and knowledge can be done by a human only and no machine can do that very accurately.

# DESIGNING AND APPLICATION

## 1. Software Designing –

- A. Deploying the model using watsonAPI machine learning client.
- B. Using FLASK APP for the design of the interface of the ML model for the final product.

2. Application – This Recruiting model will have applications across every industry known as it will be using a CV based shortlisting for the candidate. It can be modified to suit the needs of a particular domain if we are recruiting in that domain but we will go with a more general approach in this one by judging the personality score of a particular candidate.

# BIBLIOGRAPHY

1. [https://scikit-learn.org/stable/modules/generated/sklearn.linear\\_model.LogisticRegression.html?highlight=logistic%20reg#sklearn.linear\\_model.LogisticRegression](https://scikit-learn.org/stable/modules/generated/sklearn.linear_model.LogisticRegression.html?highlight=logistic%20reg#sklearn.linear_model.LogisticRegression)
2. <https://scikit-learn.org/stable/modules/generated/sklearn.svm.LinearSVC.html#sklearn.svm.LinearSVC>
3. <https://github.com/vidushi4/Personality-prediction-system/blob/master/train%20dataset.csv>
4. <https://spacy.io/usage>
5. <https://textract.readthedocs.io/en/stable/>

## Appendix

A. Source code - <https://github.com/SmartPracticeschool/SBSPS-Challenge-1198-AI-Recruiter--Shortlist-a-suitable-candidate-for-a-specific-Job-role./blob/master/majorcodefinal.py>