# Aim

* To optimize the recruitment process and improve the quality of hires through data-driven insights.

# Objectives

1. To develop a predictive model for candidate fit and success based on resume data and interview scores.
2. To identify the most effective recruitment channels by analyzing candidate source data and hire rates.
3. To automate initial resume screening by extracting key skills and experience using natural language processing (NLP) techniques.
4. To reduce time-to-hire by 15% within six months through process improvements identified by data analysis.
5. To create interactive dashboards for HR managers to track recruitment metrics (e.g., pipeline stages, offer acceptance rates).

# Data Understanding

## Sample Raw Resume Dataset Structure

|  |  |  |
| --- | --- | --- |
| **Personal Information:** |  | **Extracurricular Experience:** |
| * Name |  | * Role/Position |
| * Email |  | * Organization |
| * Phone Number |  | * Extracurricular Start Date |
| * LinkedIn Profile |  | * Extracurricular End Date |
| * Kaggle Profile |  | * Responsibilities |
| * Education: |  |  |
| * University |  |  |
| * Degree |  |  |
| * Specialization |  |  |
| * CGPA |  |  |
| * Education Start Date |  |  |
| * Education End Date |  |  |
| * Relevant Coursework |  |  |
| **Skills:** |  |  |
| * Functional Skills |  |  |
| * Programming Languages and Tools |  |  |
| **Professional Experience:** |  |  |
| * Company Name |  |  |
| * Job Title |  |  |
| * Location |  |  |
| * Employment Start Date |  |  |
| * Employment End Date |  |  |
| * Job Responsibilities/Achievements |  |  |
| **Achievements:** |  |  |
| * Competition Name |  |  |
| * Award/Result |  |  |
| * Achievement Start Date |  |  |
| * Achievement End Date |  |  |
| * Project/Model Details |  |  |
| **Related Projects:** |  |  |
| * Project Title |  |  |
| * Project Type (e.g., Final Year Project) |  |  |
| * Project Start Date |  |  |
| * Project End Date |  |  |
| * Project Description/Details |  |  |
| **Licenses & Certifications:** |  |  |
| * Certification Name |  |  |
| * Certification Date |  |  |

## Data Preparation

Mandatory Columns

Candidate ID

Full\_Name

Email

Phone\_Number

LinkedIn\_URL

Location

Highest\_Education\_Level

Field\_of\_Study

University\_Name

Graduation\_Year

All\_Education\_JSON

Latest\_Job\_Title

Latest\_Company\_Name

|  |
| --- |
|  |

Latest\_Job\_Start\_Year

Latest\_Job\_End\_Year

Total\_Years\_Experience

All\_Experience\_JSON

Skills\_List

Skills\_List\_JSON

Certifications

Languages

Projects\_Title\_List

All\_Projects\_JSON