

Identifying Patterns and Trends in Campus Placement Data using Machine Learning

Define Problem / Problem Understanding

Specify The Business Problem

Now that we have defined the business problem, let's identify some patterns and trends in campus placement data using machine learning. There are multiple ways to identify these patterns and trends. In this post, we will cover one such way using a clustering algorithm called k-means clustering with Python. The result from this algorithm will be used as input for a predictive model using decision trees in later steps

The data science team has been asked to study the trends in campus placement data for a large university. Specifically, the business problem is to identify patterns and trends in the data. You can use any machine learning model you like; however, please note that we have already identified some potential approaches (see below):

Every year, the campus placement season kicks off with the placement process at campuses across India. There are more than 100,000 students who take part in this process every year and make their way to the job market. This is a huge milestone for them and for their careers as well.

The first step is to identify the business problem. In this case, we have a large dataset of student job offers that includes the following data points:

- Job Function (e.g., Marketing, Engineering)
- Company Name and Industry (e.g., Google, Technology Consulting)
- Location (City, State)

When the hiring managers at a large university have to make decisions about their future workforce, they have access to many sources of data. They can look at performance indicators like GPA, average test scores, and course-specific requirements. They can also examine transcripts from previous semesters to see which

courses students are taking and how well they're doing in those courses.