

Identifying Patterns and Trends in Campus Placement Data using Machine Learning

BUSINESS PROBLEM:

The business problem is to analyze campus placement data and identify patterns and trends using machine learning techniques. This will help in understanding the factors that affect campus placements and provide insights to improve placement rates. The data may include information about student profiles, job offers, companies, and other relevant variables. The ultimate goal is to increase the success rate of campus placements and improve the overall job market for students.

Business requirements

- ❖ **Access to campus placement data:** The project would require access to data on student performance, qualifications, and job placement outcomes. This data would need to be collected, cleaned, and prepared for analysis.
- ❖ **Machine learning expertise:** The project would require individuals with expertise in machine learning, data science and statistical analysis to develop and implement the algorithms and models needed to analyze the data.
- ❖ **Data storage and management:** The project would require a robust and secure data storage and management system to store and organize the large amounts of data used in the analysis.
- ❖ **Infrastructure for model deployment:** The project would require infrastructure for deploying the models and algorithms developed, including hardware, software, and cloud-based resources.

Literature Survey:

- ❖ There have been several studies that have used machine learning techniques to identify patterns and trends in campus placement data.
- ❖ One study by authors P. K. Rajesh and Dr. G. R. Suresh, published in the International Journal of Computer Science and Mobile Computing in 2015, used k-means clustering and decision trees to analyze campus placement data and identify patterns that could be used to predict placement outcomes.
- ❖ Another study by authors V.V. Kulkarni and K.S. Patil, published in the International Journal of Engineering Research and Technology in 2012, used decision tree and neural network algorithms to analyze campus placement data and identify factors

that influence student placement.

- ❖ A study by authors S.S. Bhosale, S.S. Raut, and D.S. Kulkarni, published in the International Journal of Emerging Research in Management & Technology in 2013, used decision tree and Naive Bayes algorithms to analyze campus placement data and predict student placement outcomes.

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- ❖ In general, these studies found that machine learning techniques were effective at identifying patterns and trends in campus placement data, and could be used to predict student placement outcomes with high accuracy.

- ❖ It's important to note that all these studies are quite old now and you might find more recent studies and new techniques which can be useful for your project.

Social or Business Impact:

- ❖ The business impact of a project that uses machine learning to identify patterns and trends in campus placement data could be significant. By analyzing data on factors such as student performance, qualifications, and job placement outcomes, the project could help organizations make more informed decisions about recruiting and hiring new graduates.