

Project Title	Job Insights: Analyzing Employment Trends and Skills in Data Science
Technologies	Data Cleansing, EDA, Visualization
Domain	Data Science

Problem Statement:

Analyzing a job dataset can provide valuable insights and benefits for both organizations and individuals. For individuals, analyzing job datasets can provide valuable information for career planning and decision-making. By understanding job market trends, skill requirements, and salary ranges, individuals can make informed choices about their career paths, skill development, and job search strategies. Taking this information, analyze the data and give the solutions to the below mentioned problems

About Data:

Context

This is a dataset of data science jobs posted in job portals.

The columns explanation are as follows,

1. Job Title: Title of the job posting
2. Salary Estimation: Salary range for that particular job
3. Job Description: This contains the full description of that job
4. Rating: Rating of that post
5. Company: Name of company
6. Location: Location of the company
7. Headquarter: Location of the headquarter
8. Size: Total employee in that company
9. Founded: The year company was founded
10. Type of ownership: Describes the company type i.e non-profit/public/private firm etc
11. Industry, Sector: Field applicant will work in
12. Revenue: Total revenue of the company
13. Competitors: Competitors of the company

Dataset:

Dataset_Link: [Data Link](#)

Problems to be answered:

1. Identify the top five industries with the highest number of job openings
2. Analyze the distribution of job opportunities based on geographic regions
3. Determine the min and max average salary range for different job positions across the industries and how the salary changes from region to region
4. Determine the most in-demand skills across industries and highlight emerging skill trends. Hint : use the job description column
5. Academic education fosters critical thinking and problem-solving skills. Through research, analysis, and rigorous study, students learn to evaluate information, develop logical reasoning, and apply problem-solving techniques. These skills are valuable in navigating real-life challenges, making informed decisions, and contributing to innovation and progress. So find out academic qualifications preferred by companies and distribution of them ?
6. Provide how a candidate's years of experience in a job role have influenced
7. Analyze the spread of the various companies ratings
8. Analyze the distribution of the ownership of companies
9. Revenue is a key indicator of a company's financial performance. It reflects the amount of money generated through the sale of goods or services. Monitoring revenue allows businesses to assess their financial health, track growth or decline, and make informed decisions regarding profitability and sustainability. Identify the max and min revenue spread across the industries
10. Having more employees means a greater pool of ideas and insights, fostering a culture of creativity and innovation within the organization. So give the view about startups, medium firms and big firms

Note:

After completion of all the task you need to create a PowerPoint presentation

That should contain the:

1. Problem Statement
2. Tools Used
3. Approaches
4. EDA Insights

Project Evaluation metrics:

- Project evaluation will be done in the live session and have to showcase the approaches done to complete the project
- You are supposed to write a code in a modular fashion (in functional blocks)
- Maintainable: It can be maintained, even as your codebase grows.
- Portable: It works the same in every environment (operating system)
- You have to maintain your code on GitHub.(Mandatory)
- You have to keep your GitHub repo public so that anyone can check your code.(Mandatory)
- Proper readme file you have to maintain for any project development(Mandatory)
- You should include basic workflow and execution of the entire project in the readme file on GitHub
- Follow the coding standards: <https://www.python.org/dev/peps/pep-0008/>

