Analysis of Data Science Jobs

Introduction:

The amount of data we have been generating from the past few years has been incresed exponetially. As John Naisbitt once said, "We are drowning in information but starving for knowledge." But to conquer this, there has been a rapid development in the field of data science. This field makes use of mainly statistics, mathematics, scientific methods, computer programming, machine learning, deep learning and many more things to extract knowledge, generate insights and derive patterns from the noisy, unstrutured data. The growth of this field has brought many job opportunites across the world, due to this, the data science has become the most sought after career option today. This field will continue to grow, since the need of analayzing the mammoth amount of data is increasing day-by-day. There are various job titles among this field and to understand about them, here I have data of 3755 job titles from the companies all across the world. I will perform question based analysis to generate various insights and to see what are the main factors that affect the relation of job titles and their salaries. Checkout the questionairre below, click on any question for the relevant answer. If you find it useful please give it star on my GitHub and if you have any suggestions or querries feel free to contact.

Column Description:

Column Name	Descrption
Initially Existed	
1. Work Year	The year the salary was paid.
2. Experience Level	The experience level in the job during the year
3. Employment Type	The type of employment for the role
4. Job Title .	The role worked in during the year
5. Salary	The total gross salary amount paid
6. Salary Currency	The currency of the salary paid as an ISO 4217 currency code
7. Salary in USD	The salary in USD
8. Employee Residence	Employee's primary country of residence in during the work year as an ISO 3166 country code
9. Remote Ratio	The overall amount of work done remotely
10. Company Location	The country of the employer's main office or contracting branch as an ISO 3166 country code
11. Company Size	The median number of people that worked for the company during the year
Later Added	
12. Employee Residence (Country)	Employee's primary country of residence in during the work year
13. Company Location (Country)	The country of the employer's main office or contracting branch
14. Foreign Employee	Is employee from the other country?
15. Conversion Rates	Currency conversion rates with USD as the reference
16. Experience Level Ela.	Experience level elaborated
17. Employment Type Ela.	Employment type elaborated
18. Job Type	Whether employee working on-site, remote or hybrid

Features of this Project:

1) Data Collection : Importing data from the web-pages
3) Data Cleaning using Excel Functions
4) Data Manipulation using PowerQuery
5) Feature Engineering
6) Question Based Analysis & Supporting Visuals

Questionnaire:

1) Which are the top 10 popular job designations? Also give their average salaries over the years.
2) Which are the top 10 highest paid job designations over the years? What are the number of posts?
3) Compare the company sizes and salaries offered by them over the years.
4) Which companies are preferred by employees if we consider sizes?
5) Give the number of employees working remote,hybrid and on-onsite over the years.
6) Which of these job type gets the highest average salary over the year?
7) What percentage of the remote workers are foreign?
8) In which country the most foreign employees work?
9) From which country the most foreign employees work?
10) Which currency is the strongest and which is the weakest?
11) Which country has the highest number of people working in the field of data science?
12) Compare the salary with experience level over the years.
13) Compare the employment type with salary.
14) Show which are all countries involved in the survey.
15) What is the average salary offered to an employee from each country?

16) What is the average salary offered in each country of the company location?
17) Show the distribution of salaries offered over the years.
18) Analyze the number of posts over the years.