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DATA SCIENCE JOB POSTING DATA ANALYSIS

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Contents

Introduction

The term "data science" and the practice itself has evolved over the years. Its popularity has grown considerably due to recent innovations in data collection, technology, and mass data production across the globe. The procedures to collect, analyze, and interpret data paved the way for data science to become a popular field today. With the flood of new information and businesses seeking new ways to increase profit and make better decisions, the data science job market expanded worldwide.

In a day, 500 million tweets are sent, 294 billion emails delivered, and 4 petabytes of data created on Facebook. Finding the right set of skilled individuals to transform data into insights is essential for a successful business. The field's newness has made the data science job role an evolving title. Today's data scientists must possess the abilities to collect, clean, extract, transform and load data and must be able to communicate the findings in both written and spoken form.

Glassdoor listed data scientist as the number 1 career, but it wasn't just top of the list for tech. It topped every industry. The fast-paced growth of data science jobs has been met with a severe lack of qualified candidates. And businesses that do hire for the role of data science jobs often have no idea how to utilize their skills effectively.

In this project, we're looking at the data science job opportunity connected to their salary, location, firm, sector, industry type, and skills to determine whether there's a link between these factors and the differences we detect. The key factors driving the demand for data science job includes growth. The inclination of organizations toward data-intensive business strategies and the rising adoption of an advanced career in creating opportunities for the data science job through Glassdoor data analysis.

Data Collection

This data set is regarding Data science Job Posting on Glassdoor. This data set is collected from Kaggle. The URL to the data set is https://www.kaggle.com/datasets/rashikrahmanpritom/data-science-job-posting-on-glassdoor. This dataset contains data science job roles and descriptions in different companies and approximate salaries offered for various positions in other companies. This data set contains all the information on data science job posting on Glassdoor like company name, industry type, sector, minimum and maximum salary offered, location of the company, skills required, and job description of the role. It has all the details of data science job postings in different states of the US. The dataset contains 671 rows and 30 columns, shown below.

Field Name	Data Description
Job Title	Describes the title of the job such as Date Scientist, Data modeler, Data Analyst, Business Intelligence Analyst, etc
Salary Estimation	Shows the approximate salary range for that job
Job Description	Includes the full description of that job
Rating	Shows the rating of the post out of 5
Company Name	Shows the name of the company
Location	Shows where the company is located
Headquarters	Shows the location of the headquarters of the company
Size	It shows the total employees in that company.

Type of ownership	Describes the company type i,e non-profit/public/private/government, etc
Industry	Describes the type of industry the applicant will work in, like Research & Development, Insurance, Advertising & Marketing, Enterprise Software & Network Solutions, etc
Sector	Describes the sector of industry the applicant will work in like Retail, Manufacturing, Government, etc
Revenue	Describes the overall revenue of the company
Competition	Describes the competitive company
Minimum Salary	Describes the minimum salary offered for the position
Maximum Salary	Describes the maximum salary offered for the position
Average Salary	Describes the average salary offered for that position
Job State	Describes the state where the applicant will work
Company Age	Describes the age of the
Python	It describes whether the knowledge of Python is required for this job.

Excel	It describes whether the knowledge of Excel is required for this job.
Hadoop	It describes whether the knowledge of Hadoop is required for this job.
Spark	It describes whether the knowledge of Spark is required for this job.
AWS	It describes whether the knowledge of AWS is required for this job.
Tableau	It describes whether the knowledge of Tableau is required for this job.
Big Data	It describes whether the knowledge of Big Data is required for this job.
Job Simp	Describes the more straightforward name for the posted job
Seniority	Describes the level of the job such as fresher, senior, etc

Table 1: Data Description

Data Cleaning

Data cleaning is the process of identifying and fixing problems in a dataset. The purpose of data cleansing is to correct data that are inaccurate, incomplete, malformed, duplicated, or irrelevant to the purpose of the dataset. This is typically achieved by replacing, modifying, or deleting data that falls into one of these categories.

The data will likely be duplicated or mislabeled when combining multiple data sources. If the data is wrong, the results and algorithms are unreliable, even if they look correct. Since the process is different for each dataset, there is no absolute way to indicate the exact steps of the data cleansing process. Our decisions are usually based on datasets, so if the quality of the data is poor, our results will not be accurate. Therefore, data cleaning is essential because you can get high-quality data that leads to better quality decisions.

Not all data is good data in the data set. There were a few junk data. This dataset used for this analysis contained some null values. Some datasets had blank / missing values, so these data were deleted and filtered while focusing on the required data set. Unnecessary columns were removed, and a few cues were split. Below are the few steps taken to clean the dataset.

Data Cleaning Steps

1. **Extract the required information from the column Salary_Estimation**

<u>Steps to clean the Data</u>

(Glassdoor. est) was removed from the column, and the salary range was split into the minimun_salary and maximum_salary columns.

A	B	C	D	E
Job Title	Salary Estimate	Job Descri	Rating	Company
Sr Data Scientist	$137K-$171K (Glassdoor est.)	Descripti	3.1	Healthfir
Data Scientist	$137K-$171K (Glassdoor est.)	Secure	4.2	ManTech
Data Scientist	$137K-$171K (Glassdoor est.)	Overvie	3.8	Analysis
Data Scientist	$137K-$171K (Glassdoor est.)	JOB	3.5	INFICON
Data Scientist	$137K-$171K (Glassdoor est.)	Data	2.9	Affinity
Data Scientist	$137K-$171K (Glassdoor est.)	About	4.2	HG
Data Scientist / Mac	$137K-$171K (Glassdoor est.)	Posting	3.9	Novartis
Data Scientist	$137K-$171K (Glassdoor est.)	Introduct	3.5	iRobot

Figure 1: Sample data set before cleaning

A	B	C	D	E	F
Job Title	Salary Estimate	Minimum_Salary	Maximum_Salary	Average_Salary	Rating
Data Scientist	$137K-171K	137000	171000	154000	2.9
Data Scientist	$137K-171K	137000	171000	171000	3.5
Data Scientist	$137K-171K	137000	171000	171000	3.8
Data Scientist	$137K-171K	137000	171000	171000	2.8
Data Scientist	$75K-131K	75000	131000	131000	5
Data Scientist	$75K-131K	75000	131000	131000	2.7
Data Scientist	$75K-131K	75000	131000	131000	5
Data Scientist	$75K-131K	75000	131000	131000	3.3
Data Scientist	$75K-131K	75000	131000	131000	3.7
Date Analyst	$75K-131K	75000	131000	131000	4.3
Date Analyst	$75K-131K	75000	131000	131000	4

Figure 2: Sample data set after cleaning

2. **Split the column**

<u>Steps to clean the Data</u>

The column location had cities and state information. This information was split into two-column I,e Location and Job_State

F
Location
New York, NY
New York, NY
McLean, VA
Boston, MA
Sheboygan, WI
Chantilly, VA
Palo Alto, CA
San Francisco, CA
Cambridge, MA
San Francisco, CA
New Orleans, LA

Figure 3: Sample data set before cleaning

I	J
Location	Job_State
New York	NY
New York	NY
McLean	VA
Boston	MA
Sheboygan	WI
Chantilly	VA
Palo Alto	CA
San Francisco	CA
Cambridge	MA
San Francisco	CA
New Orleans	LA

Figure 4: Sample data after before cleaning

3. **Removing irrelevant observation**

<u>Steps to clean the Data</u>

The column company_name has a few junk numbers. These numbers were removed from the column company_name

E
Company Name
Healthfirst
3.1
ManTech4.2
Analysis Group3.8
INFICON3.5
Affinity Solutions2.9
HG Insights4.2
Novartis3.9
iRobot3.5
Intuit - Data4.4
XSELL Technologies3.6
Novetta4.5

Figure 5: Sample data set before cleaning

G
Company Name
Healthfirst
ManTech
Analysis Group
INFICON
Affinity Solutions
HG Insights
Novartis
iRobot
Intuit - Data
Novetta

Figure 6: Sample data after before cleaning

4. **Filling the missing Information**

<u>Steps to clean the Data</u>

Few columns and rows had missing information. This information was manually added to the data set. For example, a few companies were missing location, headquarters, size, type of ownership, industry, and sector. This information was added to the dataset.

New York	New York	Lutherville	51 to 200 em	Subsidiary	Video Games	Media
Bethesda	Bethesda	New York,	1 to 50 empl	Private	Health Care Servic	Health Care
Herndon	-1	-1	-1	-1	-1	-1
Schaumburg	-1	-1	-1	-1	-1	-1
Winter Park	-1	-1	-1	-1	-1	-1
San Francisco	-1	-1	-1	-1	-1	-1
Lehi	-1	-1	-1	-1	-1	-1
Holyoke	-1	-1	-1	-1	-1	-1
Chicago	Chicago	San Francis	51 to 200 em	Private	Computer Hardwar	Information Tech
McLean	McLean	San Mateo	201 to 500 e	Private	Lending	Finance

Figure 7: Sample data set before cleaning

New York	New York	Lutherville Timon	51 to 200 employee	Subsidiary	Video Games	Media
Bethesda	Bethesda	New York, NY	1 to 50 employees	Private	Health Care Services & H	Health Care
Herndon	Herndon	South San Francis	51 to 200 employee	Private	Biotech & Pharmaceutica	Biotech & Pharmaceuticals
Schaumburg	Schaumbu	Beavercreek, OH	51 to 200 employee	Private	Consulting	Business Services
Winter Park	Winter Pa	Schaumburg, IL	51 to 200 employee	Private	Shipping	Transportation & Logistics
San Francisco	San Franci	Saint Louis, MO	51 to 200 employee	Private	IT Services	Information Technology
Lehi	Lehi	San Francisco, CA	1 to 50 employees	Private	Enterprise Software & Ne	Information Technology
Holyoke	Holyoke	San Francisco, CA	51 to 200 employee	Private	Computer Hardware & So	Information Technology
Chicago	Chicago	San Francisco, CA	51 to 200 employee	Private	Computer Hardware & So	Information Technology
McLean	McLean	San Mateo, CA	201 to 500 employe	Private	Lending	Finance

Figure 8: Sample data set after cleaning

5. **Removing Unknown details**

<u>Steps to clean the Data</u>

Many columns and rows didn't have relevant data. These columns and rows were deleted. Index row, description, competitors, same_state, company_age, and job_simp were deleted from the data set to make it a more readable dataset.

K	L
Sector	Revenue
Insurance	Unknown / Non-Applicable
Business S	Unknown / Non-Applicable
Informatio	Unknown / Non-Applicable
Informatio	Unknown / Non-Applicable
Governme	Unknown / Non-Applicable
Health Car	Unknown / Non-Applicable
Informatio	Unknown / Non-Applicable
Aerospace	Unknown / Non-Applicable
Informatio	Unknown / Non-Applicable
Informatio	Unknown / Non-Applicable
Health Car	Unknown / Non-Applicable
Biotech &	Unknown / Non-Applicable
Informatio	Unknown / Non-Applicable

Figure 9: Sample data set before cleaning

Sector	Revenue in USD
Business Services	$5 to $10 million
Health Care	$5 to $10 million
Aerospace & Defense	$5 to $10 million
Information Technology	$5 to $10 million
Information Technology	$5 to $10 million
Health Care	$5 to $10 million
Biotech & Pharmaceuticals	$5 to $10 million
Finance	$5 to $10 million
Government	$5 to $10 million
Information Technology	$5 to $10 million
Information Technology	$5 to $10 million
Information Technology	$5 to $10 million
Transportation & Logistics	$5 to $10 million
Information Technology	$5 to $10 million
Biotech & Pharmaceuticals	$5 to $10 million
Information Technology	$5 to $10 million

Figure 10: Sample data after cleaning

Data Visualizations

Data visualization is a graphical representation of information and data. Using visual elements such as charts, graphs, and maps, data visualization tools provide an accessible way to see and understand trends, outliers, and patterns in your data. Data visualization tools and technologies are essential to analyze vast amounts of information and make informed decisions in big data.

Data Visualization Questions

1. Top ten highest-paid companies for data scientist job role

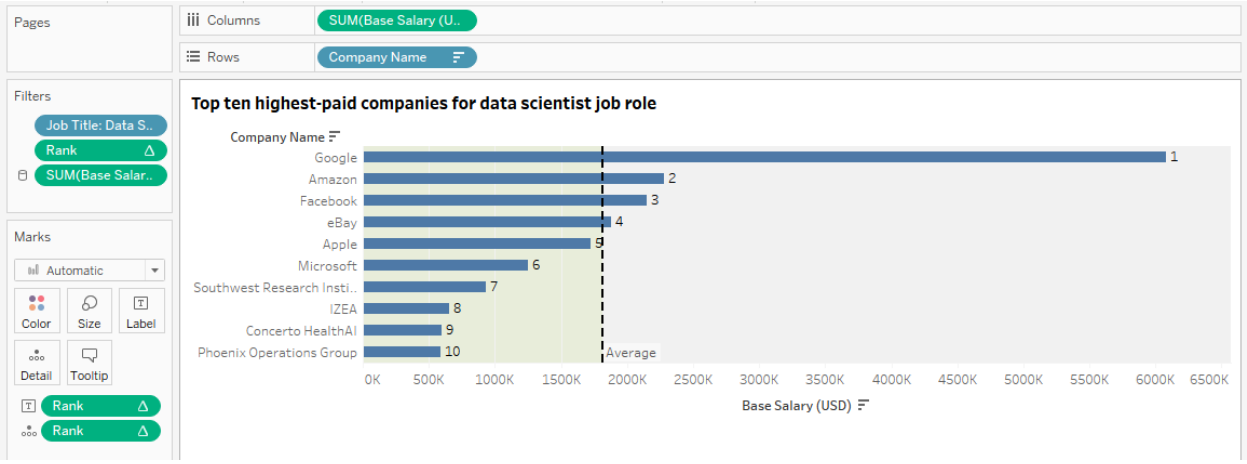

Figure 11:Top ten highest-paid companies for Data Scientist Job profile

[Application Used: Bullet Graph and Reference Line, Filter, Marks Card]

This analysis helps us understand the salaries offered in different companies for the data scientist role. The above bullet graph shows the top ten companies that pay the highest compensation to data scientists. The graph's x-axis is the base salary, and the chart's y-axis is company names. A rank filter is added to the graph. The numbers on the graph show the company's rank according to the salary offered to data scientists. A filter on job title is added to the chart to select the data scientist job role. From the above graph, we see that Google has the highest salary for a data

scientist, followed by Amazon, Facebook, and eBay. A reference line is added to the graph, which divides the chart into two equal parts based on the average salary. Out of the ten companies, the average salary of all ten companies is approximately around 1813900USD sum in base salary. If we compare the average salary of these ten companies and the salary of the individual company, it's seen that Google, Amazon, Facebook, and eBay offer the highest salaries. The salary offered by Google is much higher than the average salary of all ten companies. There is a significant difference in wages provided by the top tenth and second-highest companies. If we compare the result of the other nine companies, there is not much difference in the range of salary offered. Similarly, the job role filters can be changed to see the salaries offered in different companies for different job roles.

2. Analysis of the salary offered by different companies based on years of experience

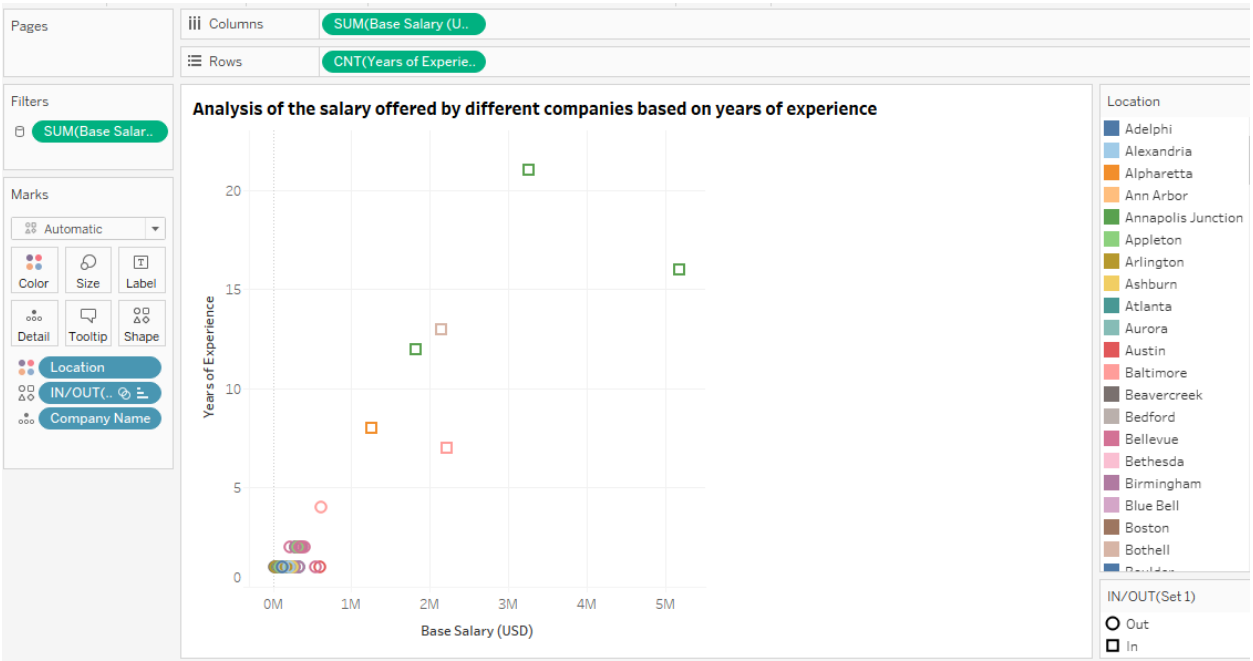

Figure 12: Scatter Plot of the analysis of salary offered by different companies based on years of experience

[Application Used: Scatter Plot and Set, Filter, Marks Card]

This analysis helps us understand the salaries offered in different companies based on their year of experience. The above graph shows the scatter plot which shows the salary offered in other companies based on experience. Facebook provides the highest compensation for a person with 21 years of experience; Envision LLC provides the lowest pay for one year of experience. The graph's x-axis is the base salary, and the chart's y-axis is the year of experience. A set is created for the diagram, which shows the data for salaries offered by different companies for more than five years of experience. The box is included in the set, and a circle is excluded from the group. This set will help understand the salary range for a particular range of experience. We can use settings to analyze the salaries offered for a specific field, like for more than five years or less than five years of experience. Different companies provide different salaries for various years of experience. Many companies offer different salary ranges for one year of experience. There is no particular way to analyze what based companies offer salaries for additional years of experience. Companies might consider other factors like skills, requirements, etc., to provide wages.

3. Job opportunities in different states in the USA

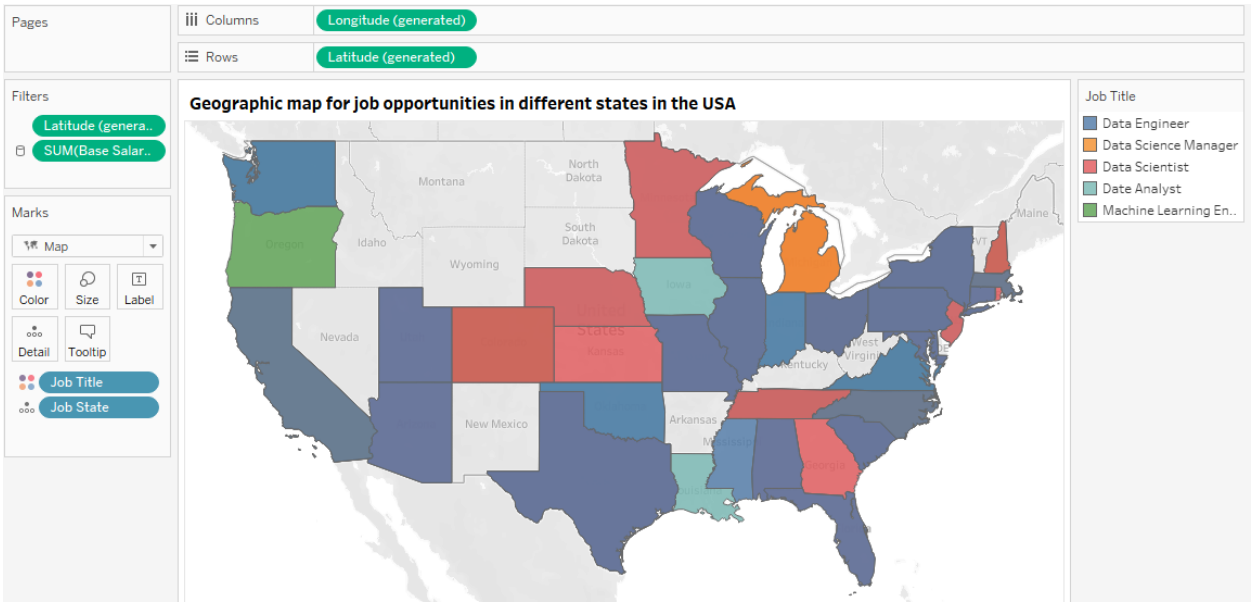

Figure 13: Geographic map for job opportunities in different states in the USA

[Application: Geographic Map, Filter, Marks Card]

The above graph shows the geographic map for different jobs roles in other states in the USA. The map is based on longitude and latitude. The color indicates the details of job titles. Details are shown for the job state. The data is filtered on the sum of base salary.

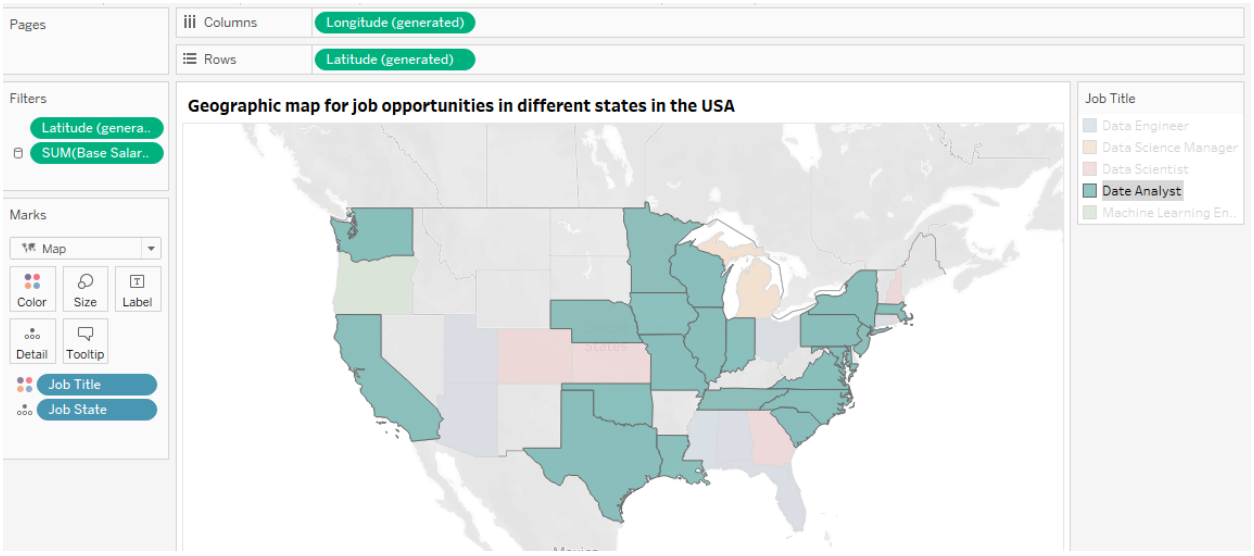

Figure 14: Filtered data for Data Analyst job role in different parts of the USA

From the above chart, it is seen that Data engineering is offered in most parts of UAS, and Machine learning is offered in just the most minor state. From this graph, we can analyze the job opportunities in different forms. The data engineer is the most common job role provided in the USA, followed by Data Scientist and Data analyst. Most of the job opportunity is offered in the east part of the USA compared to other factors. This analysis will help us understand the job opportunity in different regions of the USA. Job titles can be filtered, and only the job roles we are interested in can be analyzed. With the help of a filter, we can see which job is offered in which states, and based on that; a candidate can analyze which location to apply for jobs,

4. Relation between Education, Years of Experience, and Base salary

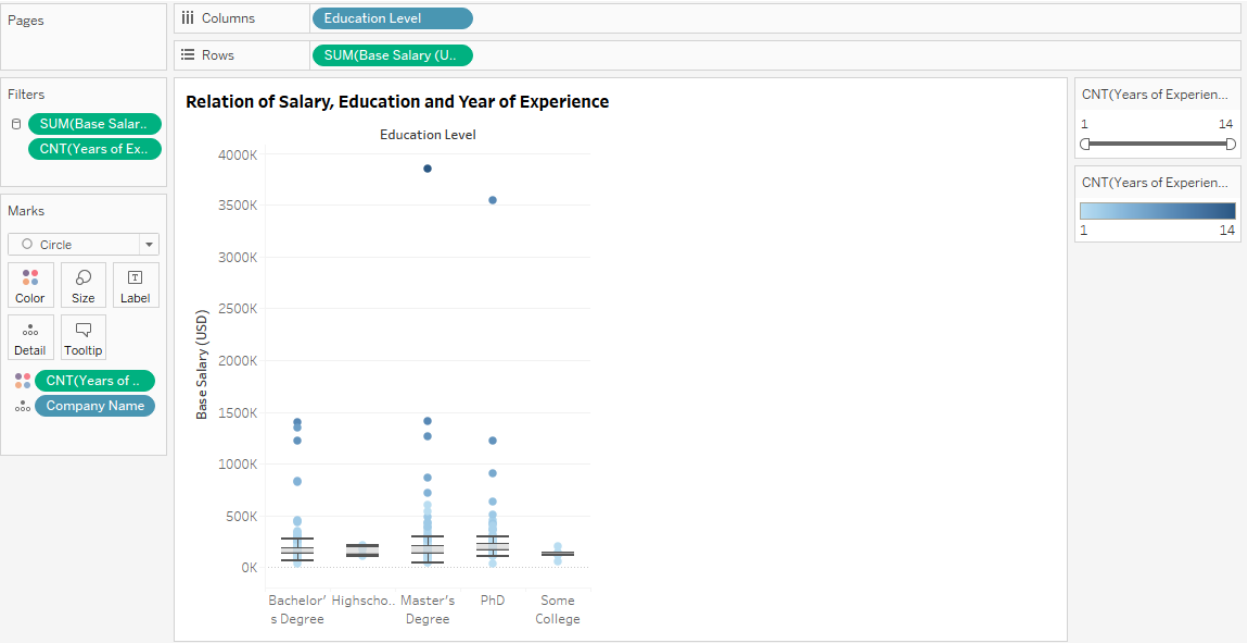

Figure 15: Box and Whisker plot to show the relation between Education, Years of Experience, and Base Salary

[Application Used: Box and Whisker Plot, Filter, Marks Card]

The above chart shows the relationship between education, years of experience, and base salary. This box and whisker plot shows the graphical method of displaying variation in the education level based on wage and year of experience. With the help of this graph, we can understand the distribution of data points on different education levels. The X-axis is the education level; the y-axis is the sum of base salary; the color shows the count of years of experience. Details are shown for the company name.

Most companies require a master's degree and a Ph.D. degree from the above graph. So, from the analysis, we can predict that an employee with a master's degree is highly likely to get a better salary and job opportunity than others. High school and some colleges have the most negligible chances of getting a job.

5. Maximum and minimum salary offered for the different sectors for data scientist

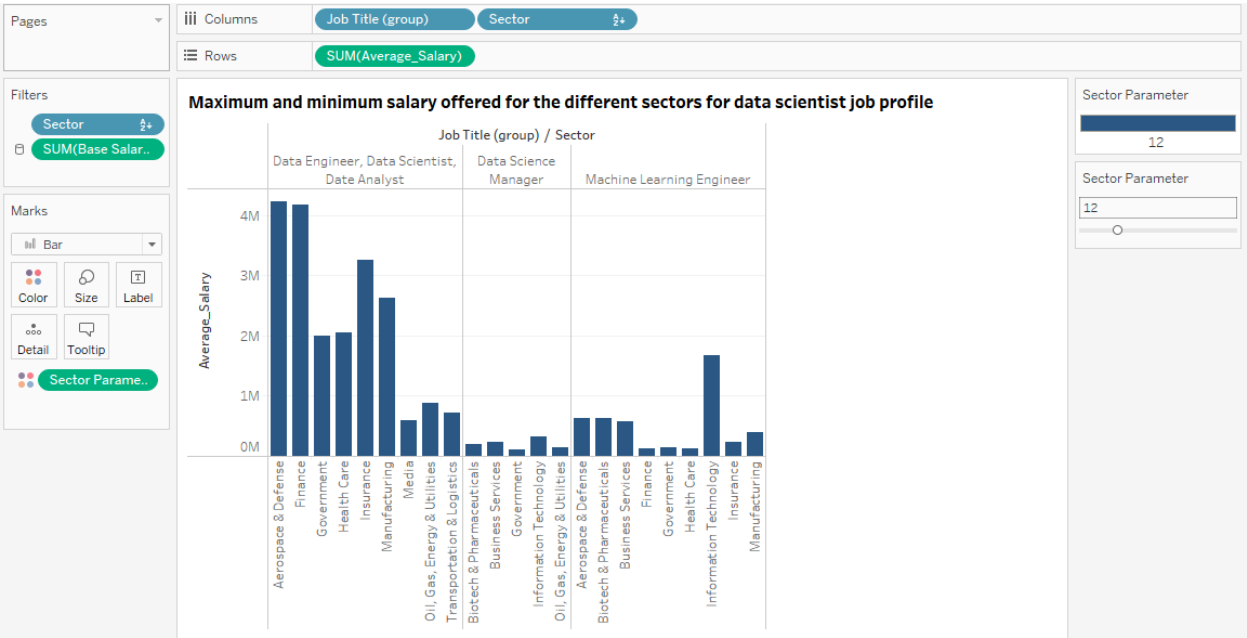

Figure 16: Bar graph that shows the maximum and minimum salary offered for the different sectors for Data Scientists

[Application Used: Bar Chart, Parameter, Sort, Filter, Marks Card]

The above bar graph shows the average salary offered for different companies' different sectors profiles scientist job profiles. The Sum of the average salary is broken down by job title. The X-axis shows the details of other sectors and different job titles. Y-axis shows the average wage offered for the various job roles. The parameter is added to this graph. Parameters give you a way to modify values in a Top 10 filter dynamically. Rather than manually setting the number of deals, a filter parameter is added to see the top ten details. We can see the maximum values we want to analyze as we change the parameter filter. Here the top 12 highest salaries offered based on the sector are shown. These sectors are sorted alphabetically. The above graph shows that data engineers, data scientists, and data analysts are grouped as these job profiles have similarities.

This analysis shows that Finance Aerospace & defense offers the highest salary for a data engineer, data scientist, and data analyst. Machine learning engineer has a good job opportunity in the information technology sector. This graph analyzes how different salaries are offered for various job roles based on industry.

6. Average salary offered by different sectors for different job roles

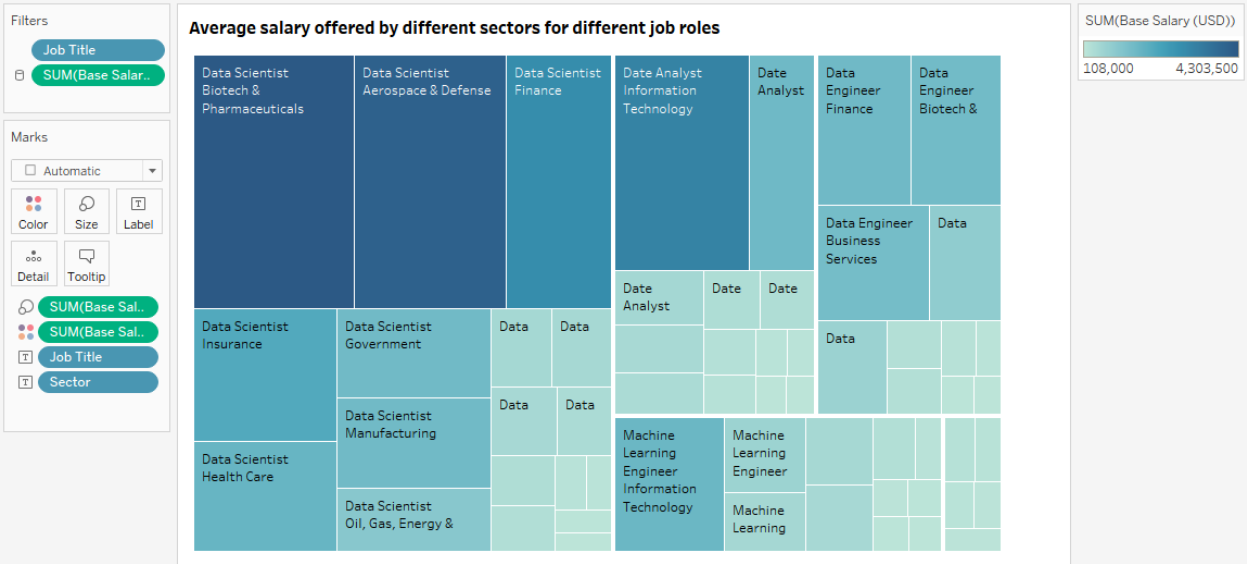

Figure 17: Treemap of Average salary offered by different sectors for different job roles.

[Application Used: TreeMap, Filter, Marks sheet]

The visualization shows the structure of the TreeMap based on the size of the job title and different sectors. The above graph represents the number of jobs in the other industry. The darker shade represents the highest number of jobs, and the lighter shade represents the lowest number of job openings for a different sector. Data science jobs have increased each year vividly. From the above analysis, Biotech & Pharmaceutical, Insurance, Health care, and Aerospace & Defense have a high demand for data scientist positions. The retail sector has the least need for data scientist jobs. Also, from the analysis, we can see that many companies have careers based on data science.

Dashboard

A dashboard is a collection of several views, which lets us compare various data simultaneously. If a set of opinions is reviewed every day, we can create a dashboard that displays all the pictures simultaneously, rather than navigating to separate worksheets.

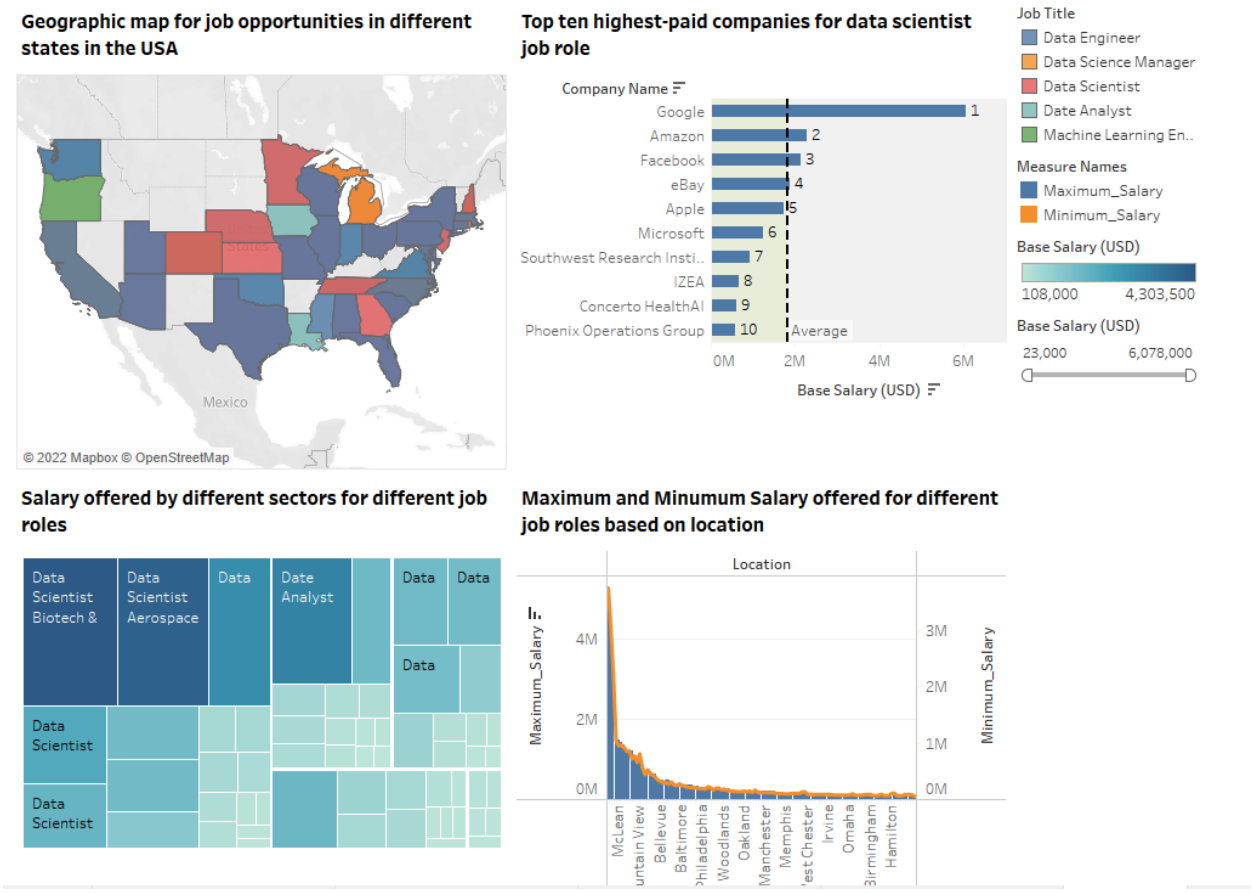

Figure 18: Dashboard of four different visualization

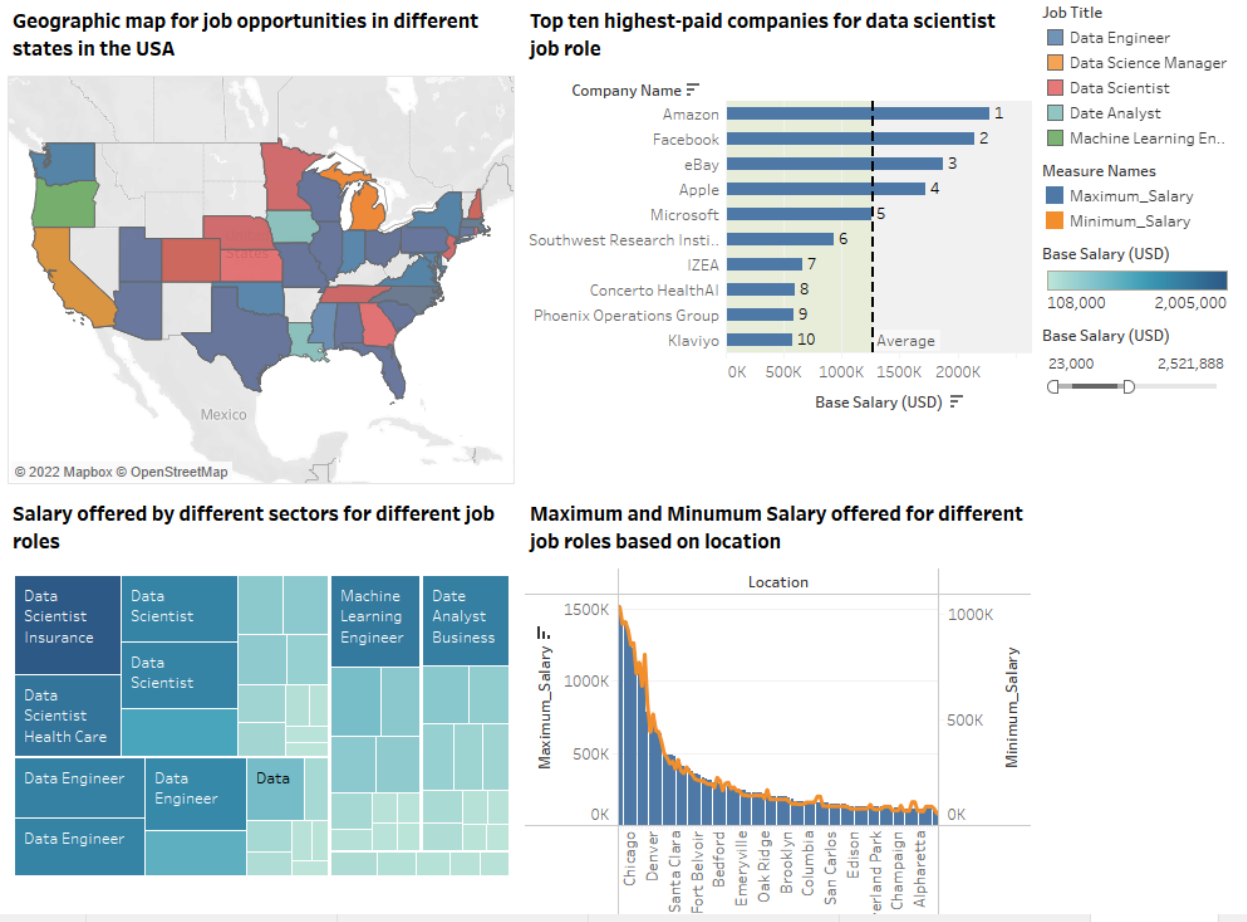

Figure 19: Dashboard that shows the filter based on salary

All the four graphs are linked with base salary; when the base salary changes, there are changes in all the graphs. It is shown in the above chart.

We have identified an appropriate analysis worksheet to build a story and identify what the key incites of our data are, as given below:

- **Geographic map for job opportunities in different states in the USA**

We start with identifying job opportunities in different parts of the USA. The map is based on longitude and latitude. The color indicates the details of job titles. Details are shown for the job state. The data is filtered on the sum of base salary. We can see the spread of different job roles in other parts of the USA. Each color symbolizes one job role. Dark blue is for the Data engineer job

role. Similarly, other color shows other job profiles. We can differentiate and analyze different jobs offered in various states with these. In this way, we could have an overall view of the job opportunities, which could help us with further analysis.

- **Top ten highest-paid companies for data scientist job role**

Secondly, we chose the analysis which demonstrated the top ten highest-paid jobs for different job roles. The base salary, company name, and job title are determined here. We can analyze the top ten companies that pay the highest wages with this information. This analysis helps us understand the salaries offered in different companies for the data scientist role.

- **Salary offered by different sectors for different job roles**

Thirdly we see the job opportunities based in other sectors. The visualization shows the structure of the TreeMap based on the size of the job title and different sectors. It represents the number of jobs in the other industry. From this analysis, we can see that many companies have careers based on data science.

- **The Maximum and Minimum Salary offered for different job roles based on location**

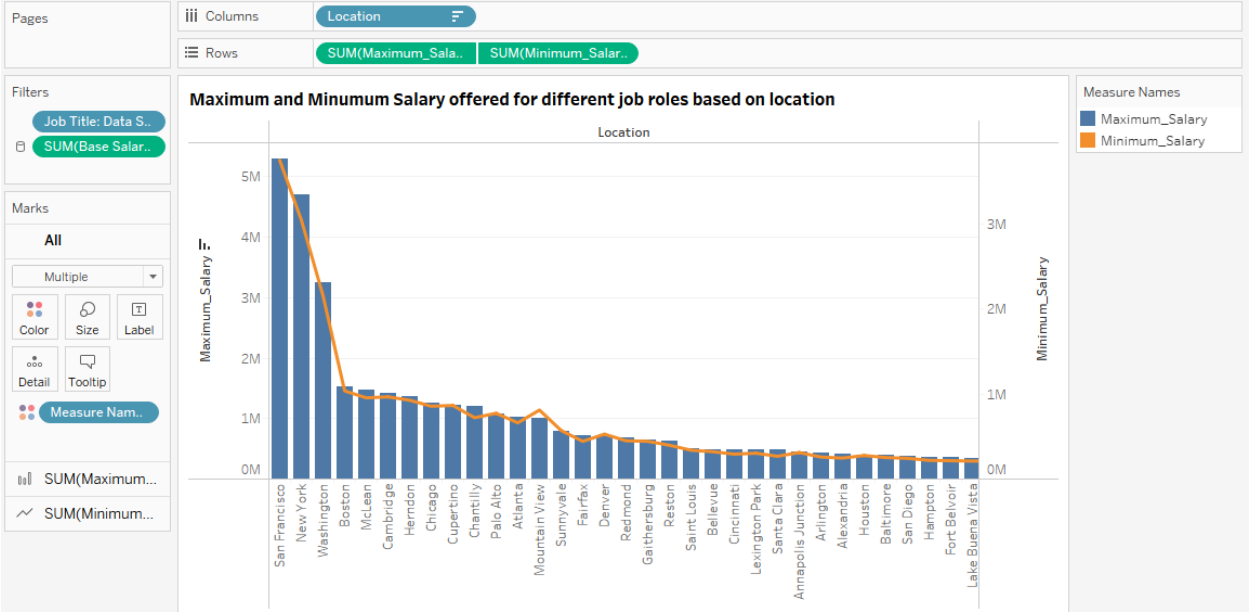

Figure 20: Dual Axis bar graph for the maximum and minimum salary offered for different job roles based on location

[Application Used: Bar Chat, Dual Axis Chart, Filter, Marks sheet]

The above graph shows the maximum and minimum salaries offered by different locations in different sectors. The X-axis represents the location, and the y-axis represents the maximum and minimum salary provided. This is a dual-axis graph with the maximum and minimum wage on the y-axis.

From the chart, it is seen that the San Francisco location has the highest salary offered.

As per the analysis, it is shown that San Francisco is the top contributor compared to other locations. The top 10 highest paying locations are San Francisco, New York, Washington, Boston, McLean, Cambridge, Herndon, Chicago, Cupertino, and Palo Alto. The analysis predicts that different locations have different wages, and location is one of the criteria to consider when applying for jobs.

Story Telling

Data storytelling is the ability to convey insights from datasets using narratives and visualizations effectively. You can use it to contextualize your audience's data insights and inspire action. Data Storytelling consists of three main components: Data, Narrative, and Visualization. Data visualization helps tell stories by curating data into a form that is easier to understand, highlighting trends and outliers. A good visualization tells a story, removing the noise from data and highlighting helpful information. Using visuals to represent the data will help us understand the patterns better, and we can focus on the critical points. We will be using a bar graph, geo graphs, and a few others to represent our data for this dataset. A story is a set of visualizations that work together to convey information. You can create reports to explain your data, provide context, show how decisions relate to results or provide compelling discussions.

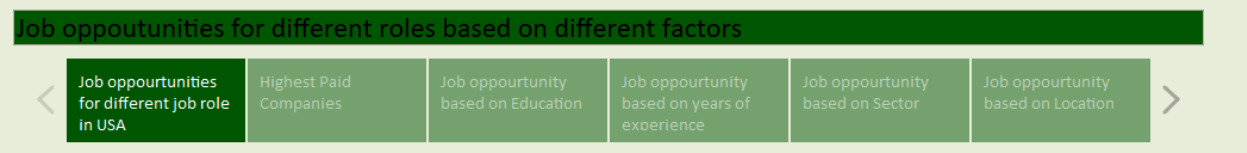

Figure: 21: Storytelling

This graph contains data science job roles and descriptions in different companies and approximate salaries offered for various positions in other companies. The information in these graphs shows all the information on data science job posting like company name, industry type, sector, minimum and maximum salary offered, location of the company, skills required, and different roles. Based on this information, we can represent our storytelling.

Many factors must be considered before applying for a job like Job opportunities in the field we are interested in, Job requirements like education, skills, and years of experience, Salary structure

in different industries, Highest and lowest-paid jobs and companies, Job opportunities in a different location, Rating of the job and company, Growth opportunity in a company and many more. This information will help us in better decision-making. The data set has various information regarding job postings; using these data, many visualizations were created. We can show these visualizations in the form of storytelling.

The story's title is Job opportunities for different roles based on other factors. Here, the factors considered are education, years of experience, sector, and salary. With the help of this visualization, we can show our analysis in the form of a story.

- **Job opportunities for the different job roles in the USA**

This visualization helps us understand the job opportunities available in different parts of the USA. We start with identifying the job opportunity in other parts of the USA. We can see the spread of different job roles in different parts of the USA. We can differentiate and analyze different jobs offered in other states with this chart. In this way, we could have an overall view of the job opportunities, which could help us with further analysis.

- **Highest paid companies**

Now that we have understood the job opportunities available in different parts of the USA, we can see which companies offer the highest salaries. This report depicts the rank of other countries based on the pay offered for data scientist jobs role. This report shows the top ten companies that are offering the highest salary. According to word, Google, Amazon, Facebook, eBay, Apple, Microsoft, Southwest Research Institute, IZEA, Concerto Health, and Phoenix Operation group are ranked in the top ten. We can determine that the top-ranked companies have the highest salaries

offered according to analysis. This data allows a candidate to convey his satisfaction level based on their required wage.

- **Job opportunities based on Education**

Every job will have different rob requirements. Education and skills are among the factors companies look for while selecting a candidate. We have seen the top ten companies that offer the highest salaries. If we want to get into these leading companies, we must have the required qualification. This visualization will help us understand the stuff required for different job roles based in other companies. The report also demonstrates that many companies prefer a candidate with a master's degree and Ph.D. A person with a master's degree or a Ph.D. will have the highest chance of being qualified. A high school or college person will have fewer chances of being prepared.

- **Job opportunities based on years of experience**

Years of experience are factors considered by companies on shortlisting candidates. We have seen the education qualification for different roles for different companies; now, we can analyze the job opportunities based on years of experience. This analysis helps us understand the salaries offered in various companies based on their year of experience. The scatter plot shows the salary offered in other companies based on experience. Facebook provides the highest compensation for a person with 21 years of experience; Envision LLC provides the lowest pay for one year of experience. According to the analysis, we can determine the salary ranges for different years of experience, and we can see the salary offered by other companies at the seniority level. Different companies provide different salaries for various years of experience. Many companies offer different salary

ranges for one year of experience. Other factors like skills, requirements, etc., are considered to give wages.

- **Job opportunities based on sector**

Every industry will have different job requirements. This bar graph shows the average salary offered for other companies' different sectors' scientist job profiles. According to the report, we can analyze the top ten industries with higher job opportunities. This analysis shows that Finance Aerospace & defense offers the highest salary for a data engineer, data scientist, and data analyst. Machine learning engineer has a good job opportunity in the information technology sector. This graph analyzes how different salaries are offered for various job roles based on industry.

- **Job opportunities based on location**

Now we know the job opportunities in different sectors, based on education and years of experience, we can analyze the job opportunities based on location. Location is one of the essential factors to consider when applying for jobs. Not every location has a good job opportunity. Urban areas will have more options; rural areas will have fewer opportunities. Salary offered in cities is higher compared to wages provided in rural areas. So, it's essential to consider location as one of the criteria before looking for jobs. With the help of this dual-axis graph, we can analyze the maximum and minimum salaries offered by different locations in different sectors. From the chart, it is seen that the San Francisco location has the highest salary offered. As per the analysis, it is shown that San Francisco is the top contributor compared to other locations. The top 10 highest paying locations are San Francisco, New York, Washington, Boston, McLean, Cambridge, Herndon, Chicago, Cupertino, and Palo Alto. The analysis predicts that different locations have different wages, and location is one of the criteria to consider when applying for jobs.

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