Data Related Job Posts in US

Data analysis, insights and recommendations



1 - INTRODUCTION

Title:

Data Analysis of job posts associated with data in US.

Objective:

To identify job post statistics in US, to put on a clear table which may help both appliers and the companies.

Data Source:

Kaggle - Data Job Postings

2-OVERVIEW OF DATA

Number of observations

14,436

Variables included

'title', 'company_name', 'location', 'via', 'description', 'extensions', 'job_id', 'thumbnail', 'posted_at', 'schedule_type', 'work_from_home', 'salary', 'search_term', 'date_time', 'search_location', 'salary_pay', 'salary_rate', 'salary_avg', 'salary_min', 'salary_max', 'salary_hourly', 'salary_yearly', 'salary_standardized', 'description_tokens'

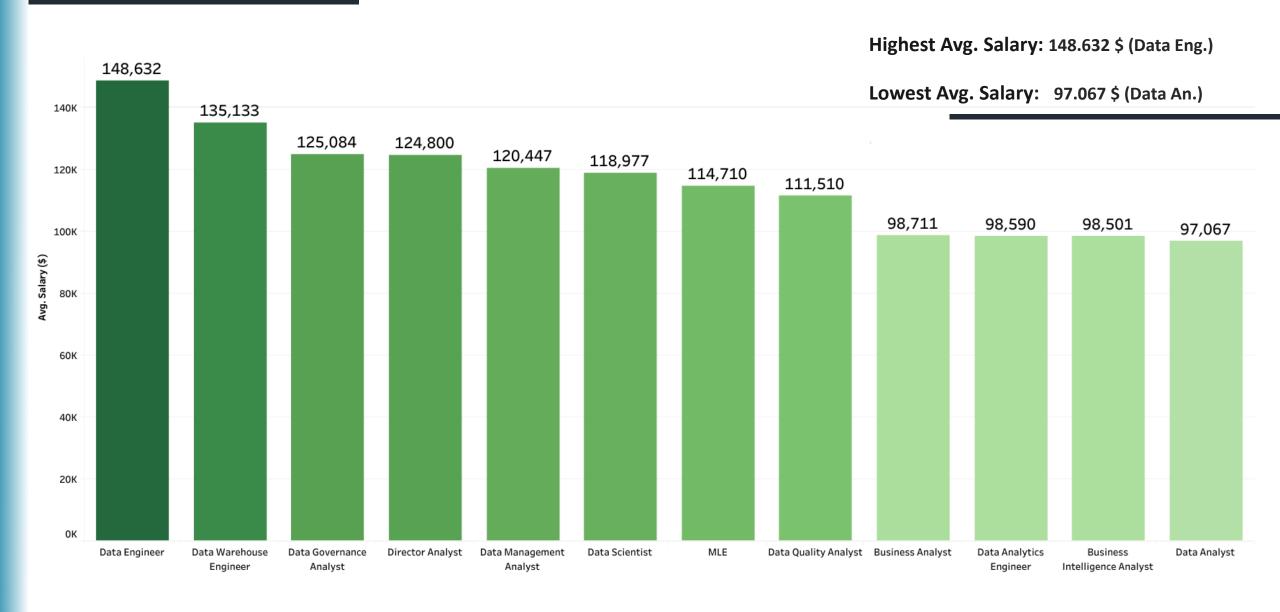
Data cleaning

Duplicates removed, missing values imputed or removed, column data types identified and corrected.

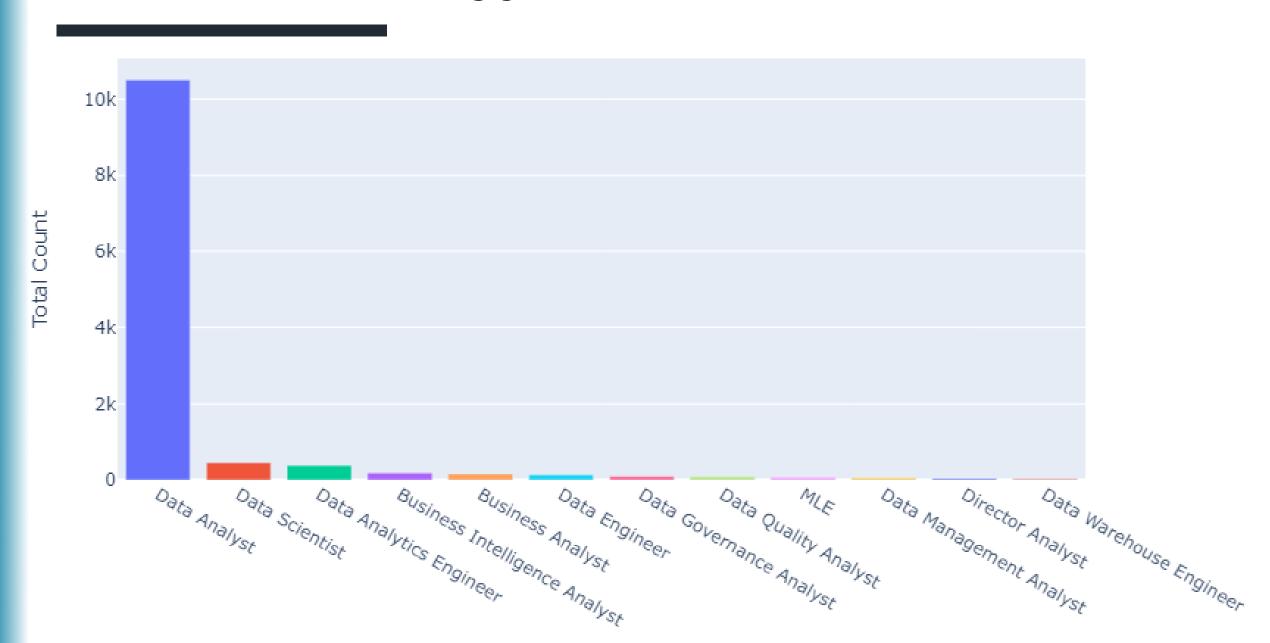
3 - DESCRIPTIVE ANALYSIS

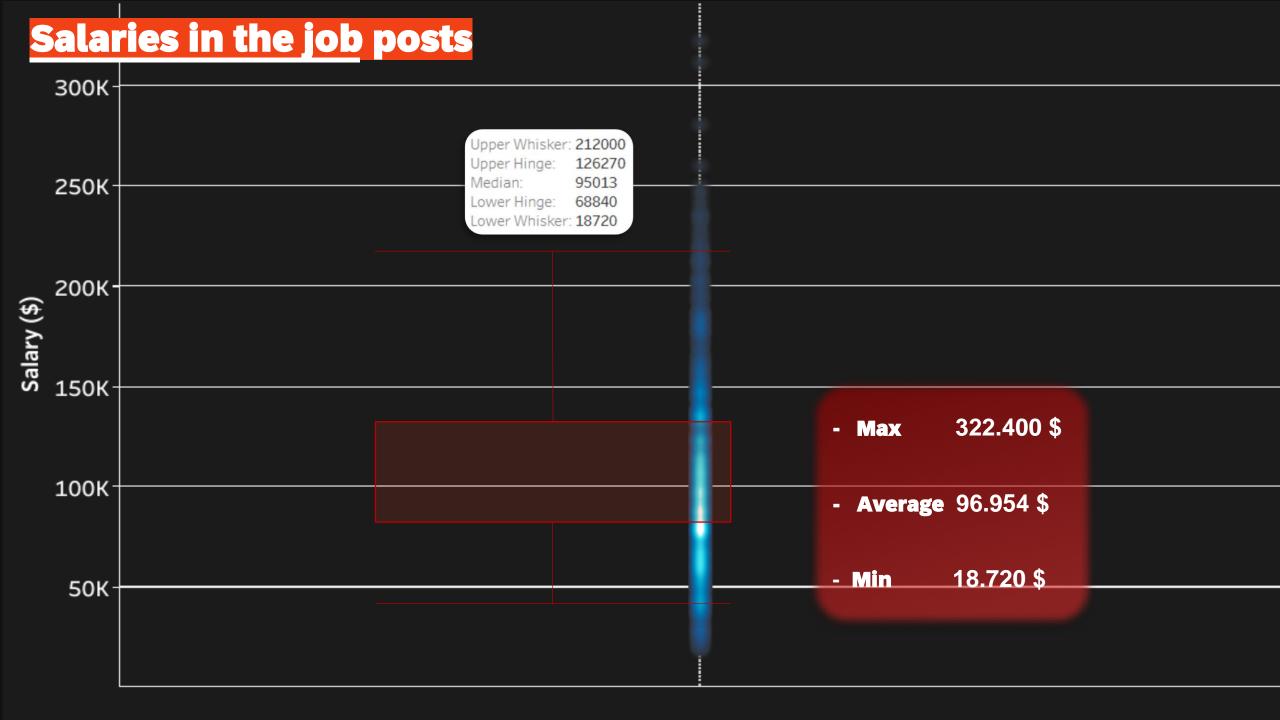
- Most Job Posts: Data Analyst
- Least Job Posts: Data Warehouse Engineer
- Most Job Posts (Platform): LinkedIn
- Most Job Posts (Job Type): Full Time
- Highest Salary: 322.400 \$
- Lowest Salary: 18.720 \$
- Most Job Posts (Seniority): Junior
- Most Job Posts (State): Missouri

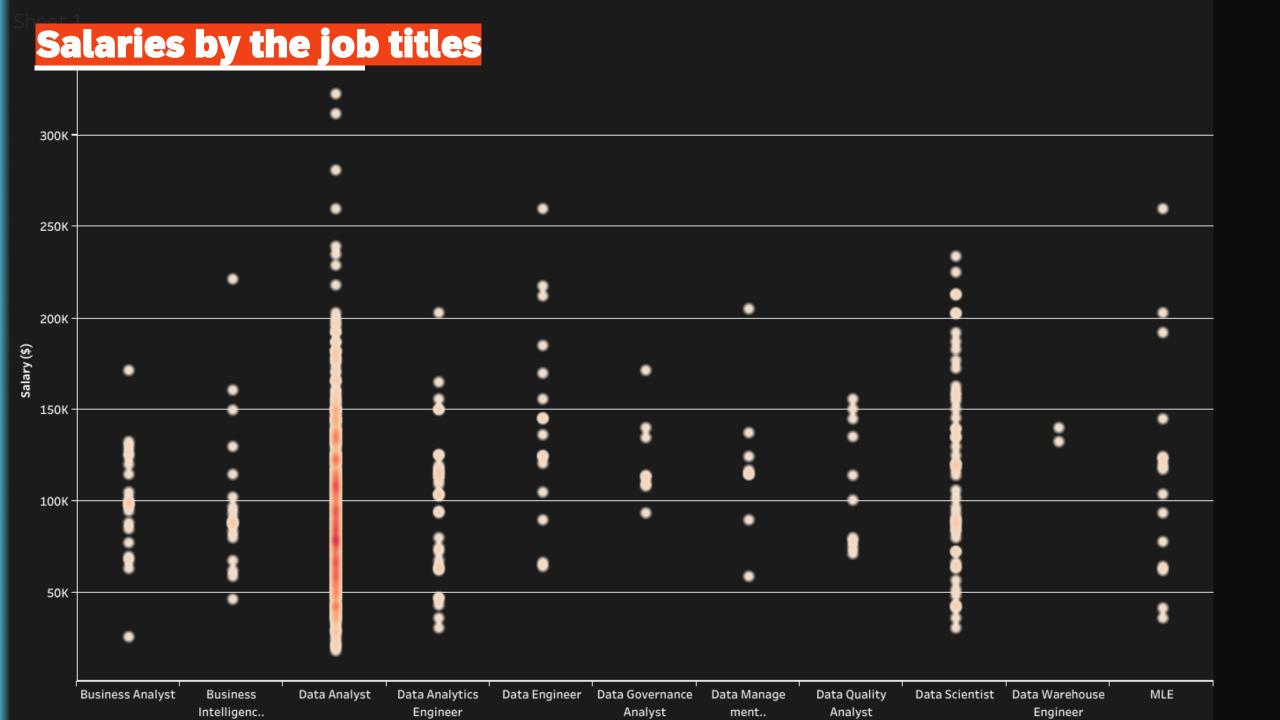
Average Salaries based on job titles



Number of Job Post by job titles







Top 5 Job Platforms

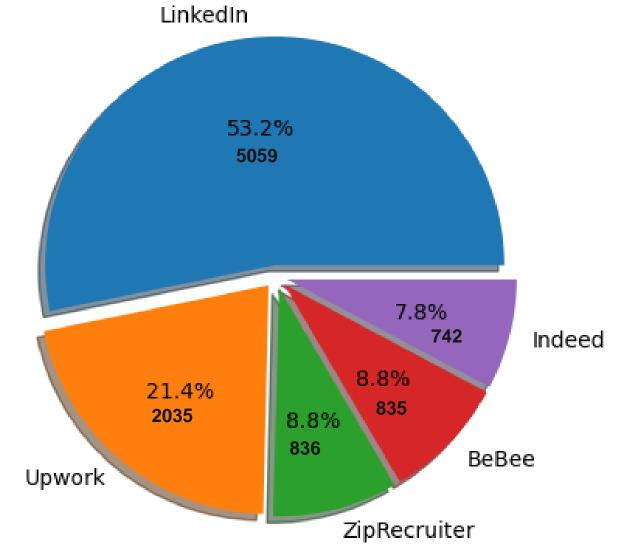
1 - LinkedIn 5059

2 – Upwork 2035

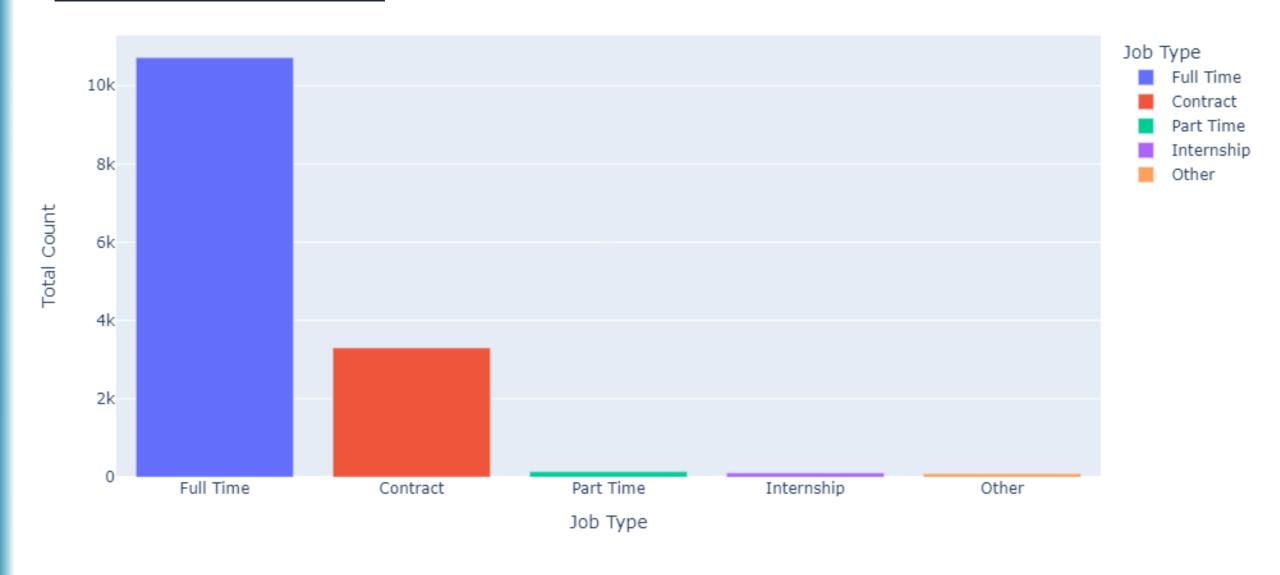
3 – ZipRecruiter 836

4 – BeBee 835

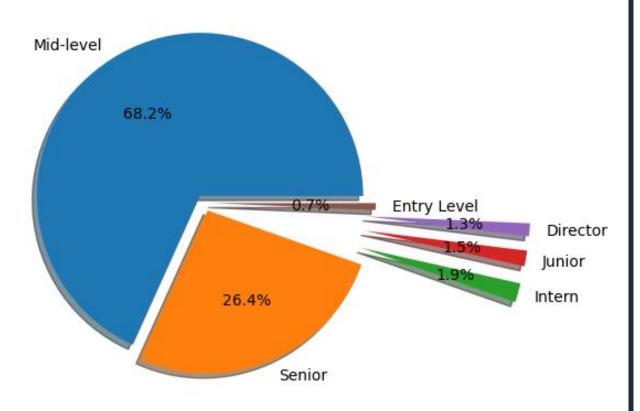
5 – Indeed 742



Schedule types of the job posts



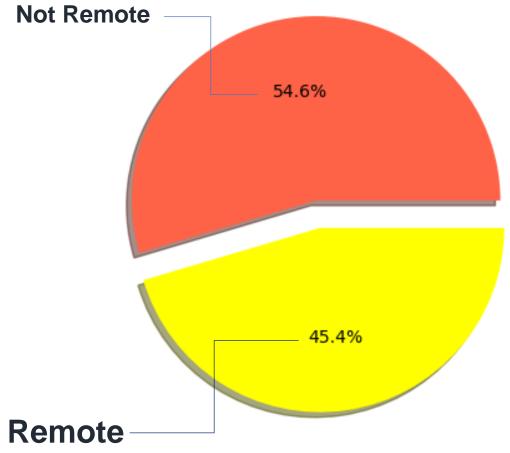
Percentage of job posts by seniority



Highest : Mid-Level

Lowest : Entry Level

Remote or not



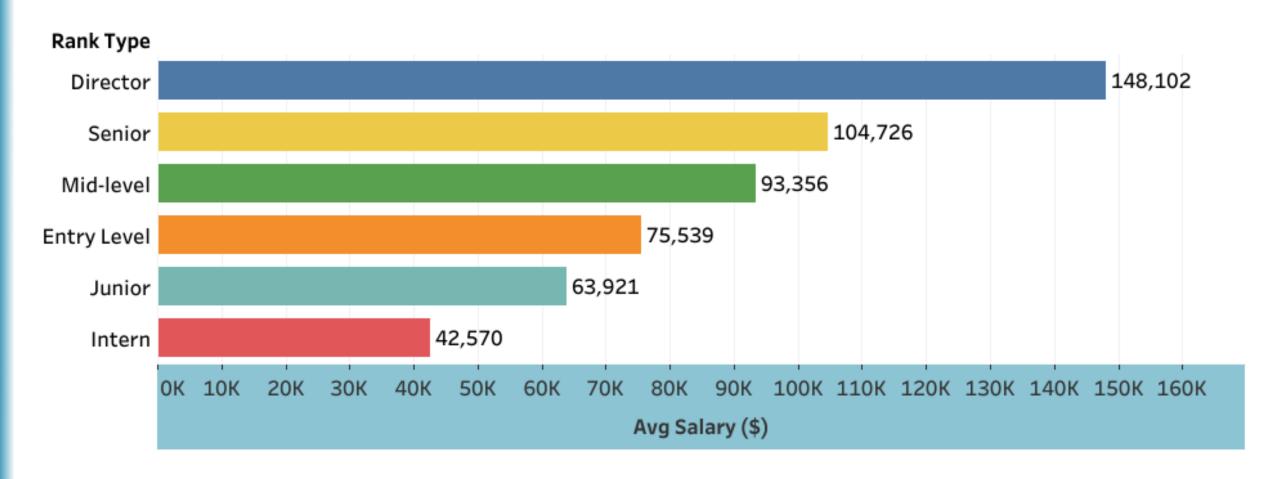
Top 20 Highest Salary in Job Postings

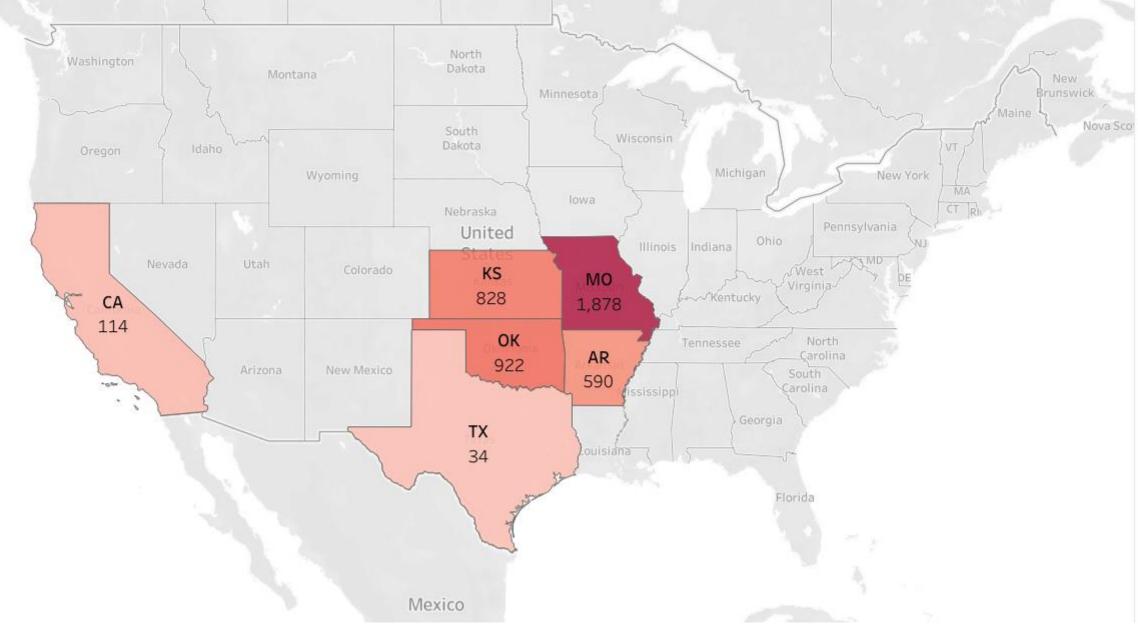
	Job Title	Annual Salary	Seniority
1	Data Analyst for Ecommerce and Marketing Agency	322400.0	Mid-level
2	Analyze census data	312000.0	Mid-level
3	Data Analyst	280800.0	Mid-level
4	Tableau prep/Data analyst expert	260000.0	Senior
5	Principal Data Engineer/Architect	260000.0	Director
6	Data Analysis	260000.0	Mid-level
7	PLS, ensamble models, decision tree algorithms	260000.0	Mid-level
8	Senior Data Analyst	260000.0	Senior
9	Consultation on Data Analysis for Master's Thesis	260000.0	Mid-level
10	Market research data analyst - Contract to Hire	260000.0	Mid-level
11	Amazon PPC Data Analyst	260000.0	Mid-level
12	Principal Data Engineer/Architect	260000.0	Director
13	Google Sheets + Data Studio Build using Supermetrics	249600.0	Mid-level
14	Google Tag Manager / GA4 Setup and Advanced Implementation	244400.0	Mid-level
15	Data Analyst: Python Scripts For Competitor Pricing - Contract to	239200.0	Mid-level
16	Clinical Mapping Data Analyst	235040.0	Mid-level
17	Web Analyst	234000.0	Mid-level
18	Contract Data Scientist/Engineer - \$125 p/h	234000.0	Mid-level
19	Need statistician help for PhD dissertation analysis	228800.0	Mid-level
20	NFT Analyst - Contract to Hire	228800.0	Mid-level

<u>Highest</u>: Data Analyst for E-Commerce and Marketing Agency

- 2/20 Director
- 2/20 Senior
- 16/20 Mid Level

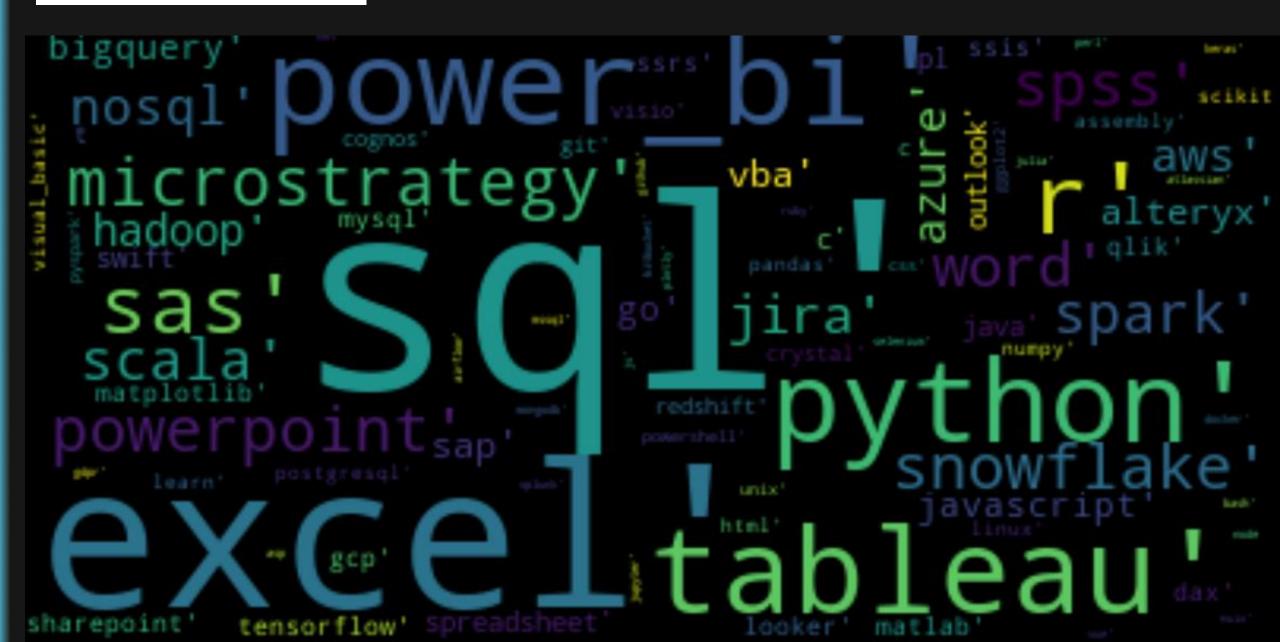
Average Salaries by Seniority



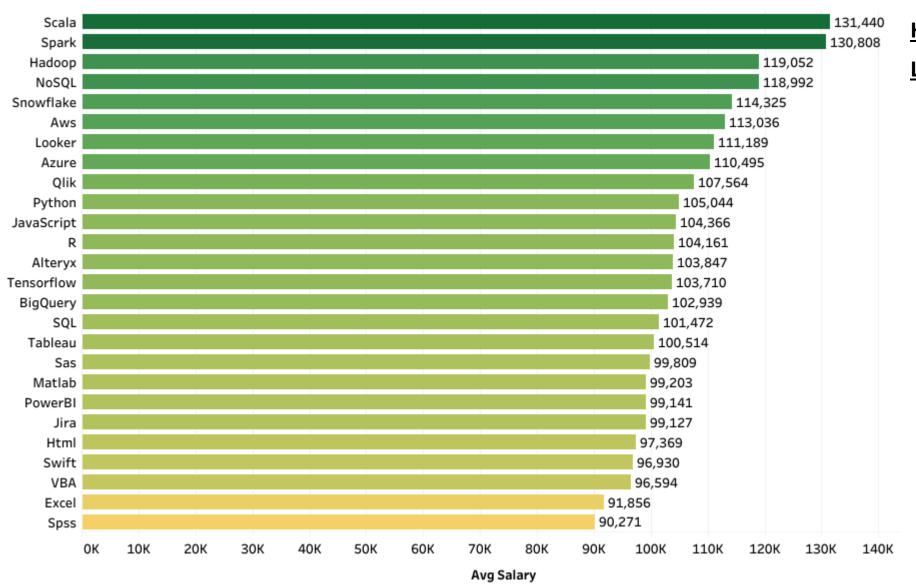


Most Job Posts based on states

Which qualifications do employers demand most?



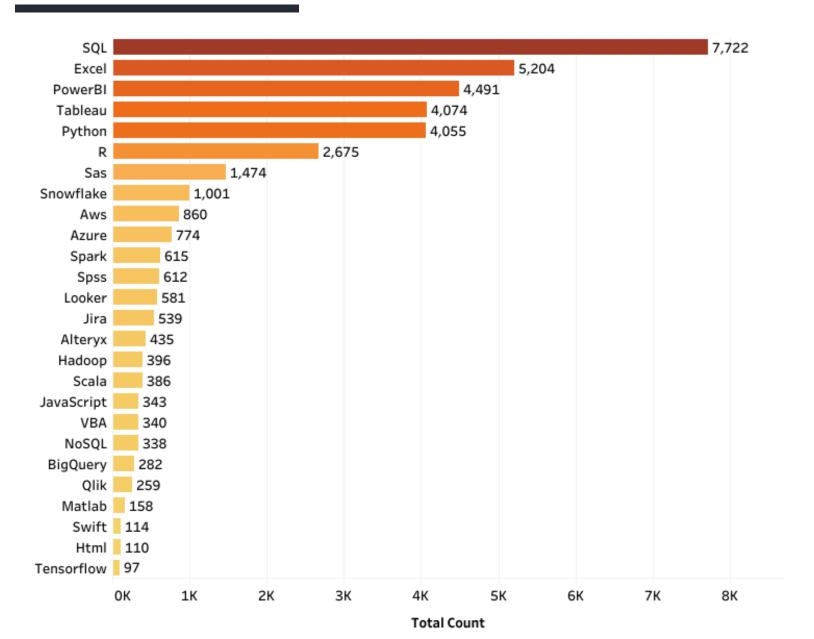
Salaries by required qualifications



<u>Highest</u>: Jobs require **Scala**

Lowest: Jobs require **Spss**

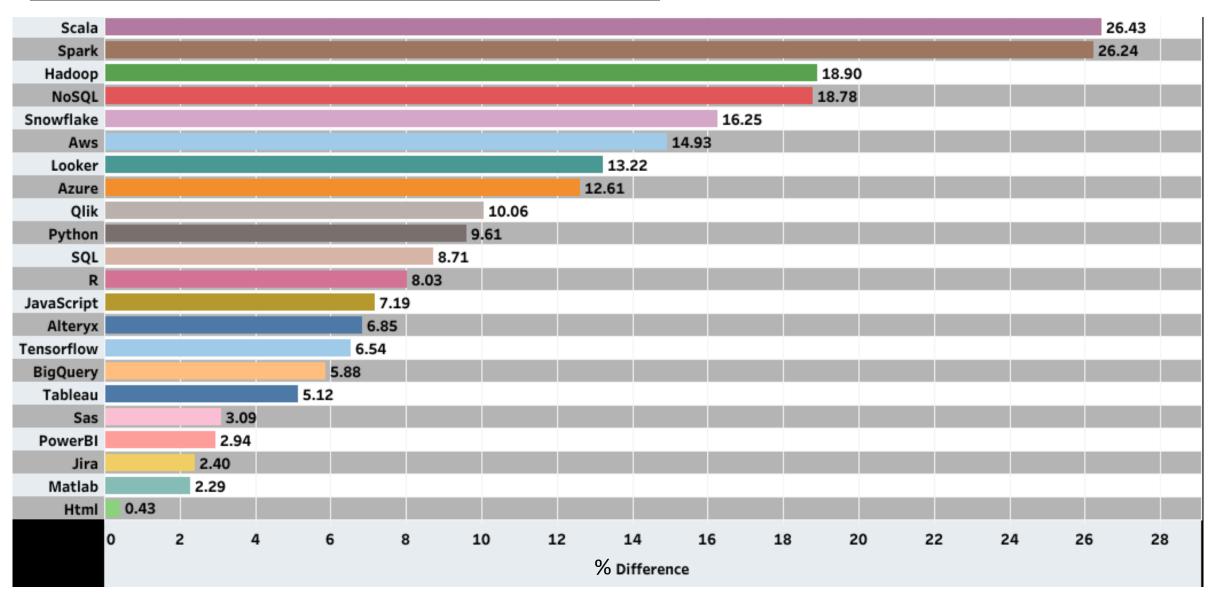
Number of jobs by required qualifications



<u>Highest</u>: Jobs require **SQL**

Lowest: Jobs require **Tensorflow**

How much does being capable of a qualification increase the salary?



This graph shows the difference between the salaries which is presented in the job post, including and not including that qualification.

5 - INSIGHTS

- SQL, Excel, PowerBI, Tableau, Python and R are very high in demand. Job seekers should consider improving these skills.
- Highest salaries are given to people skilled in Scala, Spark, Hadoop and NoSQL.
- Even the total number of job posts which require NoSQL skill is less than job posts require SQL skill, salary is higher by the job posts require NoSQL skill.
- LinkedIn has more than half of the total job posts. It may be a good idea to check the job posts in LinkedIn.
- State of Missouri has the highest count of job posts. (Info Reliability:Low)
- Part time jobs and internships are a very little part of the total count. So delivering projects and gaining certificates are better ways to gain experience.

5-INSIGHTS

- Data Engineers are the highest salary group among the jobs related with data.
- Although data engineers are the highest salary group, highest salary (322.400 \$) is paid to a data analyst.
- Data analyst job postings has the highest number of job postings by far.
- Interns get paid an average of 42000 \$ annually which is a good point for starters in data industry.
- Mid level jobs may offer high salaries, even in some cases higher than jobs stated as senior and director jobs.
- **%45,4** of the job postings offer remote working option which has many advantages such as flexibility, increased productivity and cost savings.

6-CONCLUSION

In conclusion,

- By analyzing job postings data, we can gain a better understanding of the skills and qualifications that are most in demand in data related jobs, and use this information to make more informed hiring and career decisions.
- I hope this presentation has been informative and has given you a better understanding of how job postings data can be used to gain insights into the labor market. Thank you for your attention.

While this analysis has some limitations, including the availability and quality of the data, i believe that these recommendations provide a strong starting point for further exploration and improvement.