

Job Trends in Data Science

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Overview

Objective: What are the best paying jobs in Data Science?

Dataset: “Jobs and Salaries in Data field 2024” by Murilo Zangari via Kaggle.com

# work_year	Δ experienc...	Δ employe...	Δ job_title	# salary	Δ salary_curr...	# salary_in...	Δ employee...	Δ work_settl...	Δ company_L...	Δ company_...	Δ job_categ...
2024	Entry-level	Freelance	Applied Data Scientist	30000	USD	30000	United Kingdom	Remote	United Kingdom	M	Data Science and Research
2024	Executive	Full-time	Business Intelligence	230000	USD	230000	United States	In-person	United States	M	BI and Visualization
2024	Executive	Full-time	Business Intelligence	176900	USD	176900	United States	In-person	United States	M	BI and Visualization
2024	Senior	Full-time	Data Architect	171210	USD	171210	Canada	In-person	Canada	M	Data Architecture



Questions

1. What are the most common job titles?
2. What Countries pay the best salaries?
3. How does experience influence salary?

# work_year	^ experienc...	^ job_title	# salary_in_...	^ employee_...	^ work_setti...	^ company_I...
2024	Executive	Business Intelligence	176900	United States	In-person	United States
2024	Senior	Data Architect	171210	Canada	In-person	Canada
2024	Senior	Data Architect	92190	Canada	In-person	Canada
2024	Mid-level	Data Science	57753	United Kingdom	In-person	United Kingdom



Details

14, 000+ rows of data

Timeframe: 2020 -2024

Countries: 74

Salary Range: \$15,000-\$450,000

Experience level: Entry, Mid, Senior, Executive

Job Titles: 149

Work Setting: In-person, Remote, Hybrid

work_year	experience_level	employment_type	job_title	salary
2024	Entry-level	Freelance	Applied Data Scientist	30000
2024	Executive	Full-time	Business Intelligence	230000
2024	Executive	Full-time	Business Intelligence	176900
2024	Senior	Full-time	Data Architect	171210

Data



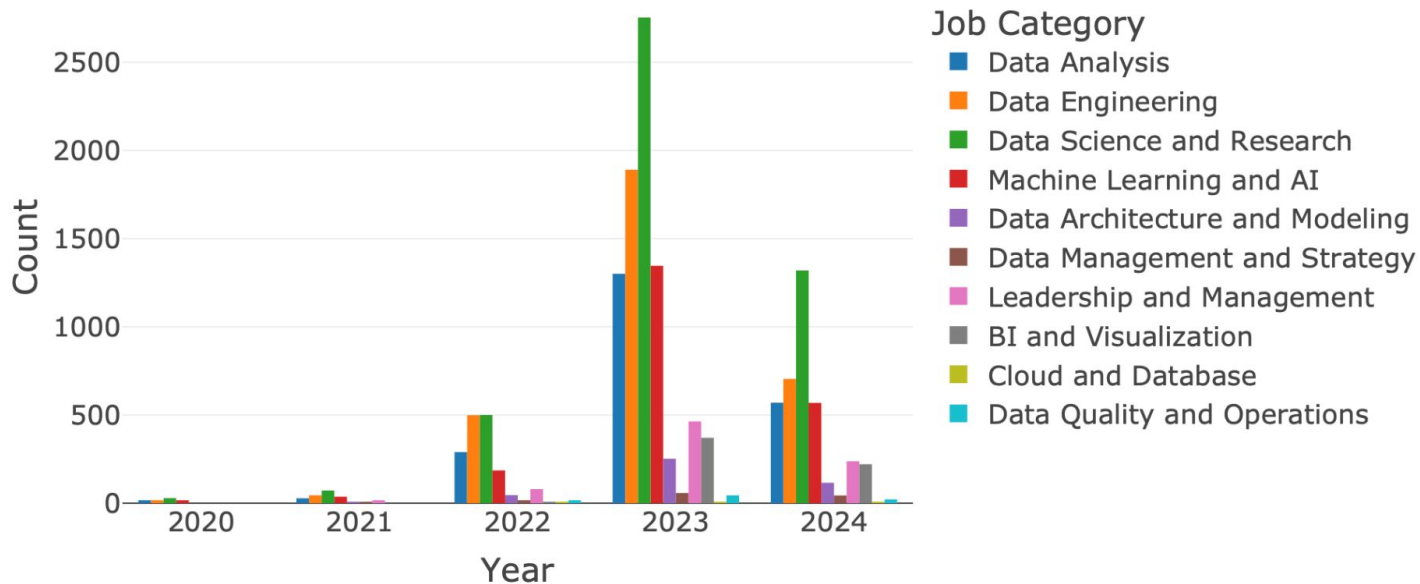
Job Growth

- We will look at the most popular jobs and how they have changed over the years 2020-2024
- We will take a specific look at the percentage of data science jobs based on popularity through the those years
- We will determine which four data science jobs are the most popular throughout the years

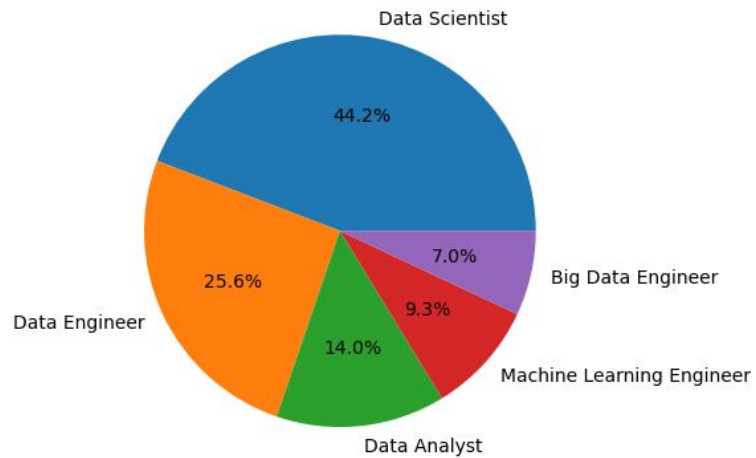


Job Growth

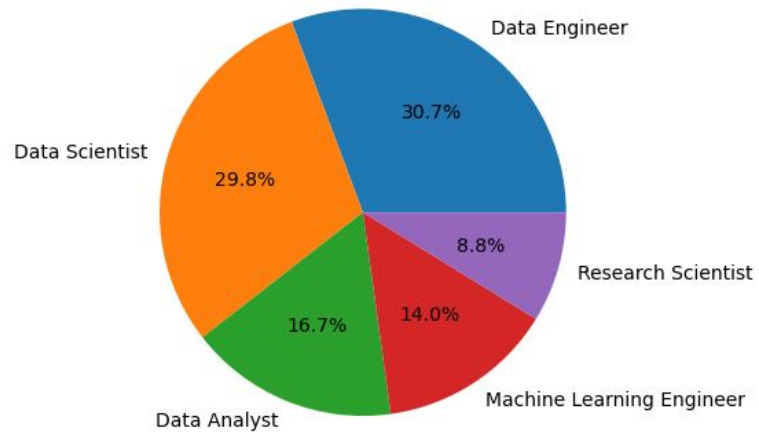
Year-on-Year Comparison of Job Categories



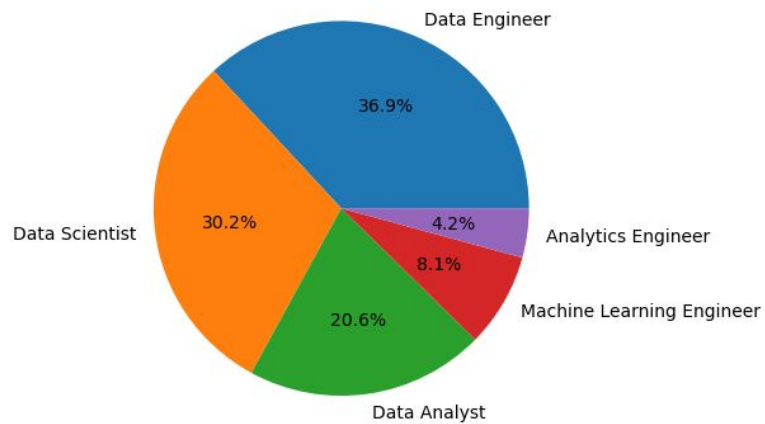
2020



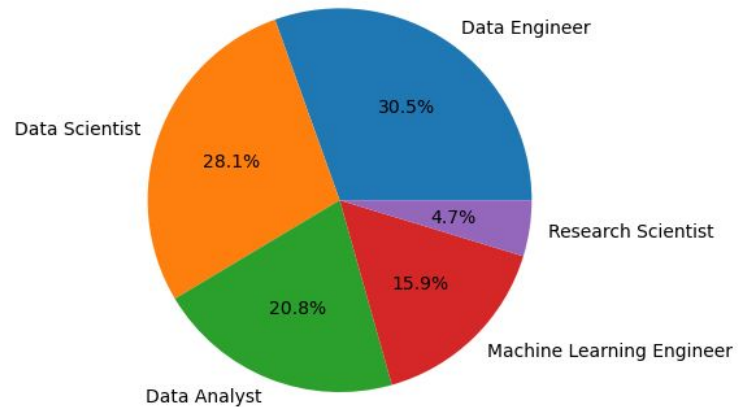
2021



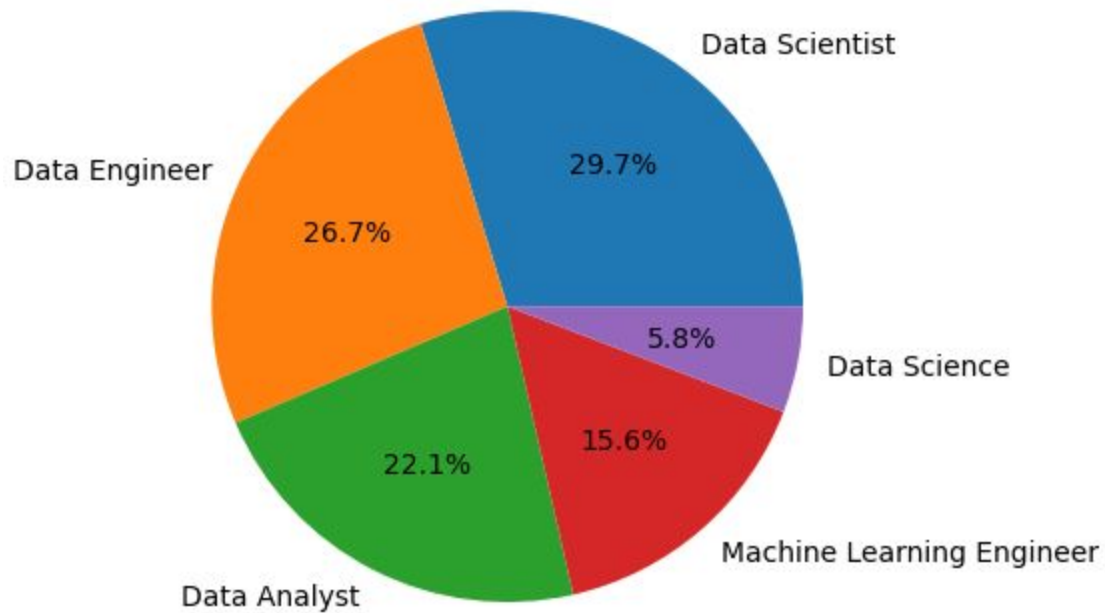
2022



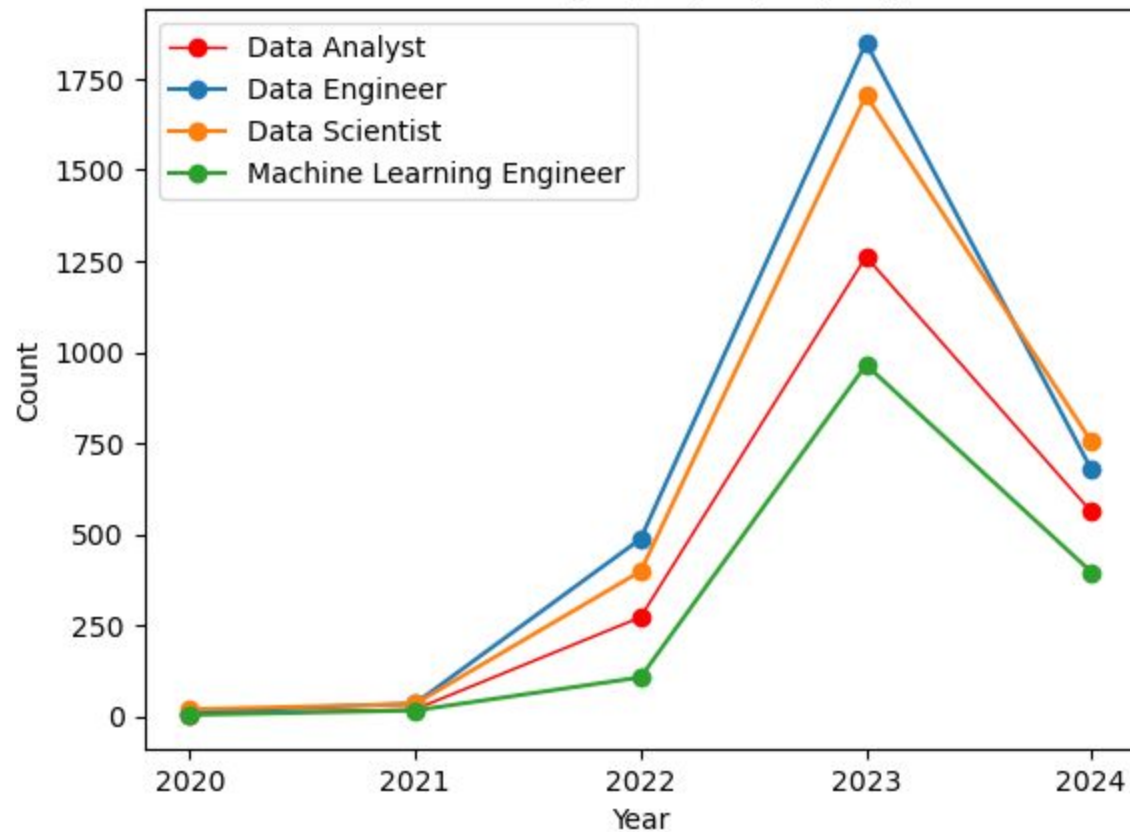
2023



2024



The amount of people per job per year



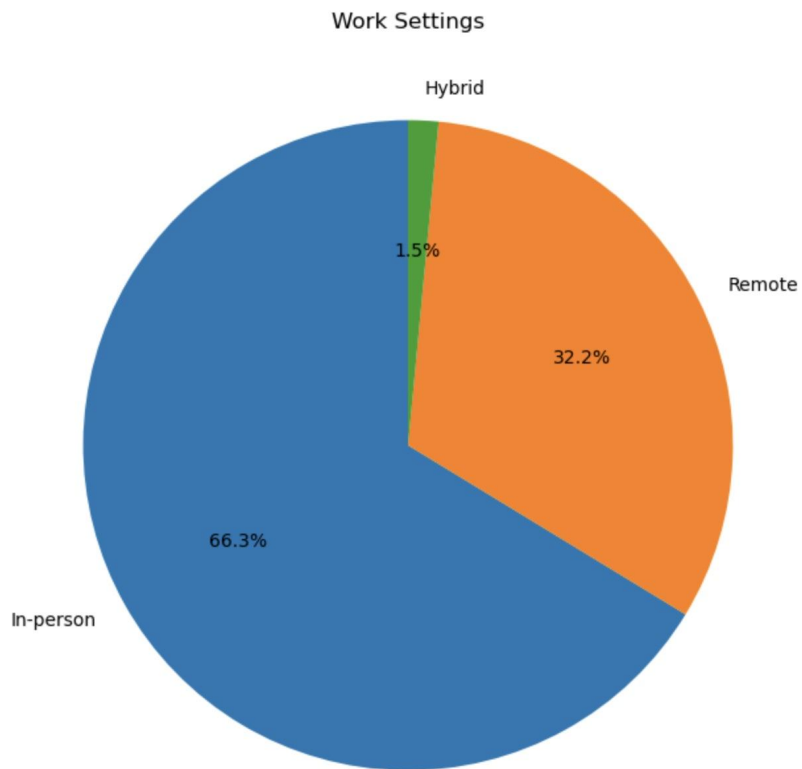


Salary by Country

- We will look at the different types of work settings available
- We will look at which countries currently have the most jobs
- We will look at the average salaries broken down by their country

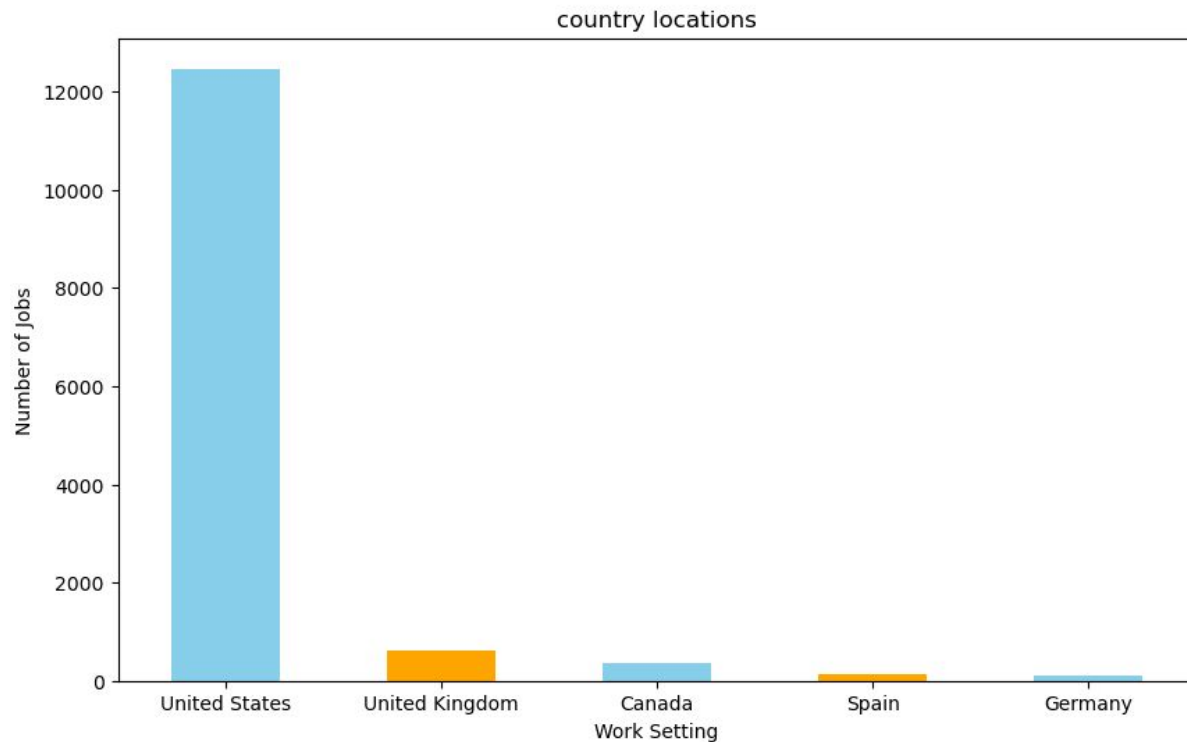


Work Settings



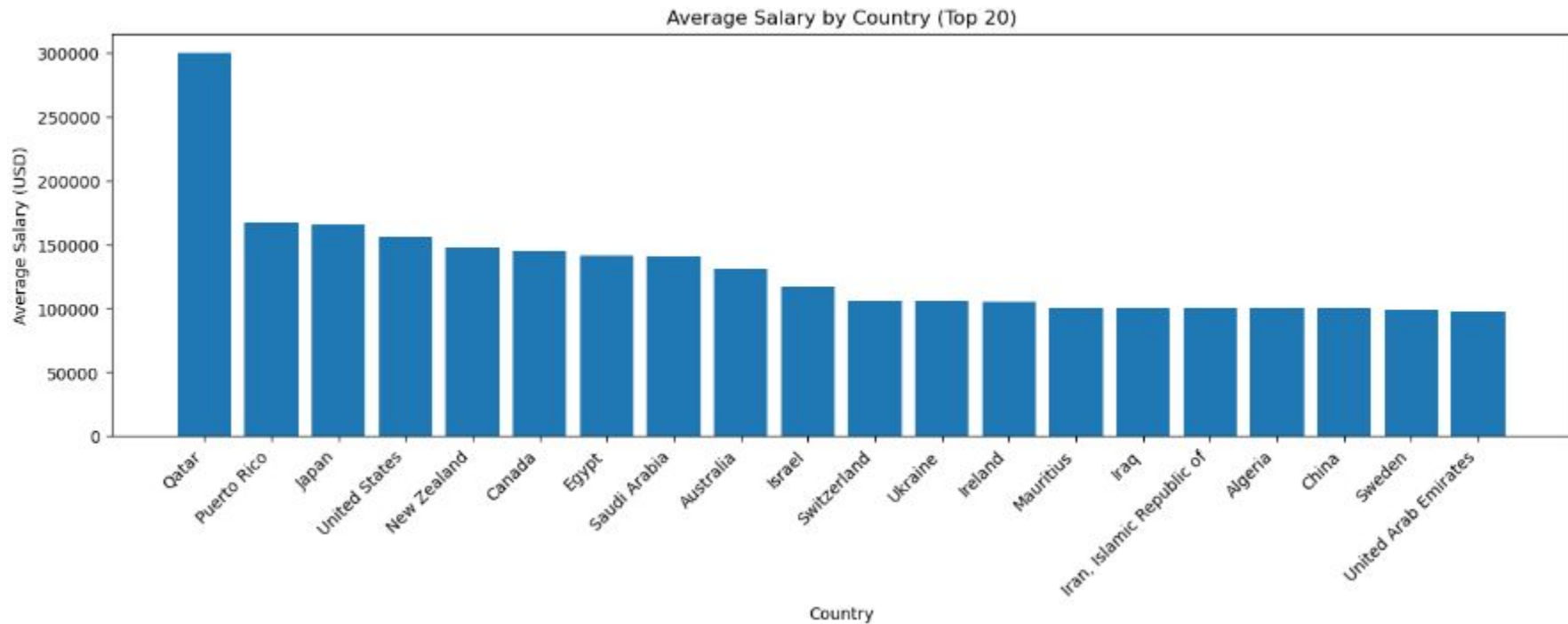


Number of Jobs by Country





Average Salary by Country



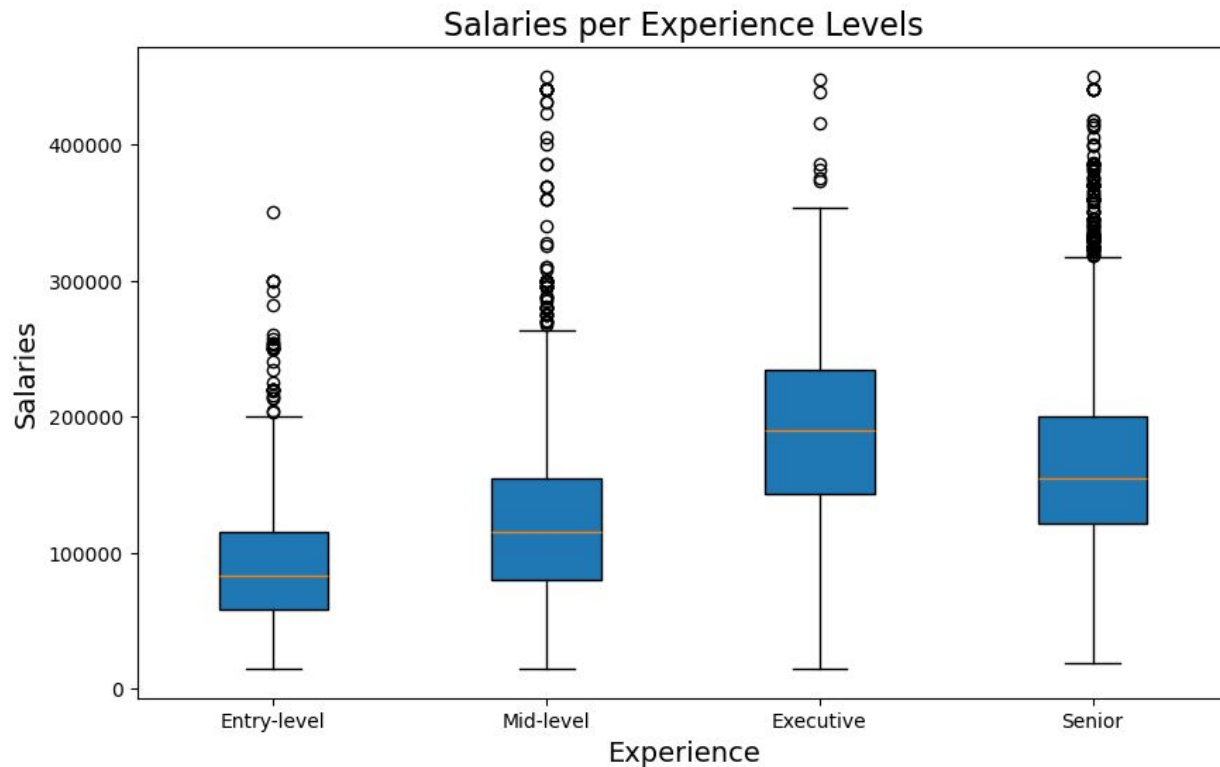


Salaries by Experience

- We will look at the average salaries separated by the level of experience an employee has
- We will look at the ranges of the maximum and minimum salaries determined by experience
- We will look at the average salaries of the top jobs we have previously found and break them down by experience level



Salaries by Experience





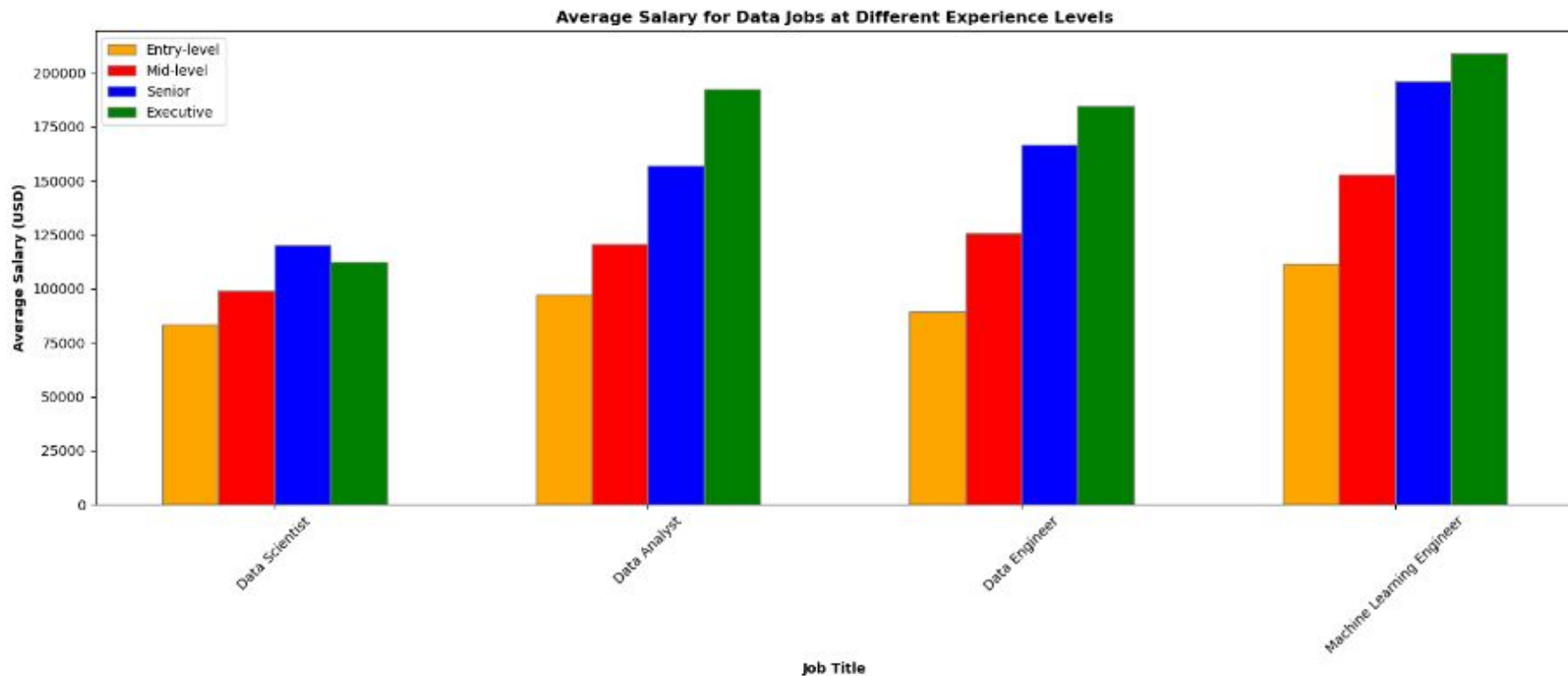
Salaries by Experience

Min to Max Ranges:

- Entry Level: \$15,000-\$350,000
- Mid Level: \$15,000-\$450,000
- Senior Level: \$18,381-\$450,000
- Executive Level: \$15,000-\$448,000



Salaries by Experience





Conclusions

- Based on our review the highest paying job in the US for an entry-level position in 2024 would be Machine Learning Engineer
- The average salary of with these specific criteria is \$126,118.85
- For remote work, the highest paying job is Data Scientist with an average salary of \$105,000
- The most popular in 2024 job was Data Scientist despite it not having the highest average salary overall



Questions Requiring Further Analysis

- A further explanation for why there are less of the highest average paying job than others
- A further explanation of the big jump of jobs in 2023 compared to all other year that were looked at
- If the data set was biased based on a particular country, type of job, or other details of the employees surveyed
- If this data set is a good/accurate representation of the population at large