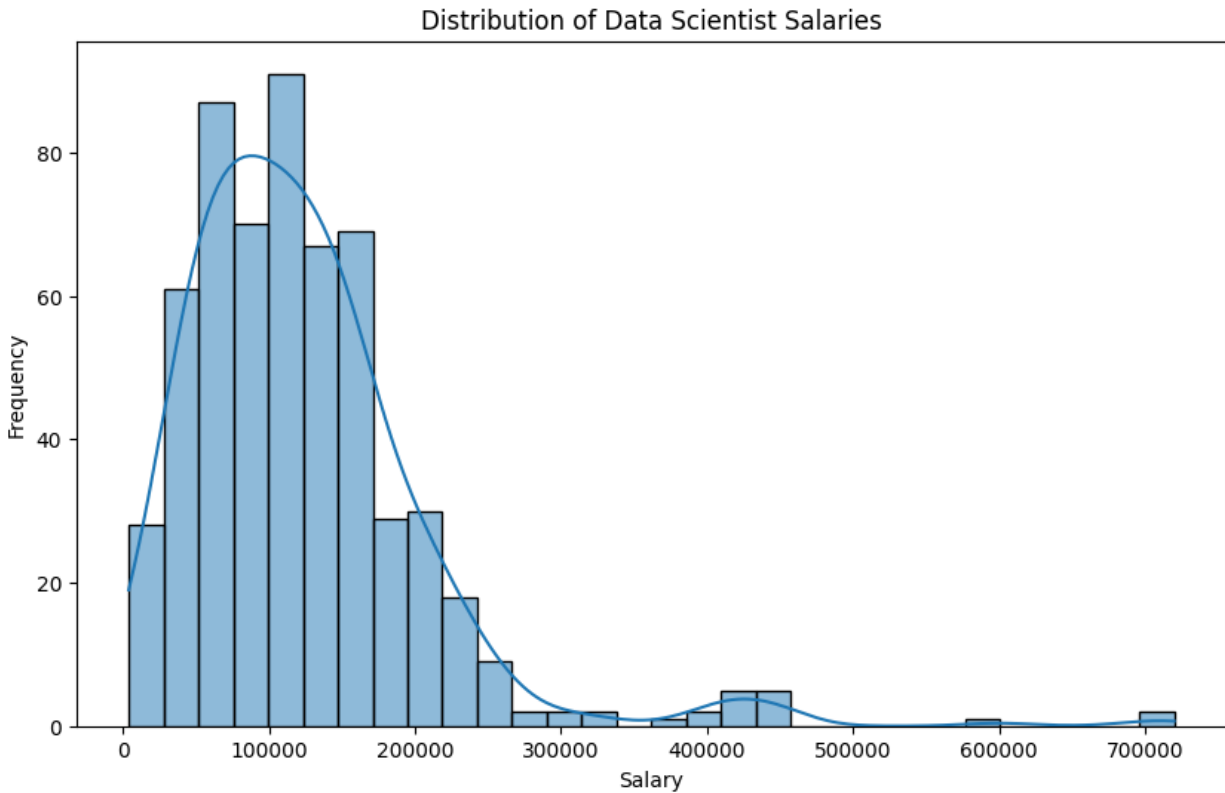


Lab 1: Analyzing Data Scientist Salaries

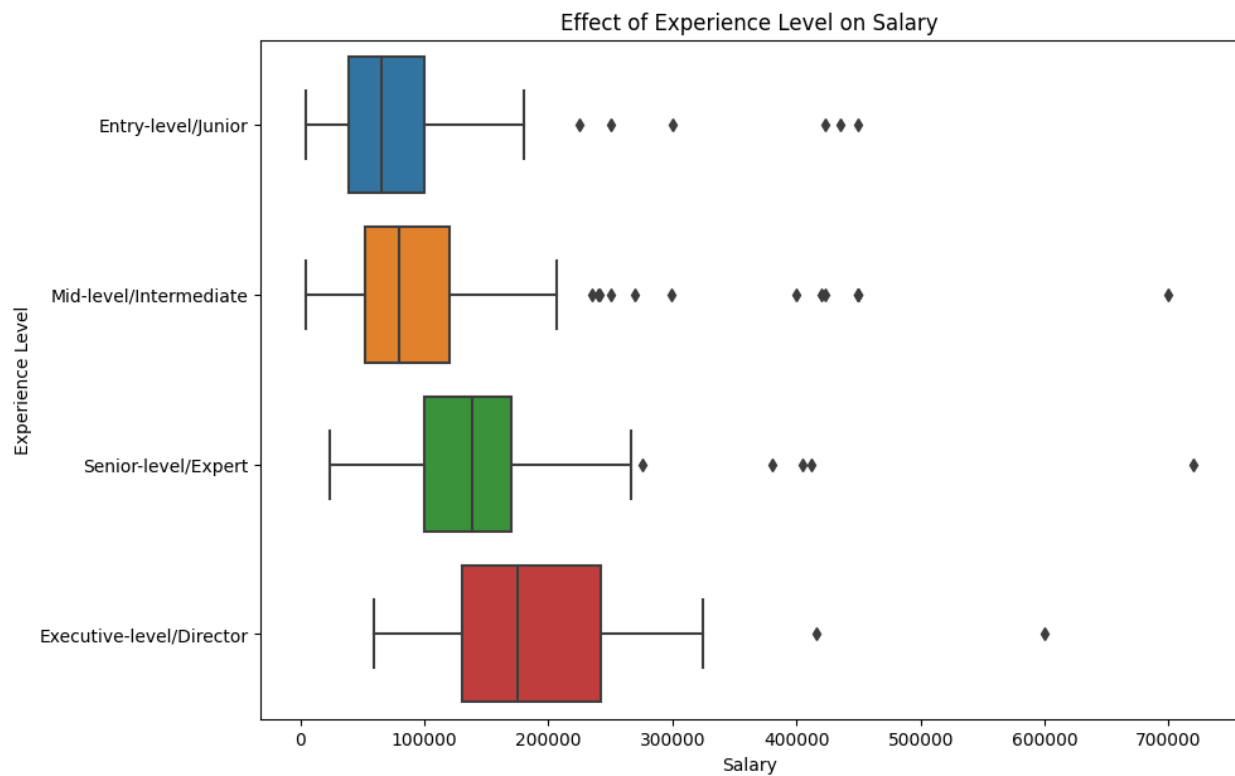
General Salary Data



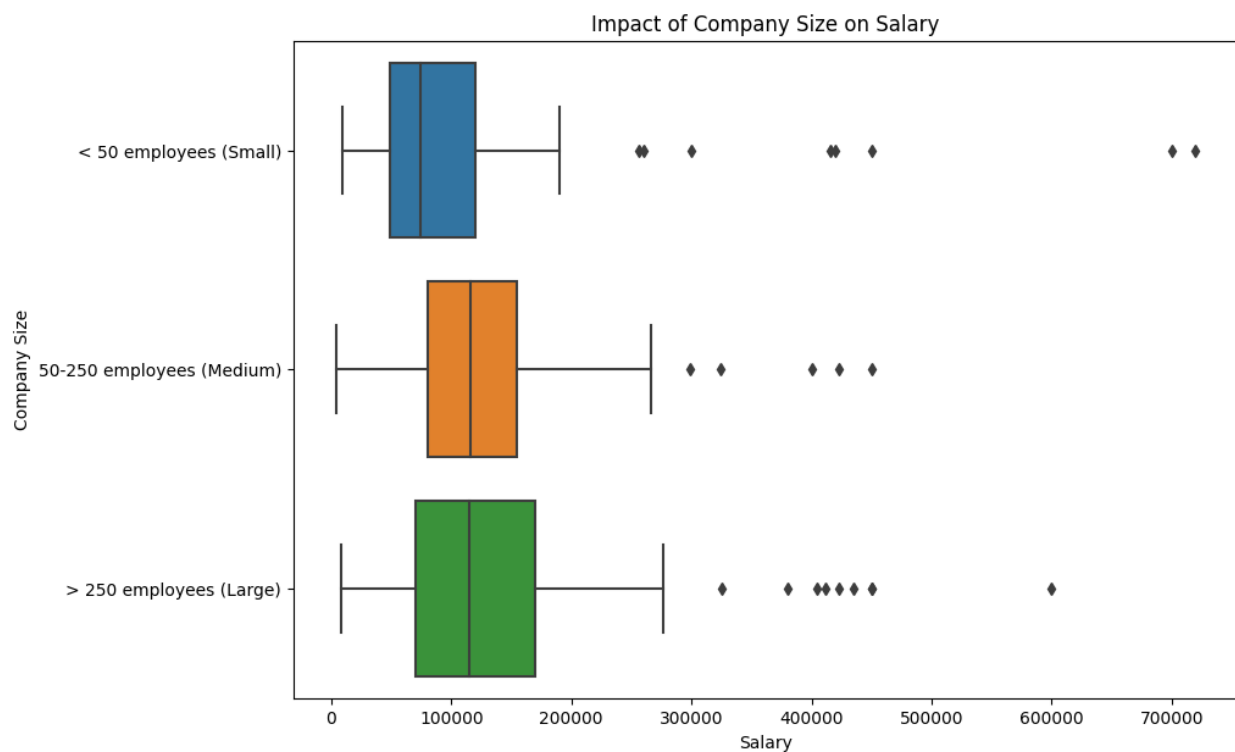
The bulk of data scientists, represented by the taller bars in the histogram, earn salaries in the upper mid-range of the scale. This is because the mode will be towards the right of the graph due to the left skew. We can notice fewer data scientists earning in the very high salary range. The graph's left-skewed nature suggests that many data scientists earn significantly less than most.

Effect of Experience on Salary

As we can see, the average salary generally increases with experience. Entry-level salaries are widespread, with some earning as low as \$4,000, which is quite unexpected for a data scientist role and might need further investigation. Could they be internships, part-time roles, or miscategorized data? We don't know yet. We can see a significant jump in the average salary from Mid-level to executive level. Also, despite having the highest salaries, senior-level roles seem to have a more consistent salary range.

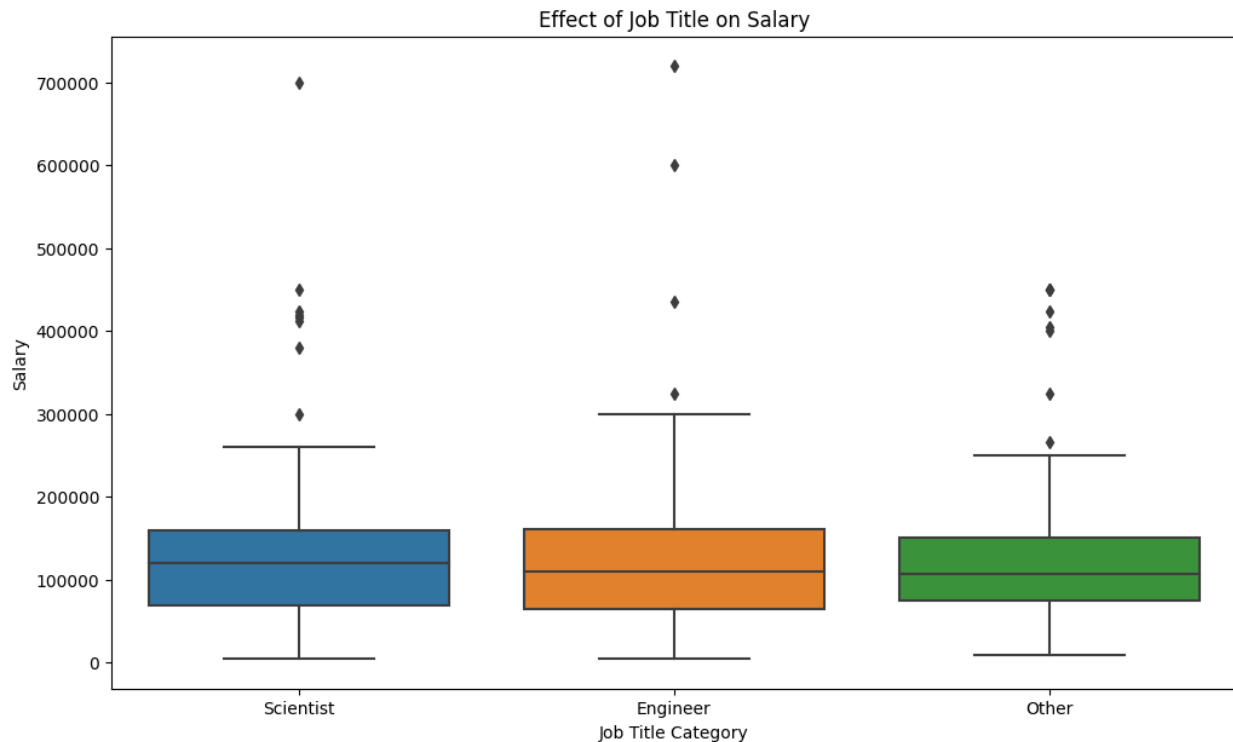


Impact of Company Size on Salary



On average, data scientists in large companies have the highest salaries, followed by those in medium and small companies. Small companies have a wide spread in salaries, meaning that roles and responsibilities can vary significantly in smaller companies.

Job Title Analysis



Job titles with the "Engineer" keyword earn more in larger companies. Those categorized under "Other," other titles, have the most significant difference in salaries based on company size, earning much more in larger companies than smaller ones. The "Scientist" keyword shows an unusual trend where individuals in small companies have competitive salaries compared to bigger ones.

Here is a two-way table:

Company Size/Job Title	L	M	S
Engineer	\$128,513.64	\$118,704.27	\$115,064.48
Other	\$145,447.00	\$118,562.15	\$84,593.26
Scientist	\$129,653.22	\$126,496.21	\$130,023.57

Conclusion

Salary trends for data scientists show most earnings in the upper mid-range. Experience significantly boosts pay, especially when moving to executive roles. While larger companies generally offer higher salaries, small ones have varied pay scales. The job title also influences pay: "Engineers" earn more in big firms, while "Scientists" in smaller companies surprisingly compete well. Earnings in data science are thus shaped by experience, role, and company size.