This report is about having the analysis through Julius where from the Glassdoor Job description, I tried to map the relation between the years of experience and salary in one graph and salary and programming languages in the second graph.
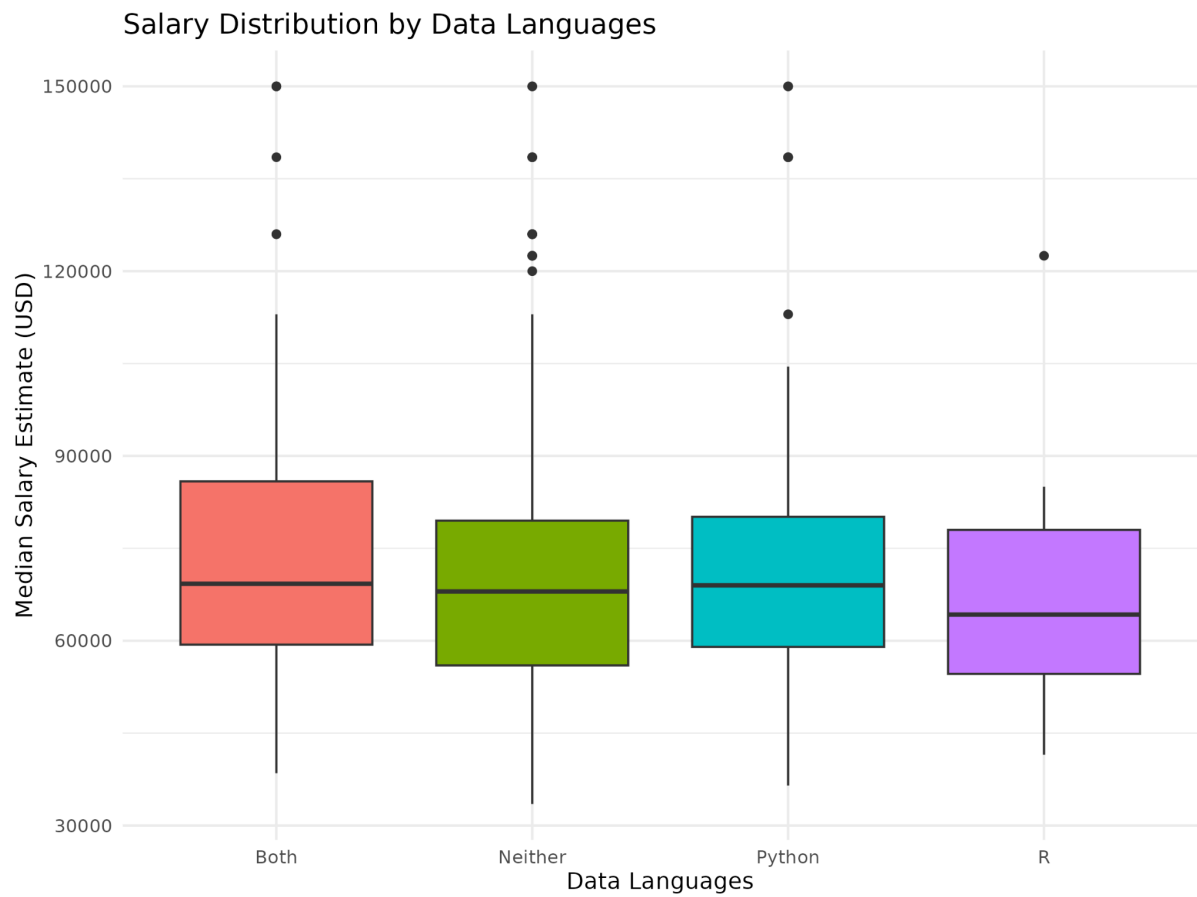
Reflection by AI

The inclusion of the regression analysis significantly shifts the interpretation of the data. Initially, one might assume a strong link between experience and salary. However, the $R2$ of 0.0034 reveals that experience is a poor predictor of salary in this dataset.

This suggests that skills are the primary currency. The box plot reinforces this,

showing clear salary tiers based on technical proficiency (Python/R). A candidate

with 2 years of experience and strong Python/R skills might command a higher

salary than someone with 5 years of experience but no coding skills.

My reflection:
The assignment/activity was easy for me, nothing that much complicated. Apart from the data, I dont think I got something noteworthy at the moment. Definitely I learned how to use APIs for LLMs, so it is going to be one new skill in my toolbox, I learned how we can combine AI analysis with reporting like Julius.

AI reflection of box plot - The box plot clearly demonstrates the financial value of technical skills. Roles requiring both Python and R consistently offer the highest median salaries, followed by those requiring Python. Positions that ask for neither language tend to have the lowest compensation. This strongly suggests that versatility in data languages is a key differentiator in the market, rewarding candidates who invest in learning these tools with higher earning potential.

Salary Distribution by Data Languages

Experience vs. Salary (R-squared = 0.0034)

$R^2 = 0.0034$

AI reflection of scatter plot - The scatter plot reveals a surprisingly weak relationship between years of experience and salary, evidenced by the extremely low $R2$ value of 0.0034. This indicates that tenure alone is not a reliable predictor of compensation in this dataset. The wide dispersion of data points suggests that other variables—likely technical skills, industry, or location—are far more influential. For job seekers, this implies that demonstrating specific competencies may be more valuable than simply highlighting years on the job.