JOB POST REPORT

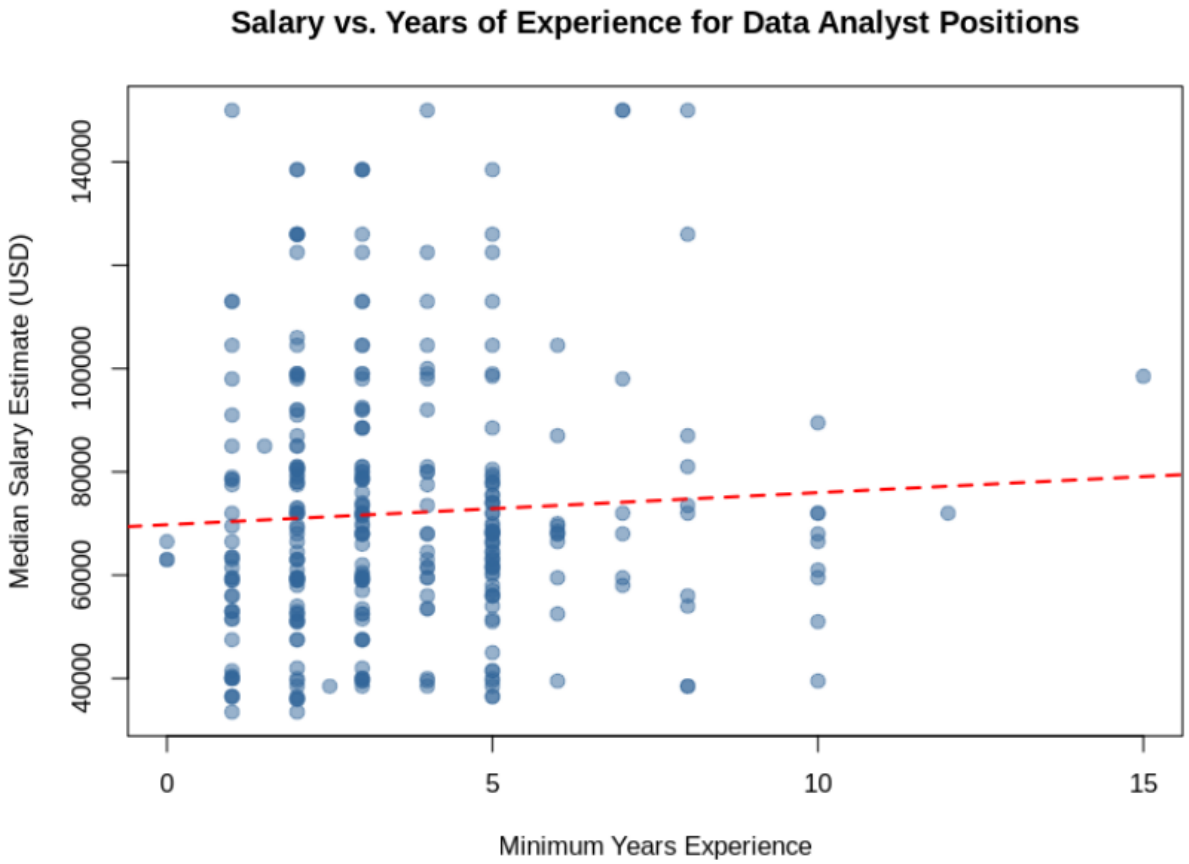
This report analyses 400 job postings for various data analyst and related roles. It provides a comprehensive look at the current job market for data professionals, detailing specific requirements, compensation, and company profiles.

Key components of the report from the dataset used:

- Job Titles & Descriptions: Includes a variety of roles ranging from general Data Analysts to specialized positions like Information Security Analysts and Bilingual Senior Data Analysts.
- Compensation: Provides a Median Salary Estimate for the positions, helping to benchmark pay across different regions and seniority levels.
- Company Information: Lists the Company Name, Size, Industry (e.g., IT Services, Video Games, Internet), and Type of Ownership (Private or Public).
- Requirements: Captures the Minimum Years of Experience required and specific Data Languages (such as Python) or tools mentioned in the postings.
- Geographic Data: Includes the Location of the job, covering various cities across the United States.

Years of Experience Analysis:

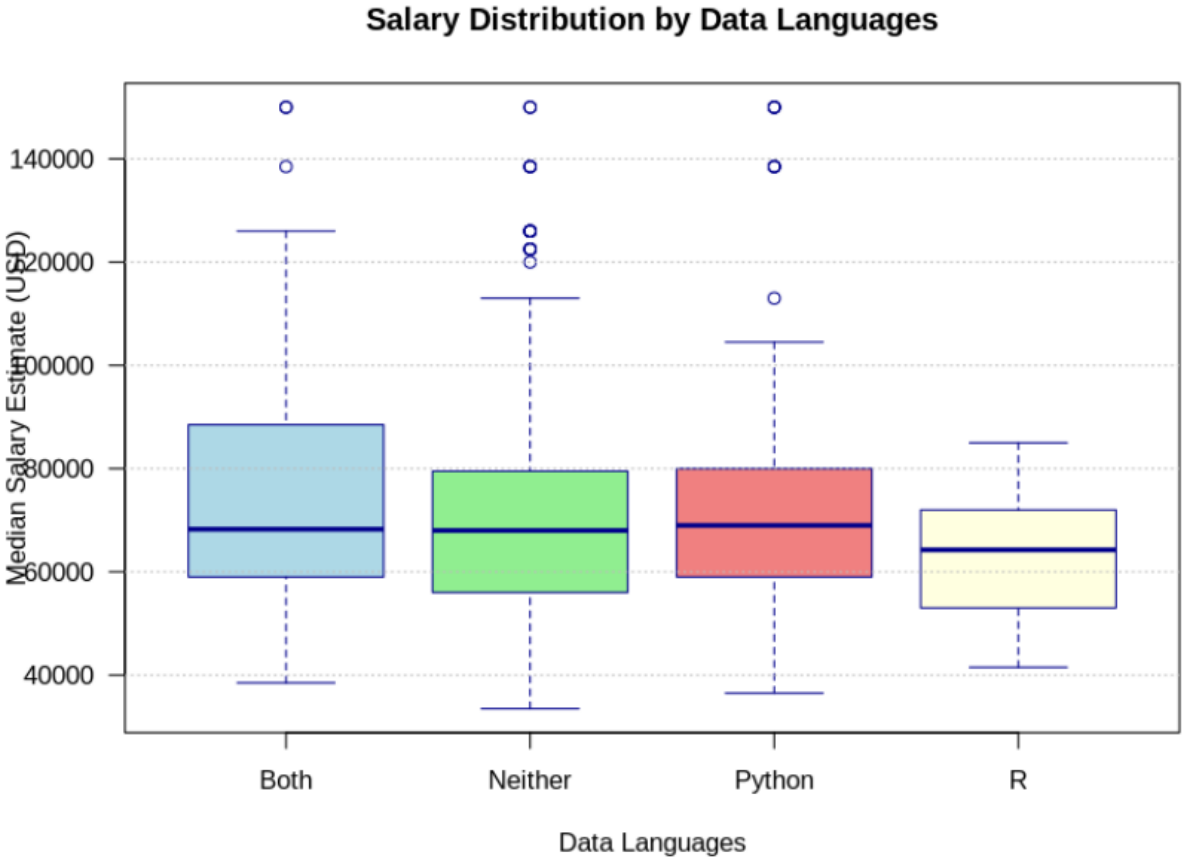
- A scatter plot: Minimum Years Experience (x-axis) vs. Median Salary Estimate USD (y-axis).



This plot shows the relationship between minimum years of experience and median salary estimates for 309 data analyst job postings. The red dashed line indicates the positive trend between experience and salary.

Programming Language Analysis:

- A box plot: Median Salary Estimate USD distributions for each category in Data Languages.



This plot compares salary distributions across four categories of data language requirements: Both (R and Python), Neither, Python only, and R only. The boxes show the median and quartile ranges for each group.

Key insights from the data:

- **Sample size:** 400 job postings total, with 309 having complete experience data
- **Salary range:** $33,500 to $150,000 (median: $68,000)
- **Experience requirements:** 0 to 15 years (median: 3 years)
- **Language breakdown:**
  - Neither: 255 postings
  - Both: 68 postings
  - Python: 63 postings
  - R: 14 postings

MY REFLECTION

1. What was easy about the process of interacting with the Al tools? It was observed that the Al tools can process huge datasets accurately in some seconds with minimal or without error, very interest.
2. What was difficult about the process of interacting with the Al tools? Inability to write coding actually limit some actions to be taken using the tools even though there is always a way around it without having coding knowledge. Having coding knowledge would have been an added advantage in interacting with the Al tools.
3. The surprising part of the process of interacting with the Al tools is that the tools act like having conversation with human being.
4. I learnt new things:
    - Knowing the ability of Al tools extract some information from a huge datasheet making it easier to relate and interpret
    - Knowledge of the Al tools usage for different purposes such as Julius for data analysis, Gemini, Gemma for ideas presentation etc.
    - How to use Google sheet and how to setup function for API use in relation with model and prompt.