

Data Job Market Analysis:
Understanding Skills, Salaries, and Opportunities for Data Professionals in 2025

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Presented to: Aspiring Data Professionals

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Introduction

As an aspiring Data Storyteller, I believe in Aristotle's idea of "we learn by doing" - which inspired this project as a hands-on practice with SQL and Python skills to analyze current job skill demands and compensation patterns in the field I aspire to enter. This project will analyze the data job market as of June 2025 examining salary information, skill requirements, and remote work opportunities.

Background

Driven by a quest to understand the current job market more effectively, this project was created to identify top-paid and in-demand skills, helping streamline the job search process for aspiring data professionals, such as myself. The data derives from [Luke Barousse's SQL Course](#). Luke's guidance, lessons, and data inspired me to build a project that not only develops SQL skills but applies these skills to answer real-world questions for aspiring data professionals like me.

The following questions were answered through my SQL Queries:

1. What are the top paying data jobs (data analyst, data scientist, business analyst, and data engineer)?
2. What skills are required for these top-paying data roles?
3. What skills are most in demand for these data positions?
4. Which skills are associated with higher salaries in the data field?
5. What are the most optimal skills to learn for aspiring data professionals?

Tools I Used

For my analysis, I used several powerful tools:

- **SQL:** The foundation of my analysis, allowing me to query the database for critical insights
- **PostgreSQL:** The database management system that was chosen for this project to handle the job posting data
- **Python:** The programming language used for data visualization, utilizing libraries such as pandas and matplotlib
- **Visual Studio Code:** The code editor used to execute the queries and build the visuals
- **Git and GitHub:** Essential for version control and sharing my project for collaboration and project tracking

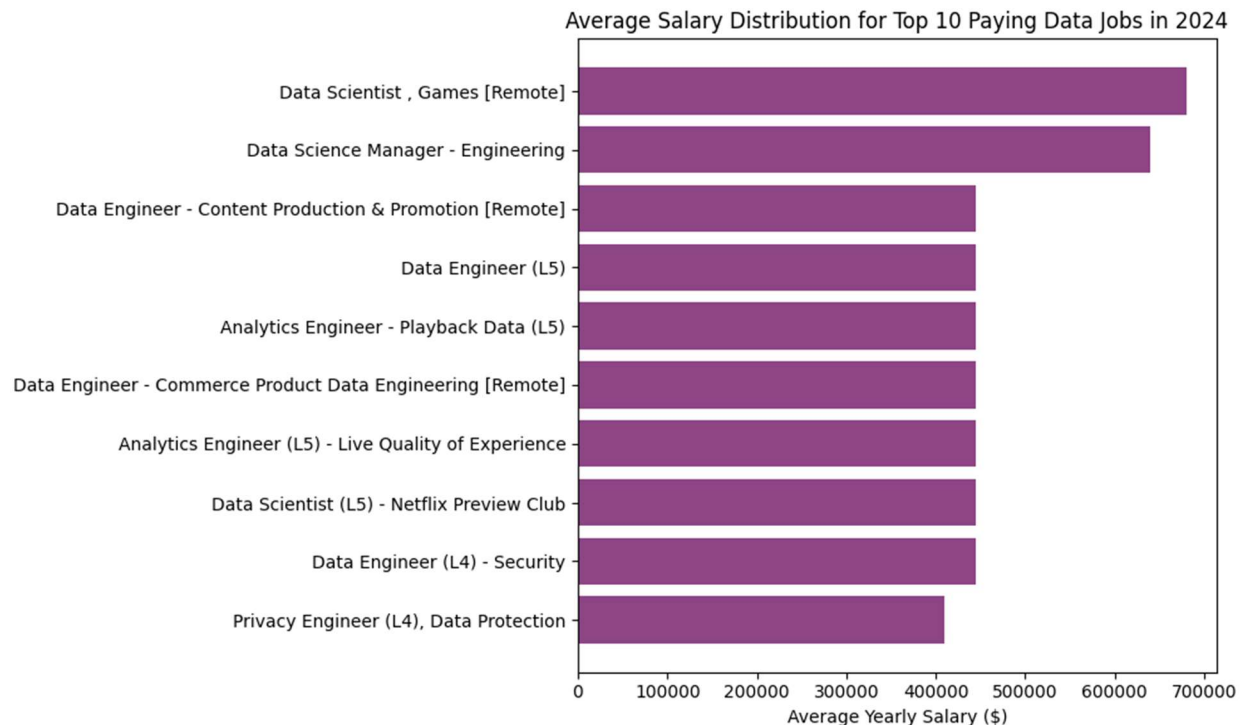
The Analysis

Each query for this project was used to investigate certain aspects of jobs I find interest in as an aspiring data professional:

- Data Analyst
- Data Scientist
- Business Analyst
- Data Engineer

I have approached each question based on different SQL queries to answer different questions with data jobs posted in 2025. The queries are available in the repository's folder "project_sql", read me file, or upon request.

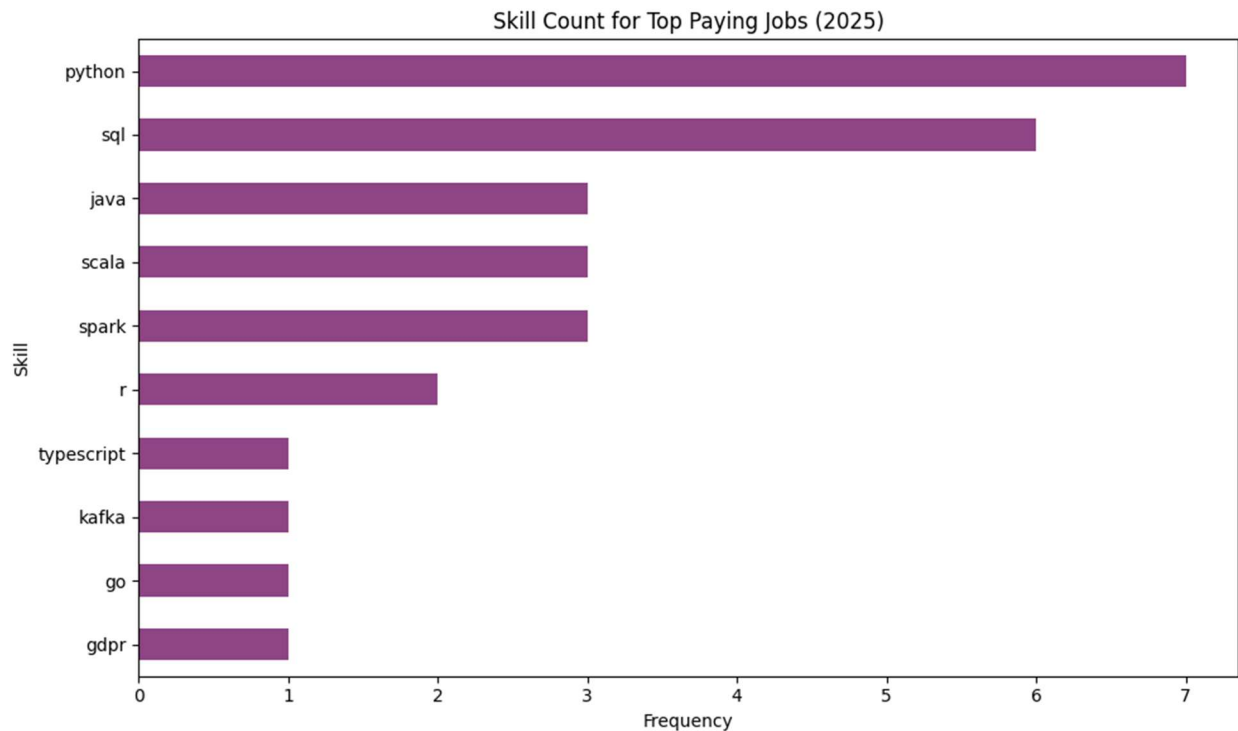
Top Paying Data Jobs in 2025



The following observations were noted from the top paying jobs for 2025:

- The top paying data professional jobs in 2025 ranged from \$410,000 to \$680,000, which shows potential for high salary careers in data
- Netflix appears to have looked for strong candidates in 2025, offering salaries in the mid-six figures
- There was a mix of different departments and roles that need data professionals for Netflix
 - Indicates that data professionals can be significant in different departments

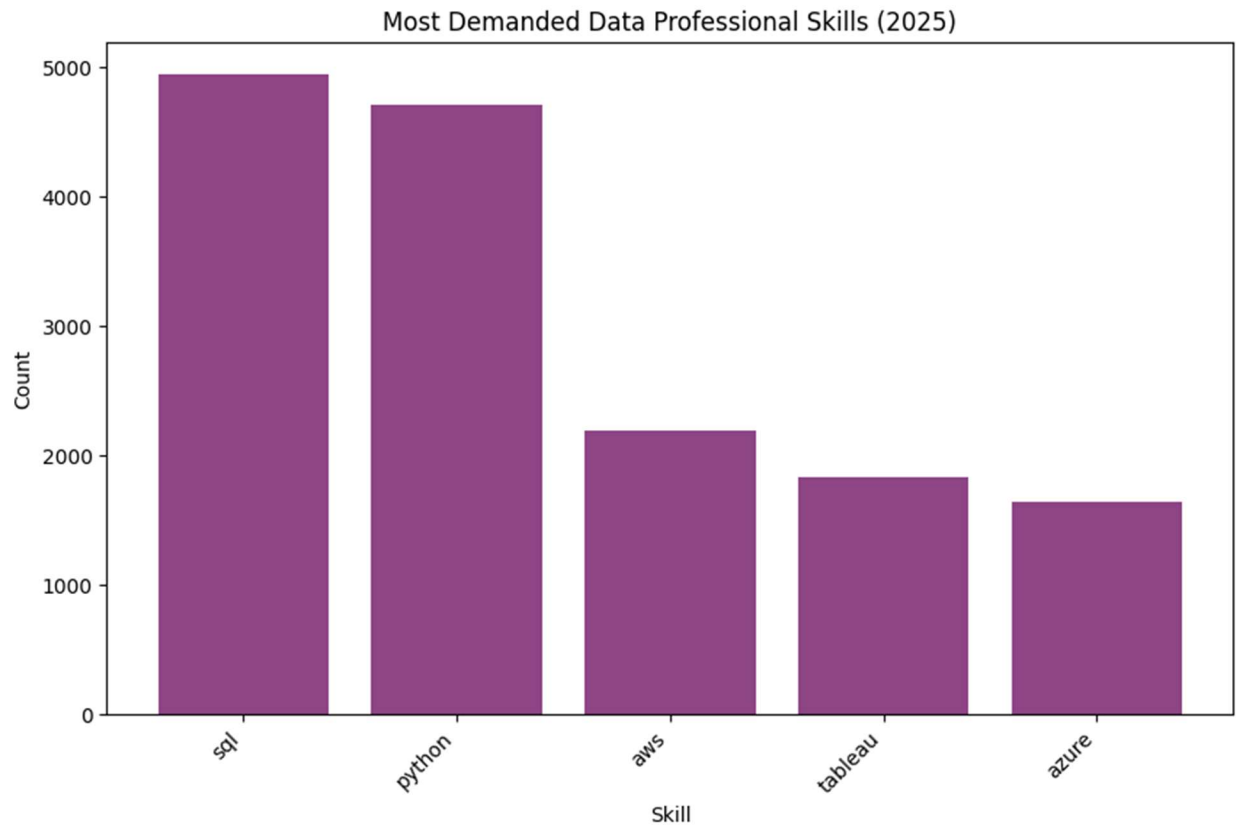
Skills for Top Paying Jobs in 2025



The following observations were noted from the skills for top paying jobs for 2025:

- Python and SQL appeared to dominate the skills needed for the top 10 paying jobs for 2025.
- It looks like the Netflix jobs also had skill requirements in other programming languages such as:
 - Scala
 - Spark
 - R
- Overall, it appears that Netflix prefers candidates with Python and SQL skills
 - However, may consider candidates with other programming skills noted in the visual

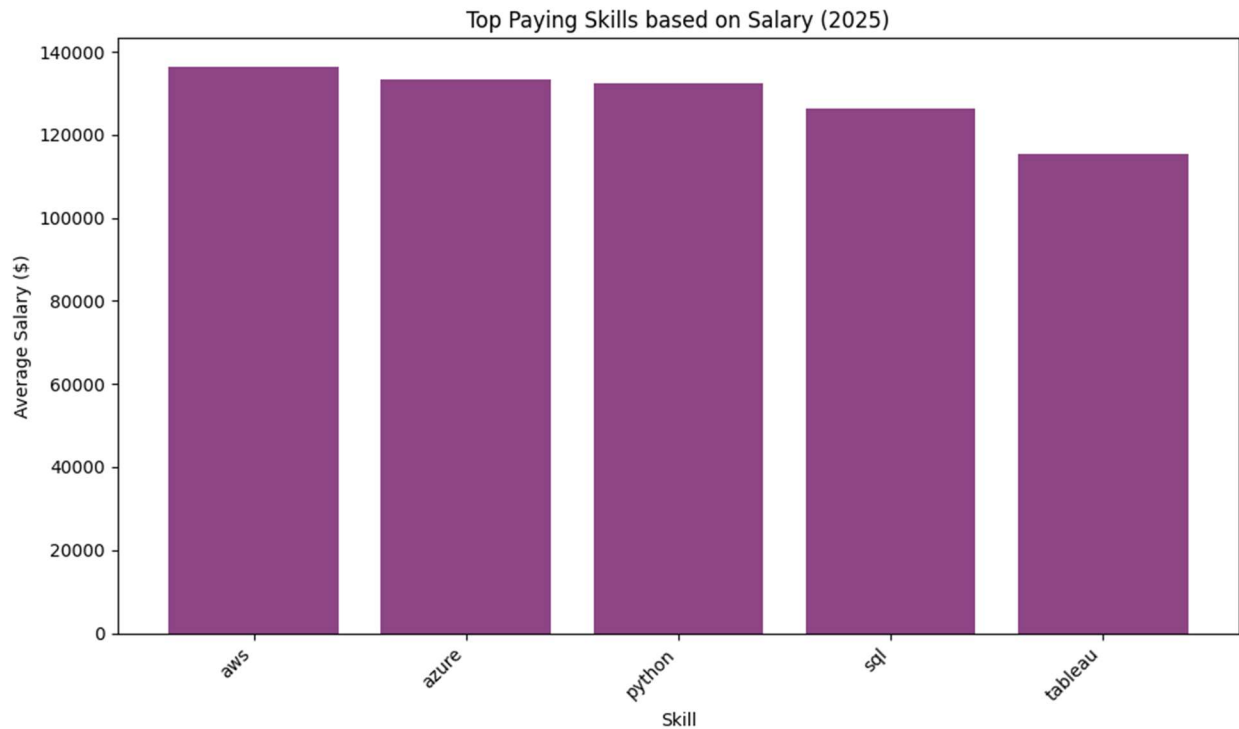
In-Demand Skills for Data Professionals in 2025



The following observations were noted from the skills for in-demand skills for 2025:

- SQL and Python appear to be the most sought-after skill for data professional jobs
 - SQL: noted 4,951 times in job postings
 - Python: noted 4,714 times in job postings
- It appears that, fundamentally, having skills in SQL and Python give professionals a competitive advantage in the data job market
- Other skills that appear essential include:
 - AWS
 - Tableau
 - Azure

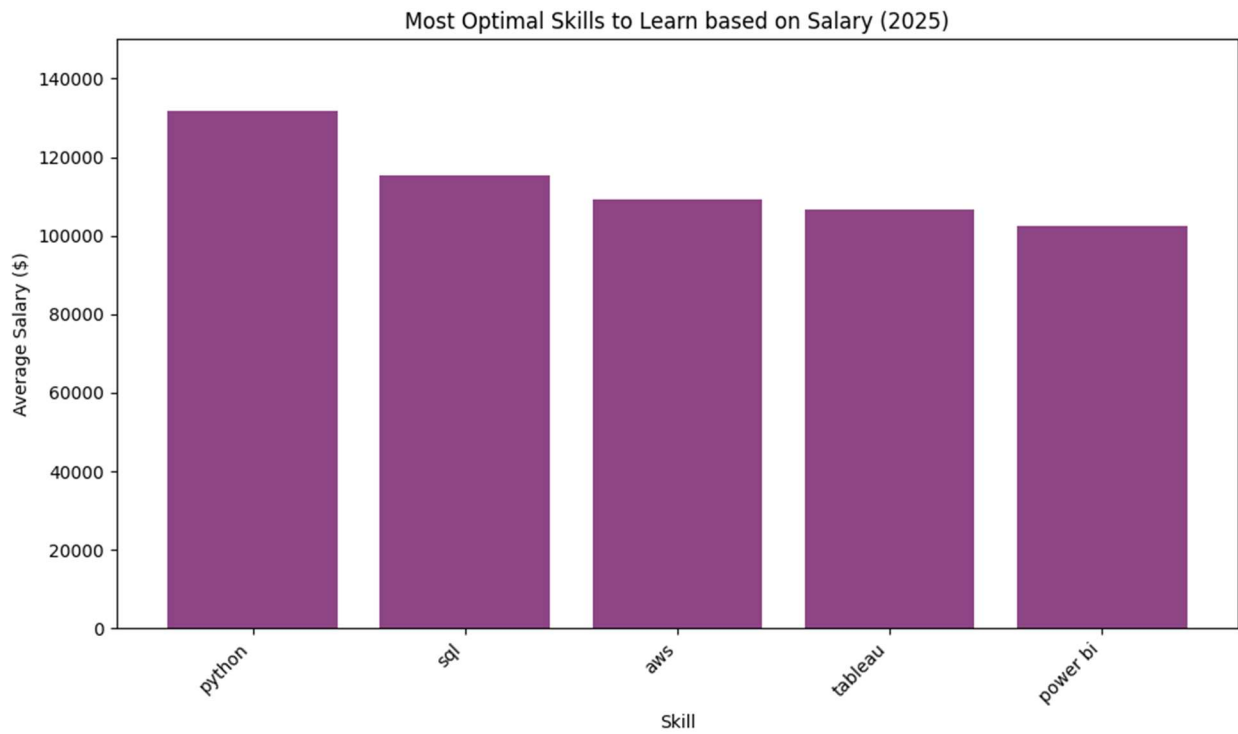
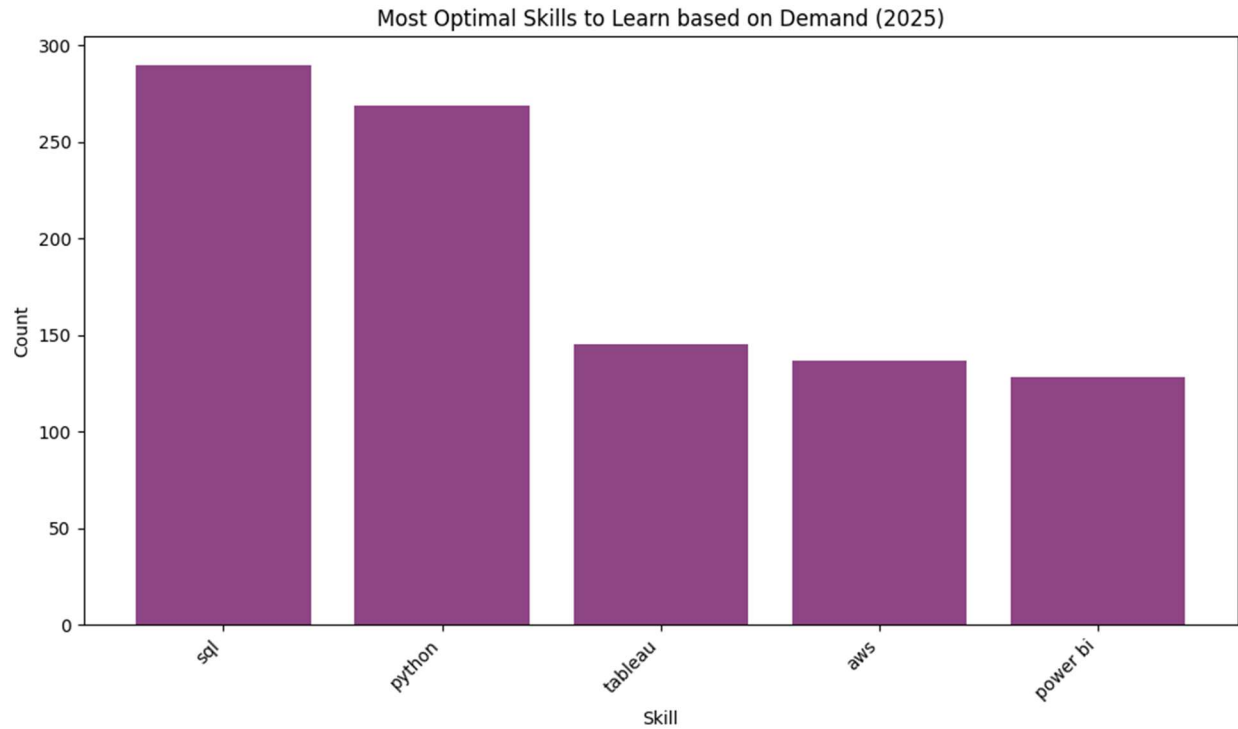
Skills based on Salary in 2025



The following observations were noted from the skills for in-demand skills salaries for 2025

- While Python and SQL appear to be in more demand – AWS and Azure appear to have the highest average salaries paid
 - AWS: Average salary of \$136,437
 - Azure: Average salary of \$133,436
- Despite Python and SQL not having the highest average salaries based on in-demand skills:
 - Python: Average salary of \$123,345
 - SQL: Average salary of \$126,367
- Based on the information, having experience or familiarity with the following may provide data professionals an edge when going into data professional roles:
 - Cloud-based technologies
 - Popular programming languages
 - Visualization tools (Tableau)

Optimal Skills and Salary for Remote Positions in 2025



The following observations were noted from the skills for optimal skill demand and salaries for remote positions in 2025:

- SQL and Python both appear to be the highest in demand and average salaries for remote positions:
 - SQL: 290 jobs with an average salary of \$115,470
 - Python: 269 jobs with an average salary of \$131,861
- Similarly with all data professional positions available, having skills in cloud-based technologies and visualizations are significant in standing out

What I learned

This experience allowed me to go full steam into my aspirations to be a data professional with the following takeaways from the project:

1. Craft complex SQL queries including:
 - a. CTEs and Subqueries
 - b. Left- and Inner-Joins
 - c. Date Functions
2. Use data aggregation so I can find counts and averages of skills and salaries
3. Utilize powerful Python libraries and functions to build visuals for my presentation
4. Refresh my skills and knowledge in:
 - a. Jupyter Notebook
 - b. VSCode
 - c. Git and GitHub
5. Use critical-thinking and problem-solving, turning real-world questions into actionable, insightful queries and visualizations

Conclusions

Insights

1. As of 2025, the top 10 highest paid jobs came from Netflix, offering salaries from \$410,000 to \$680,000
2. High-paying skills needed to work at the top paying Netflix data positions were Python and SQL which appear to be critical for success in the data roles
3. SQL and Python, overall, appear to be the top demanded skills for data professionals in 2025
4. While SQL and Python compensate for six-figure salaries on average, having specialized skills in Azure and AWS appear to pay more
5. For remote positions, SQL and Python lead the charge in both in-demand skills and average salaries

6. Overall, skills in programming languages, cloud-based technologies, and visualization tools provide data professionals with an idea of what companies look for when hiring for data roles.

Closing Remarks

This exercise has provided me with an ability to learn a language that is not only sought-after but provided me with the capability to discover other skills that are in demand as well as compensation for knowing these skills. Aspiring data professionals, such as I, can take this information and better position ourselves in a competitive job market. Constant learning and practice are important for aspiring data professionals to grow in the world of data.