

# The Data Science Job Market

## Skills, Salaries & Work Models



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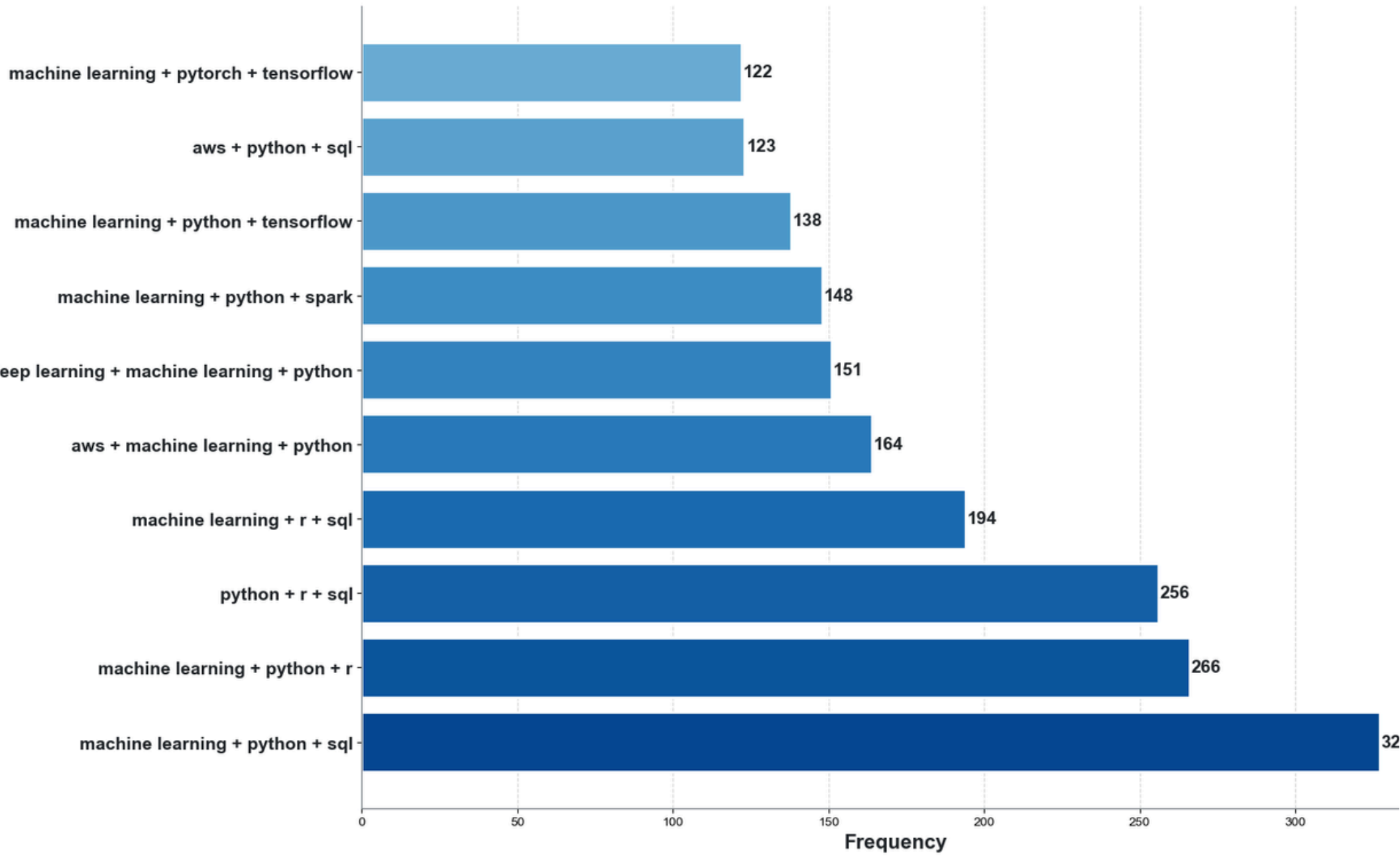


<https://datasciencejobposts2025.streamlit.app>



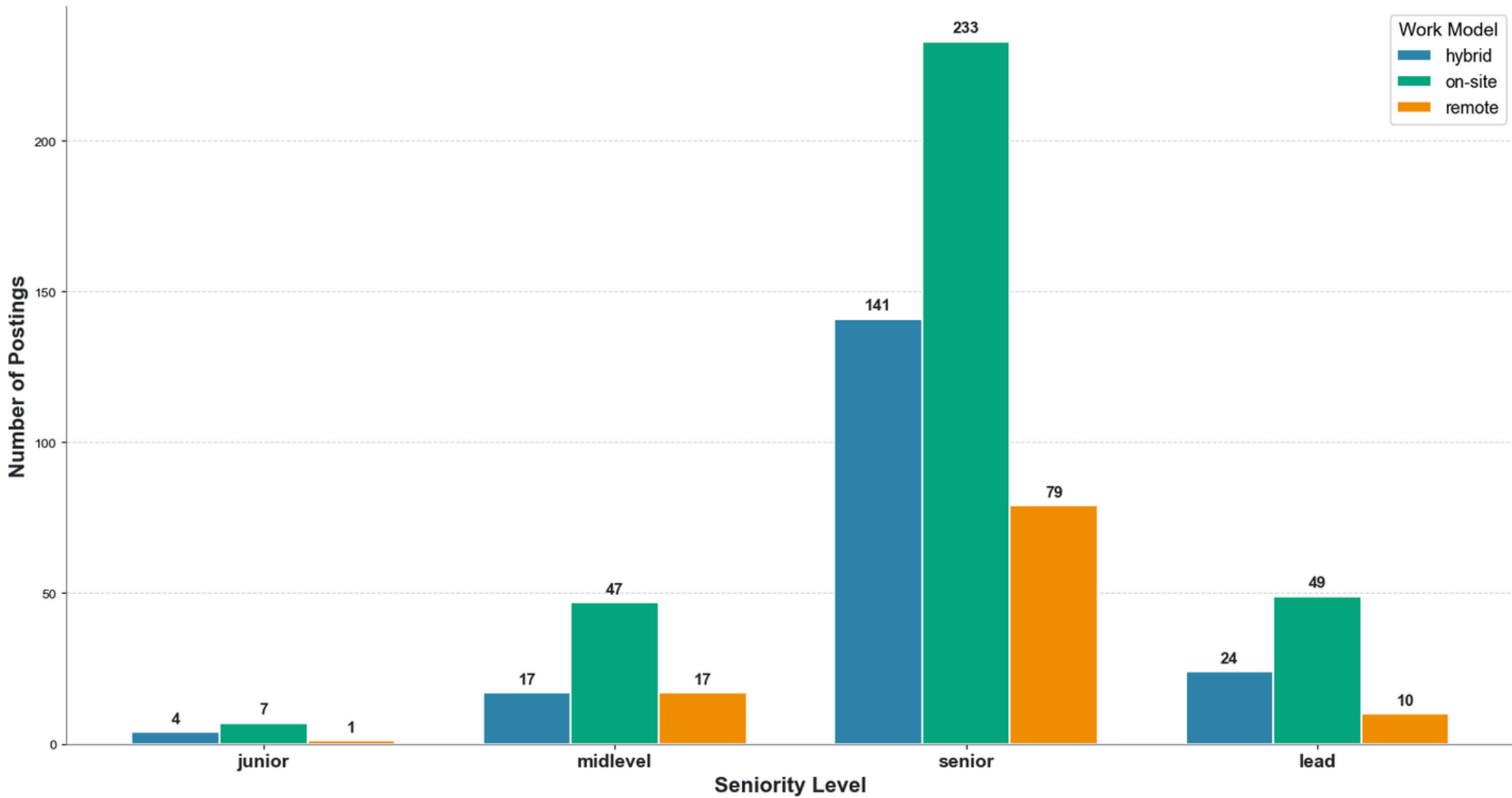
This dataset was created to analyze Data Science job postings in 2025. Collected from publicly available sources, it includes key attributes such as job titles, seniority levels, salaries, locations, industries, and required skills. Due to a high number of outliers, these observations were removed, and all analyses were conducted on the cleaned dataset. The resulting structured data provides insights into salary distributions, skill demand, and employment trends in Data Science roles, offering an overview of the 2025 job market. To access the dataset, you can scan the QR code on the side.

Most Frequent Skill Trios (Top 10)



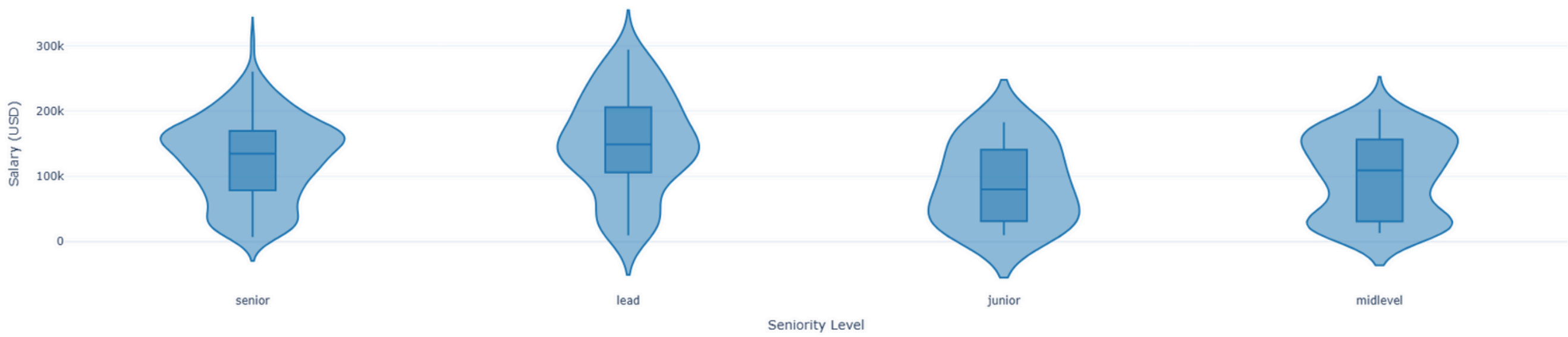
The most requested skill combinations in data science pair **Python with core data tools (SQL, R) and machine learning frameworks**. This shows that candidates need both programming skills and the ability to manage data and build models. **The Python-SQL-Machine Learning trio stands out as a baseline requirement for modern data science roles.**

Seniority Level and Work Model Relationship



This chart compares the number of job postings by seniority level and work model (hybrid, on-site, remote). Postings are heavily concentrated at the senior level across all work models, while junior roles are rare. **Overall, on-site positions dominate at every seniority level, with hybrid typically second and remote the least common—suggesting employers most often prefer in-person (or partially in-person) work, especially for experienced roles.**

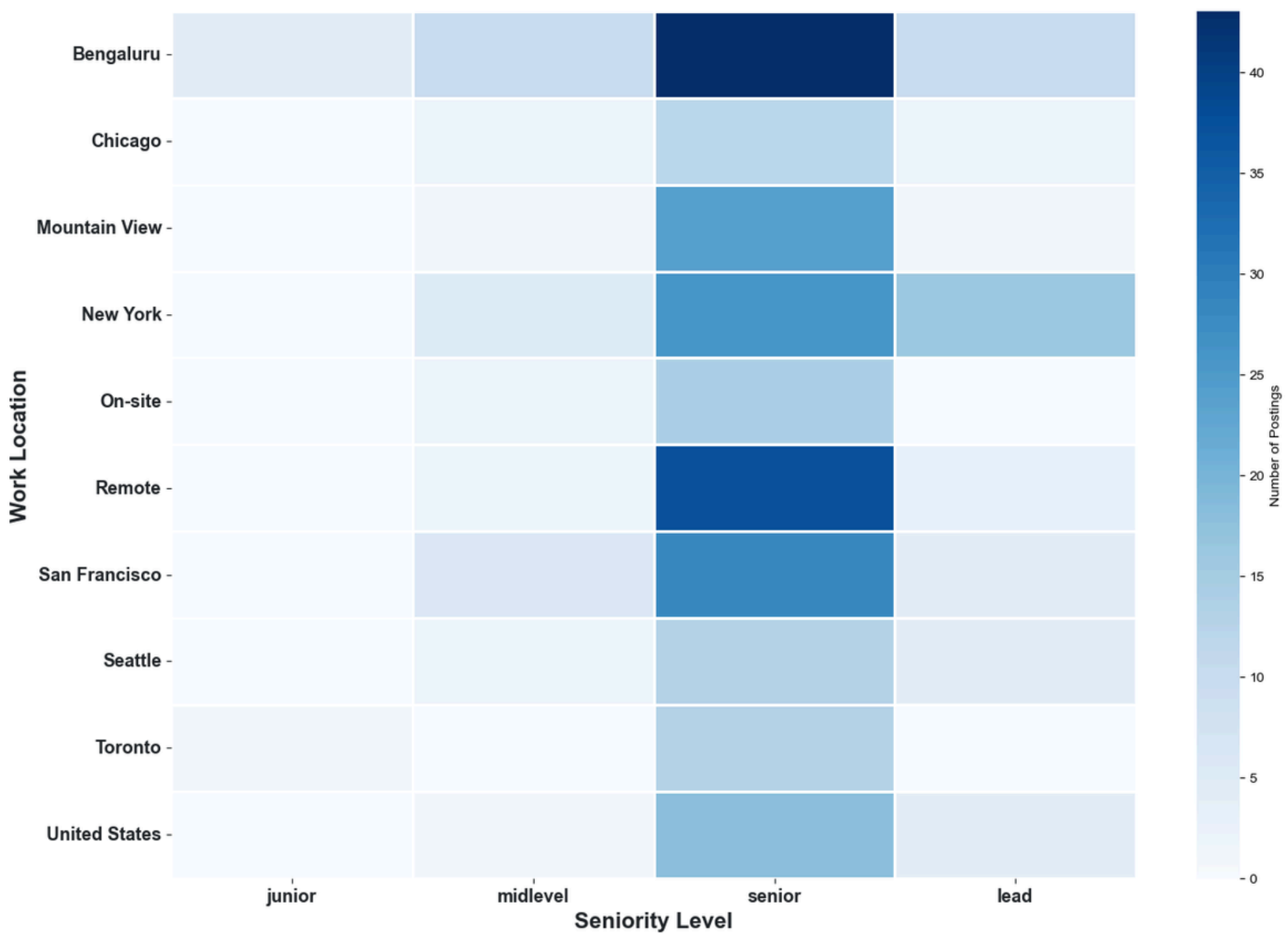
Violin Plot: Salary Distribution by Seniority Level



The violin plot shows that salary generally increases with seniority. **Junior roles cluster at lower salary ranges, while midlevel expands upward with greater variability. Senior and lead roles have the highest typical salaries, and lead shows the widest spread, indicating that compensation at the top depends heavily on factors like location, company, and responsibility scope.**

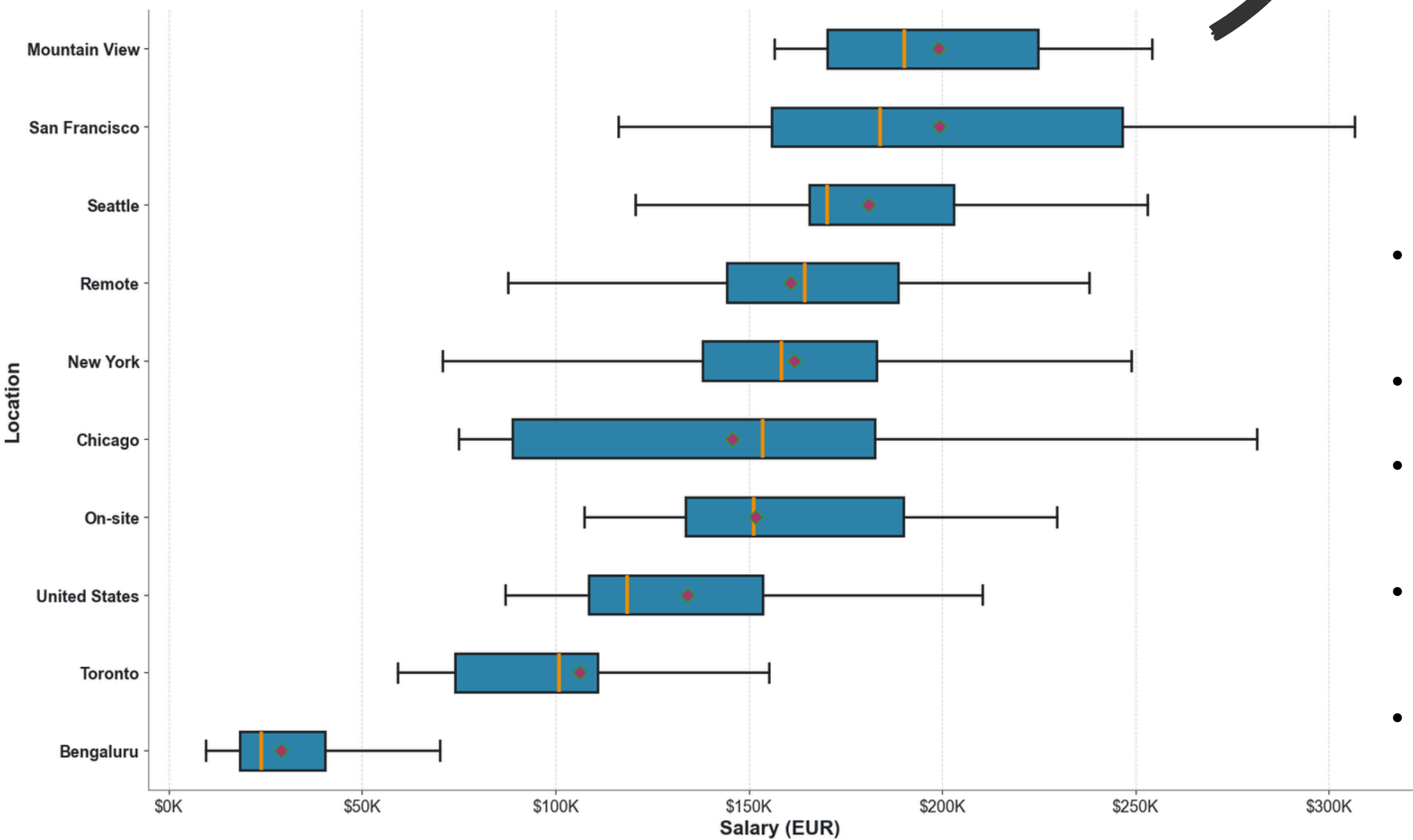
This heatmap shows how job postings are distributed across locations and seniority levels (darker cells = more postings). Across most locations, postings are concentrated at the senior level, indicating the strongest demand is for experienced candidates. **Midlevel appears less frequent, while junior roles are scarce in nearly every location. Lead roles are present but comparatively limited, and they appear more selectively in a few locations and overall aggregates.**

Location and Seniority Level Relationship (Heatmap)



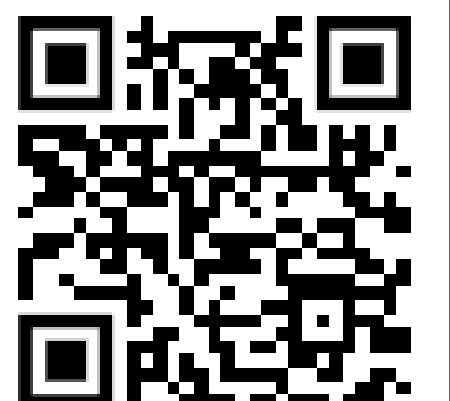
This box plot compares salary distributions across the top locations. **Pay levels vary noticeably by location: cities like Mountain View and San Francisco show higher typical (median) salaries and often wider ranges, reflecting both higher pay and greater variability. Other locations (e.g., Toronto and Bengaluru) have lower median salaries, with tighter distributions.** The longer whiskers and occasional high-end values in some locations indicate that top salaries can be substantially higher, but they are less common—overall confirming that location is a major driver of compensation.

Salary Distribution by Location (Box Plot - Top 10 Cities)



### Takeaways

- The most frequent skill combinations are built around Python, SQL, and Machine Learning, showing a clear “data → analysis → modeling” industry standard.
- Job postings are heavily concentrated at the senior level, while junior opportunities are limited across work models and locations.
- Across seniority levels, on-site and hybrid roles are more common than remote, suggesting many employers still prefer partial or full in-person collaboration.
- Salary distributions shift upward with seniority; lead/senior roles show the highest typical pay and the greatest variability, indicating strong influence from company, region, and role scope.
- Location remains a major driver of pay: top cities exhibit higher medians and broader ranges, while other regions cluster at lower salary levels.



SCAN ME

<https://github.com/tuandogukantekes-prog>