The promised sector? A Look at data professions

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The team

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The promised sector? A look at data professions

Agenda

📝 Motivation

📝 Client's profile

📝 Introduction to data

📝 Global Perspective

📝 Data Analyst (DA) Perspective

    ☑️ Top 10 Job titles for analysts

    ☑️ Entry level demand for analysts

    ☑️ Remote opportunities for analysts

    ☑️ Worldwide salaries for analysts

📝 Recommendations to client

The promised sector? A look at data professions

Motivation

To **explore** the current landscape of data professions and **provide** insightful visualizations and key **information** to help individuals assess a **career shift** into the field of data analytics (**DA**).

Clients' profile

Jessica Schultz Garrido
Residence: Frankfurt, Germany
Age: 33

- The client is considering a career shift to DA.
- The client resides is willing to relocate if profitable.
- Hybrid and remote work are preferred.
- No previous experience on IT, but willing to learn skills on demand.

Stakeholders: HR in companies, training providers

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Introduction to Data

Dataset contains 73.412 entries.

Data spans from 2020 to 2025.

Source: aijobs.net

Salary insight:

Normalized salary to USD.

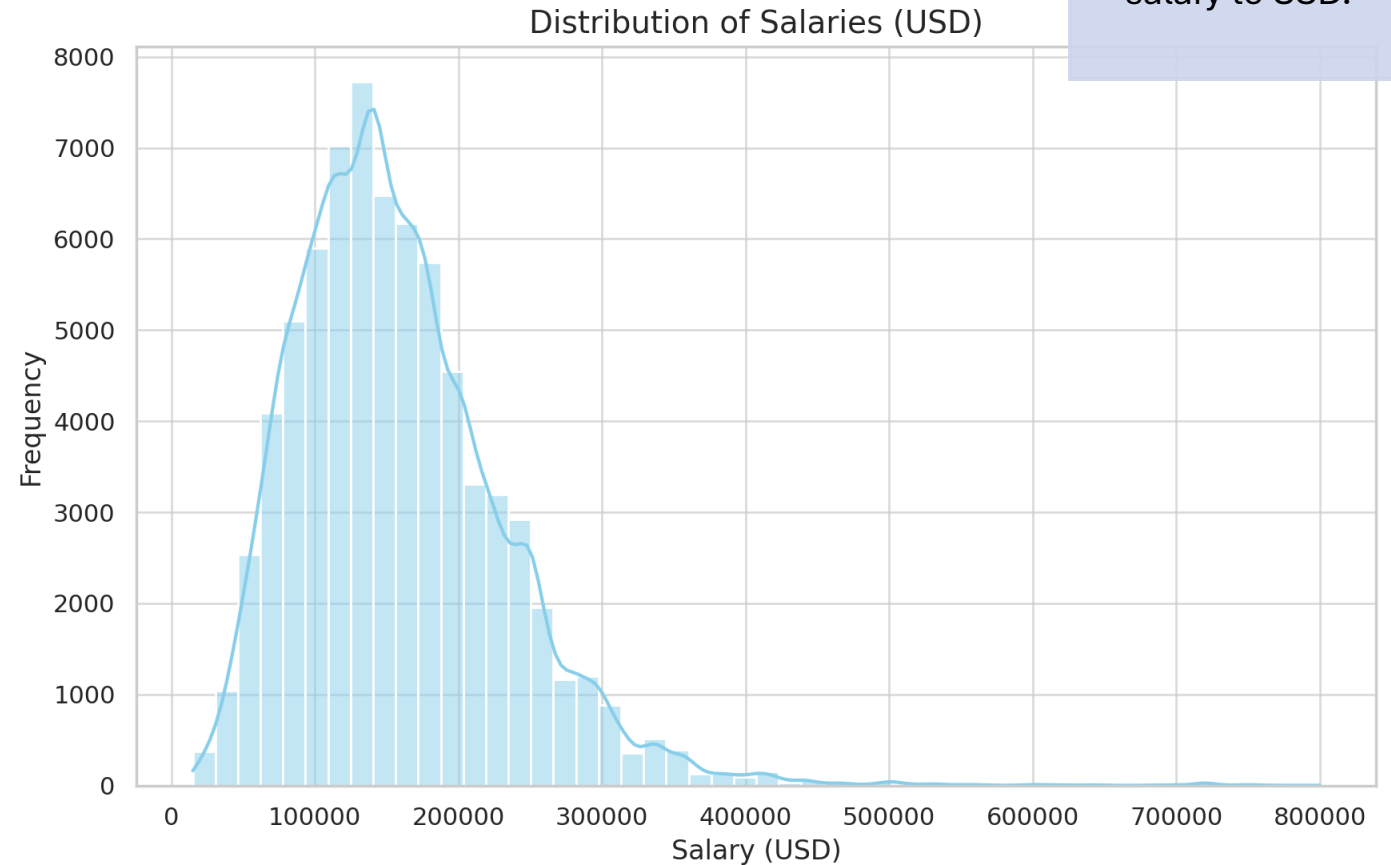Most salaries (USD) are concentrated between $100,000 and $200,000, with a few outliers reaching up to $800,000.

- **Descriptive statistics:**
  Mean: 157,970 USD
  Median: 147,500 USD
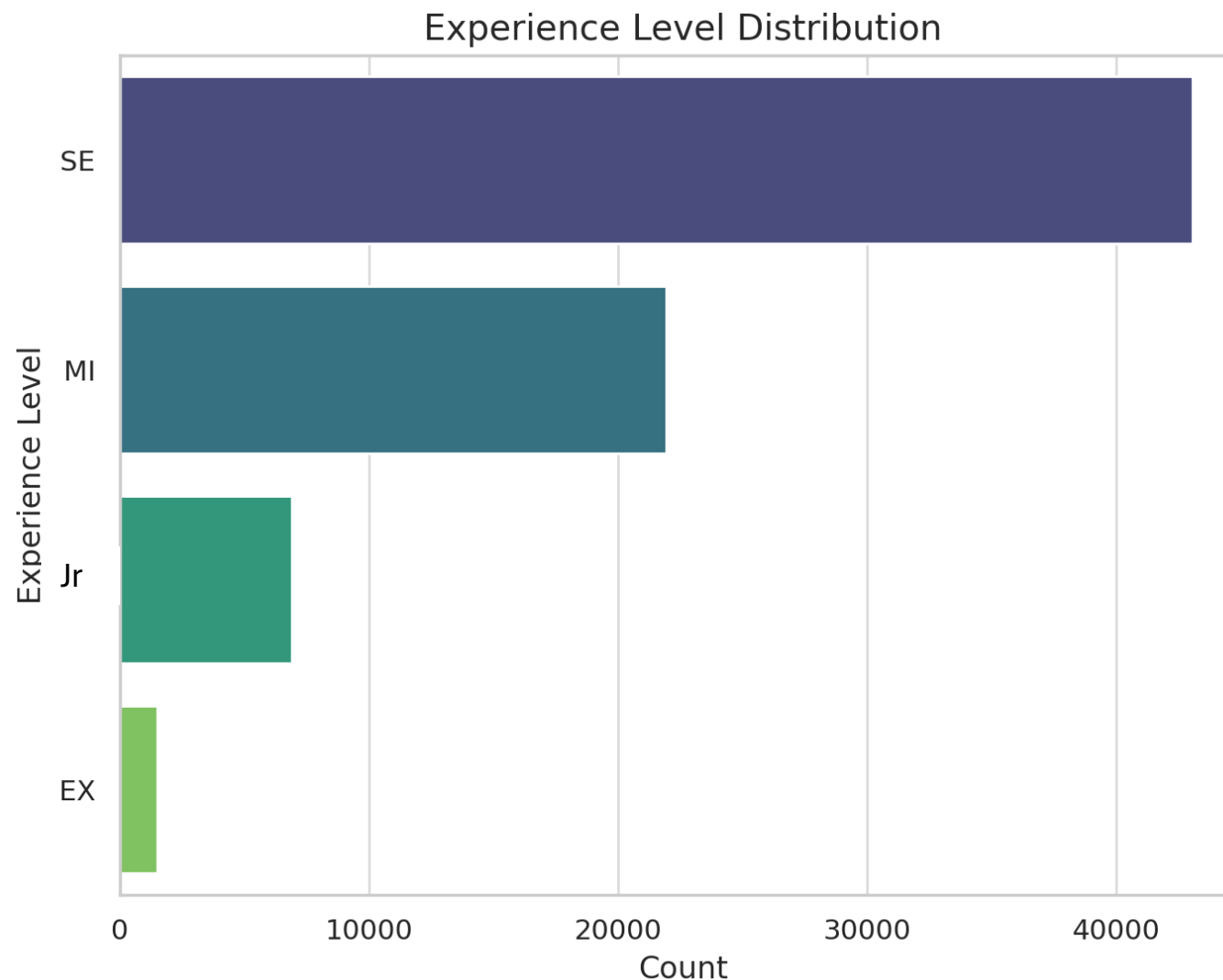 Min: 15,000 USD
  Max: 800,000 USD

Distribution of Salaries (USD)

Experience Levels:

Junior level (Jr),

Mid Level (MI),
Senior Level (SE),
Executive Level (EX)

Senior Experience ("SE") dominates the dataset, followed by Mid-level ("MI").

Reasons behind SE could be related to company sizes.

Experience Level Distribution

Remote Ratio :

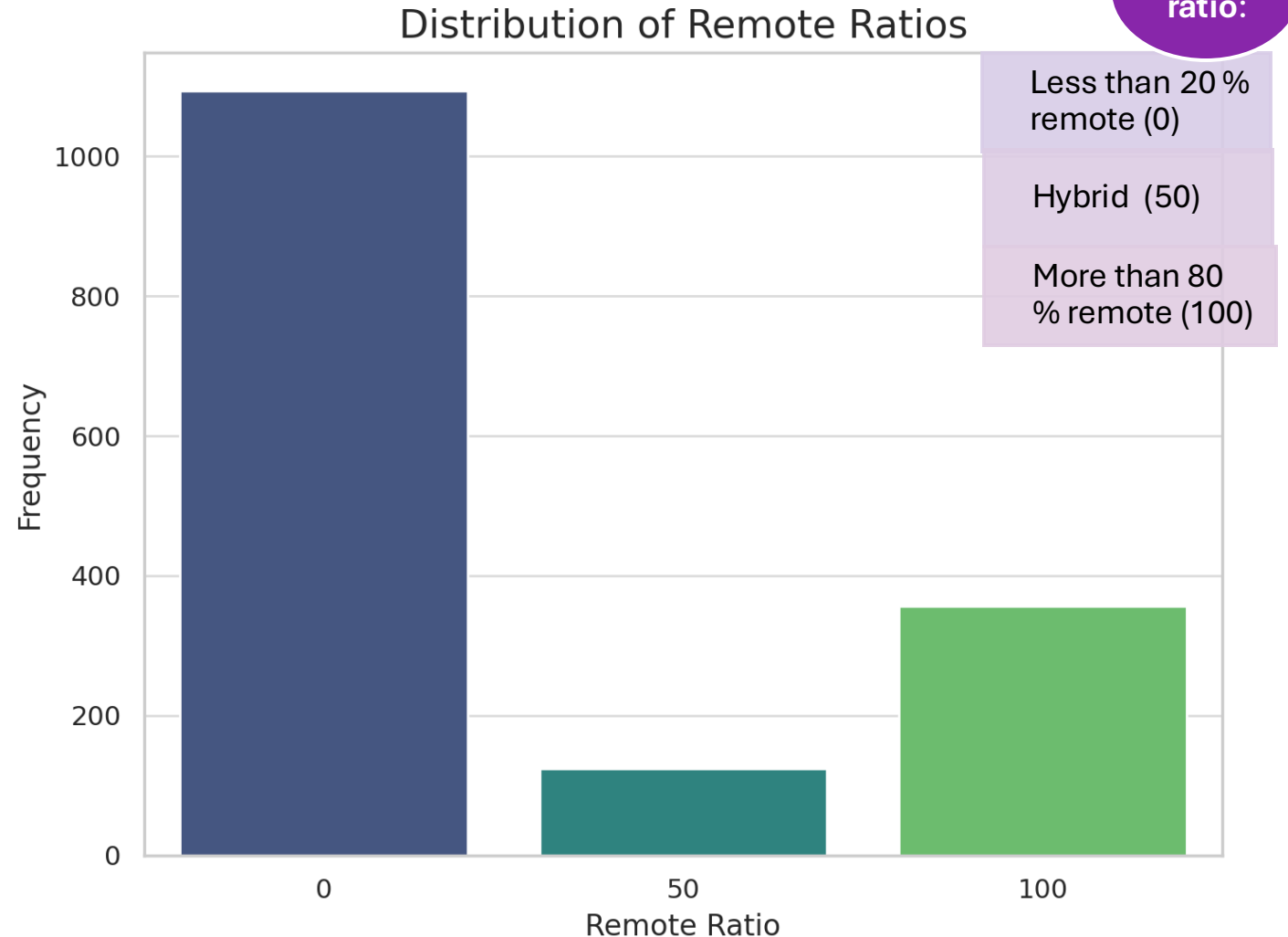A large proportion of jobs are fully on-site (0% remote).

There is a notable number of fully remote jobs (100% remote), but hybrid roles (e.g., 50%) are less common.

- **Descriptive statistics**:
  Mean: 21.55%
 Median: 0% (most jobs are on-site)
  Range: 0% to 100%

Remote ratio:

Less than 20 % remote (0)

Hybrid (50)

More than 80 % remote (100)


Distribution of Remote Ratios

Company Size:

Medium-sized companies ("M") are the most common, significantly outnumbering small ("S") and large ("L") companies.

The low frequency of Data professions in small companies could be because of budget limitations that are reflected in the hired staff.

Company size distribution

Company Size:

Small (<50), Medium (50-250), Large (>250)
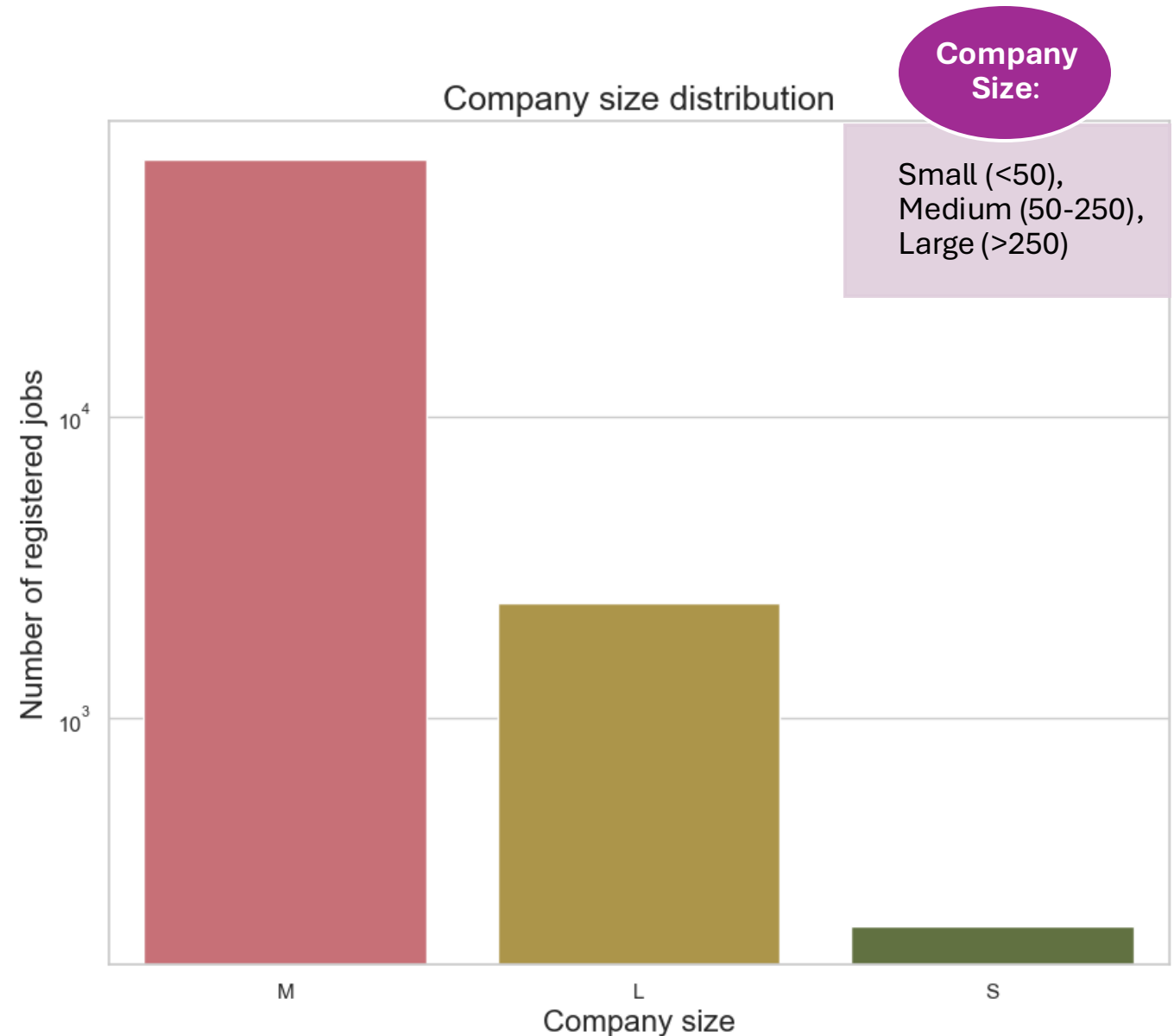
Employment type:

Full time (FT) leads the employment type in the Data professions. The Freelance (FL) is the least common employment type.

Employment Type:

Full-Time (FT), Part Time (PT), Contract (CT), Freelance (FL)
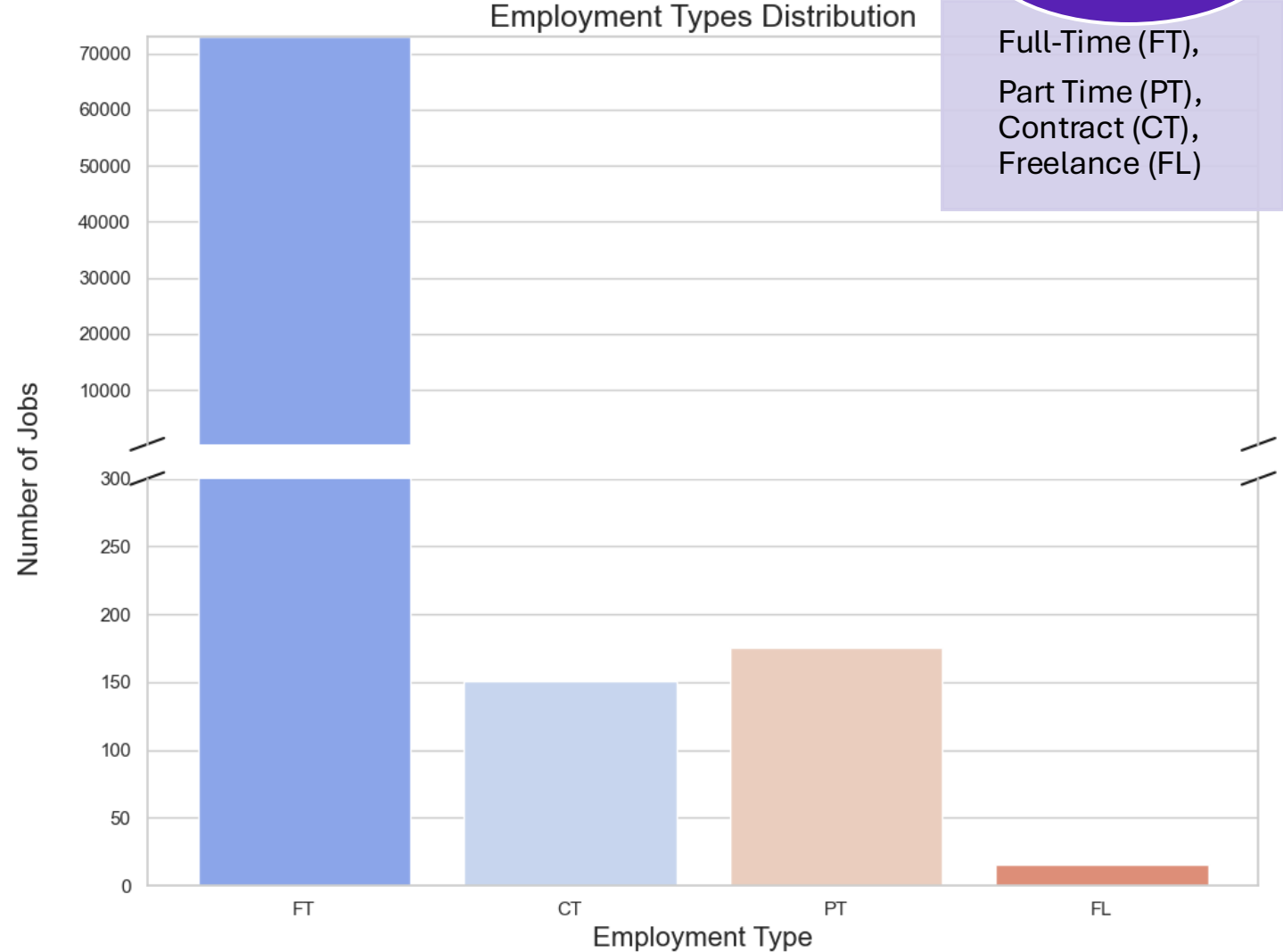
Correlation Analysis:
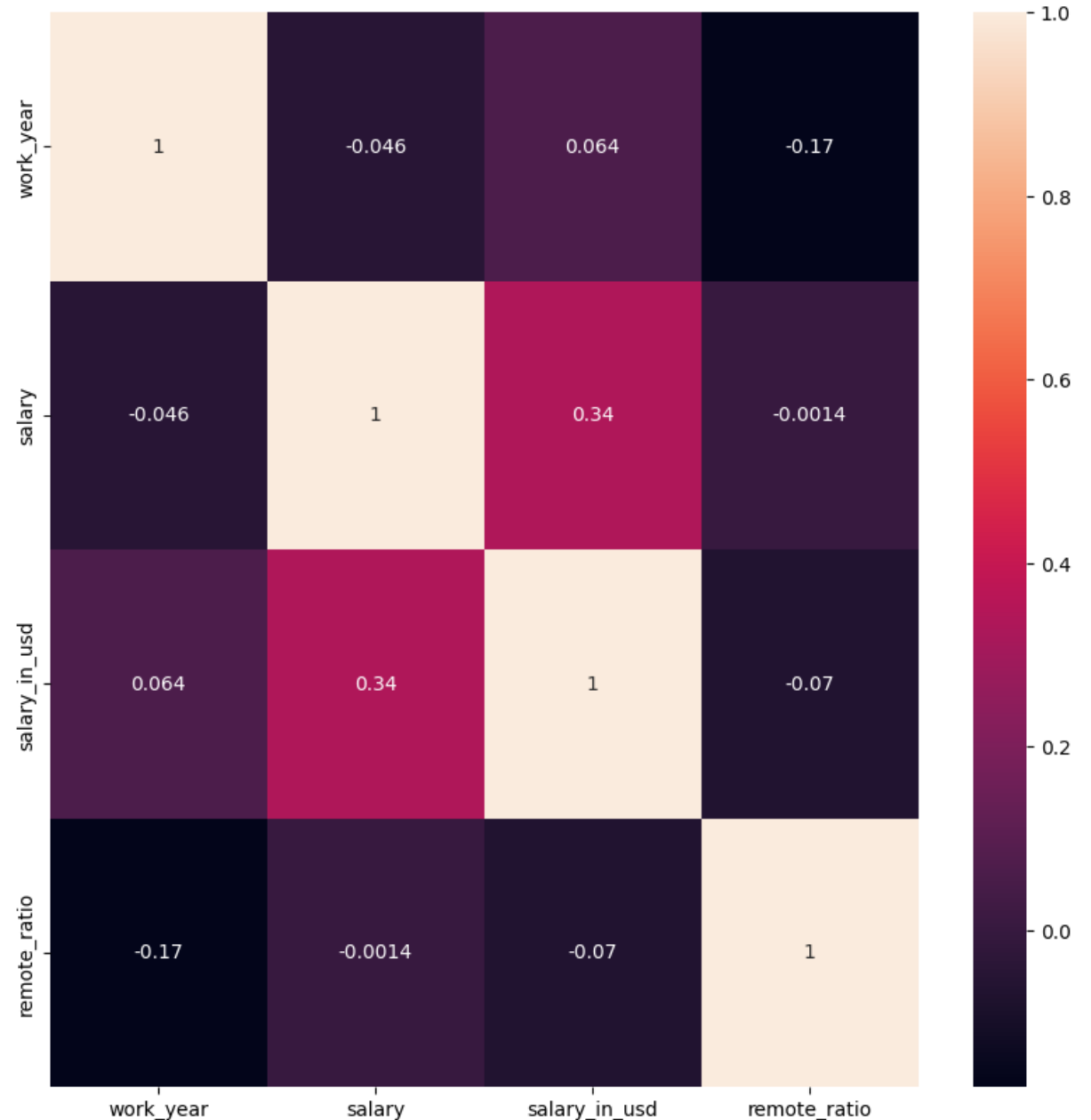
Numerical variables:

Weak correlations observed in general (**value lower than 0.5**)

Salary variations are not strongly dependent on the remote ratio.
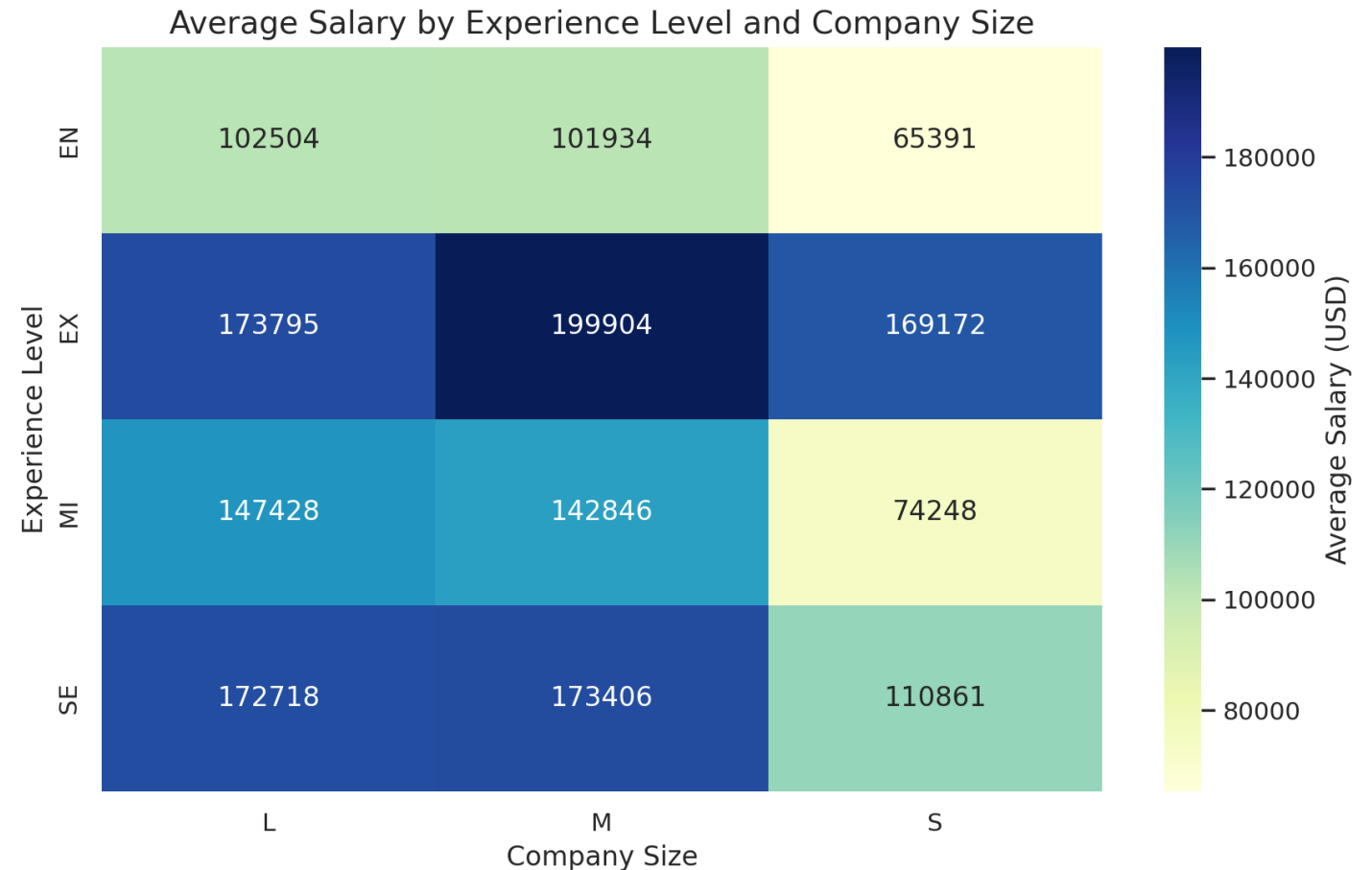
Notes:

Salary: in original currency

Work year: span 2020-2025.

Average Salary by Experience Level and Company Size:

- Senior-level roles ("SE") have the highest average salaries across all company sizes.

- Large companies ("L") offer the highest salaries for senior roles.

- Small companies ("S") generally pay less across all experience levels.

Average Salary by Experience Level and Company Size

Experience Level	L	M	S
EN	102504	101934	65391
EX	173795	199904	169172
MI	147428	142846	74248
SE	172718	173406	110861

Company Size

Average Salary (USD): 180000, 160000, 140000, 120000, 100000, 80000
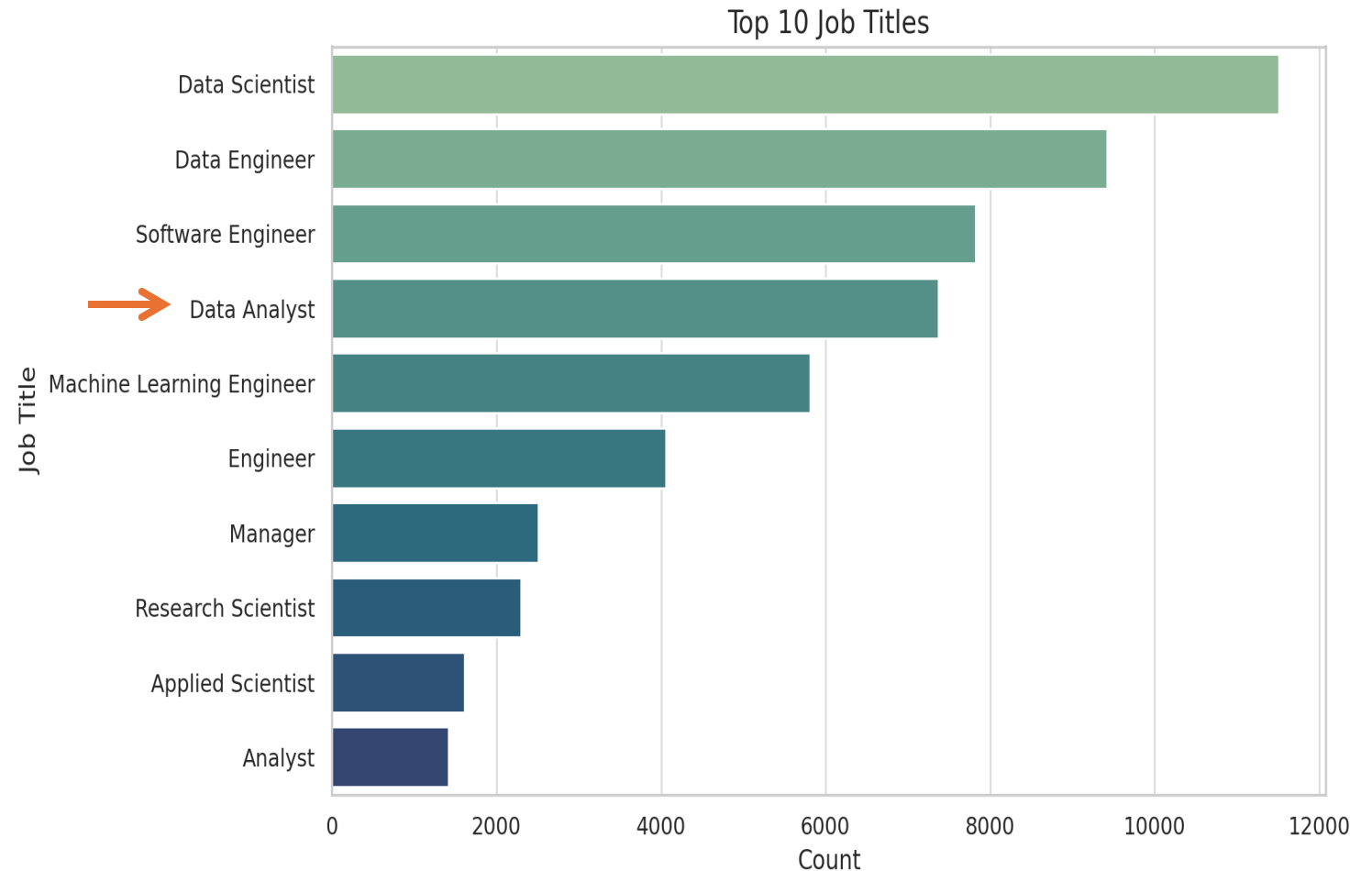
Global Perspective

Analysis of data professions worldwide, in Europe and in Germany

Top 10 Data jobs worldwide (WW):

"Data Scientist" is the most frequent job, followed by roles like "Data Engineer" and "Software Engineer."

Data Analyst is the Top 4 data profession!

Top 10 Job Titles

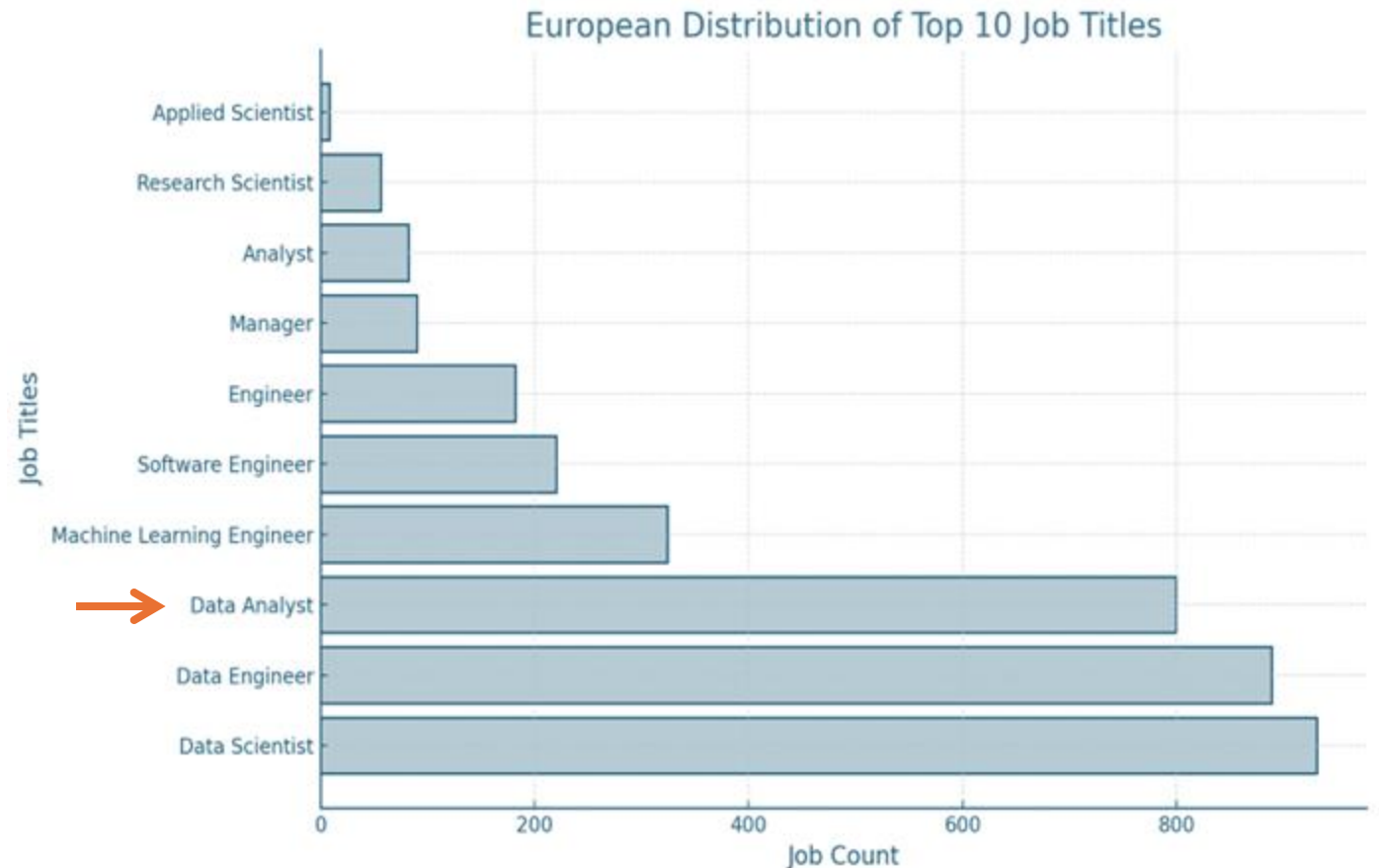* Frequencies based on the used dataset.

Top 10 Data jobs in Europe:

European Focus:
- Similar to worldwide trends, roles like **Data Engineer** and **Data Scientist** are highly prominent.

Regional Specialization:
- **Data Analyst** shows relatively **higher ranking (Top3)** compared to worldwide analysis, indicating regional expertise or demand.

European Distribution of Top 10 Job Titles

* Frequencies based on the used dataset.

Salary Distribution for Data professions in Europe:

European salaries concentrated within $40,000 to $100,000 USD.

(vs global salary range $100,000 and $200,000).

Distribution of Salaries (USD)
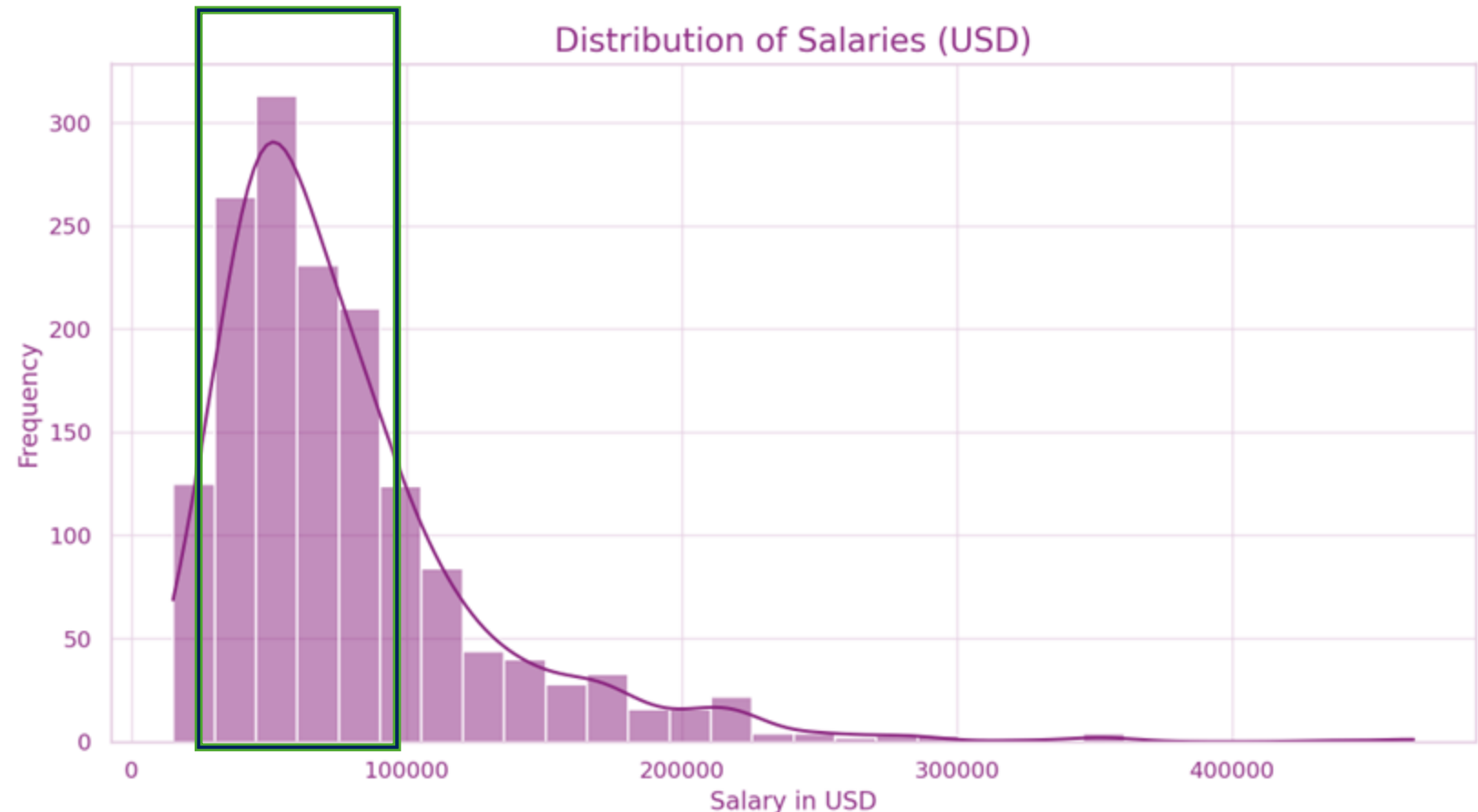
* Frequencies based on the used dataset.

Top 7 Jobs in Germany:

Niche Roles: Some job titles may have lower counts, indicating more specialized demand.

High-Demand Titles: The most common roles reflect Germany's industrial and technological strengths, such as **Software Engineer** or **Data Scientist**.

Distribution of Top 7 Job Titles in Germany
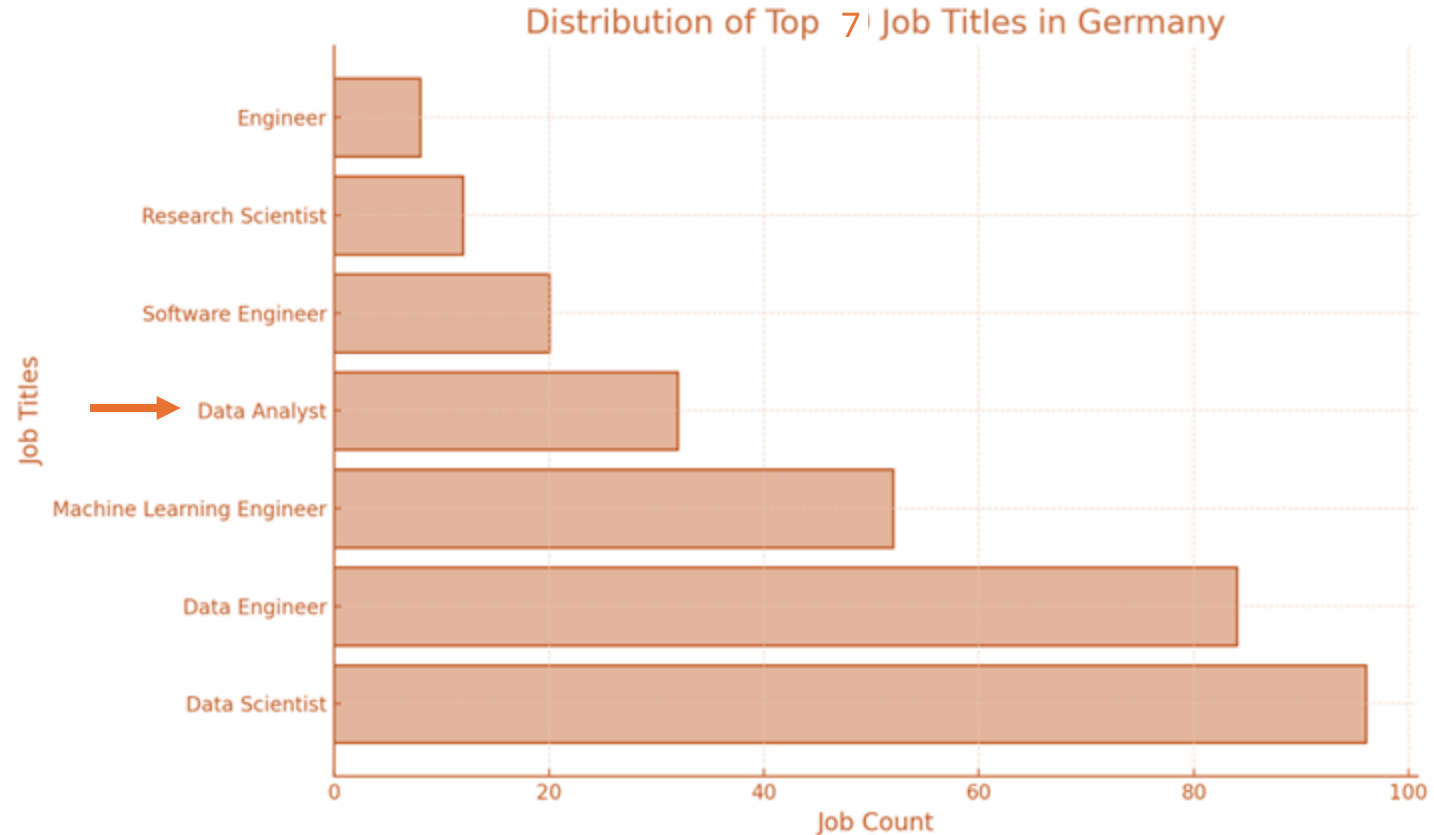
* Frequencies according to the used dataset.
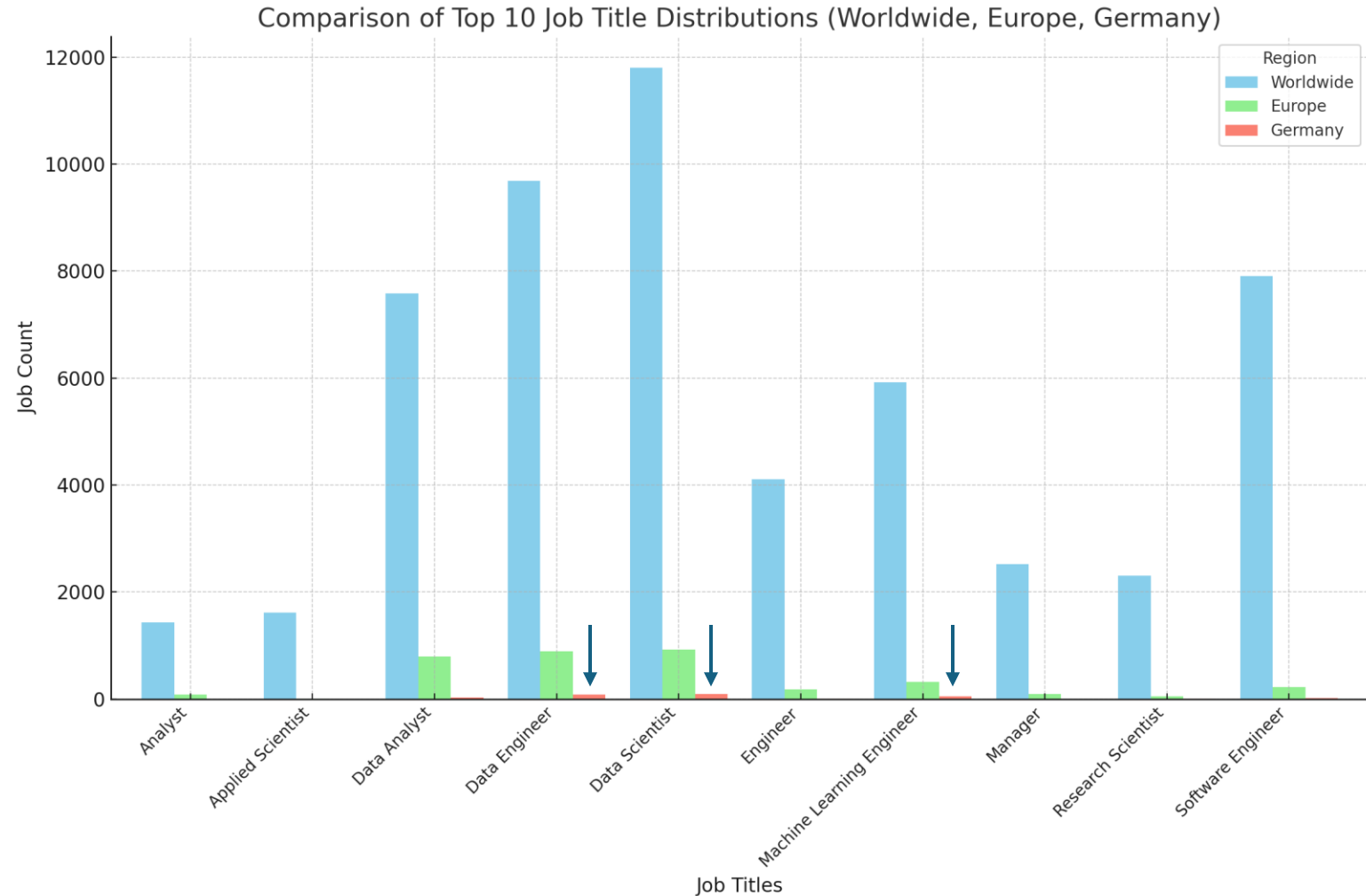
Comparison Top Job Titles WW, Europe and Germany

- **Prominent** roles in Germany may indicate regional demand.

  Example: **Data Engineer** might stand out in Germany due to industrial focus on data generation.

- **Underrepresented roles** may suggest opportunities for growth or skill gaps in the region.

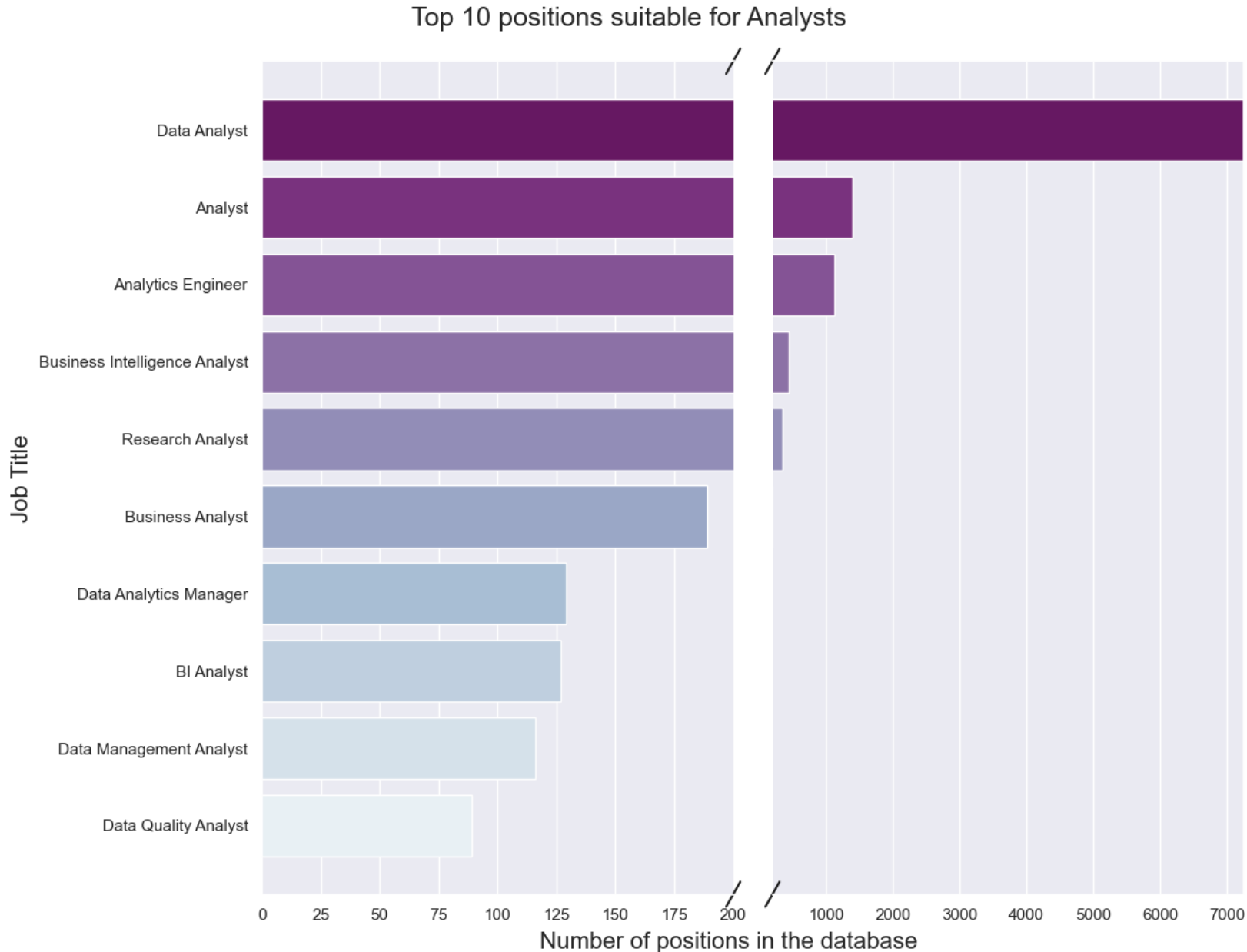Comparison of Top 10 Job Title Distributions (Worldwide, Europe, Germany)

Analyst Perspective

Panorama for a career shift

Top 10 jobs for Analysts worldwide:

56 job related to data analysis were found worldwide in the data set.
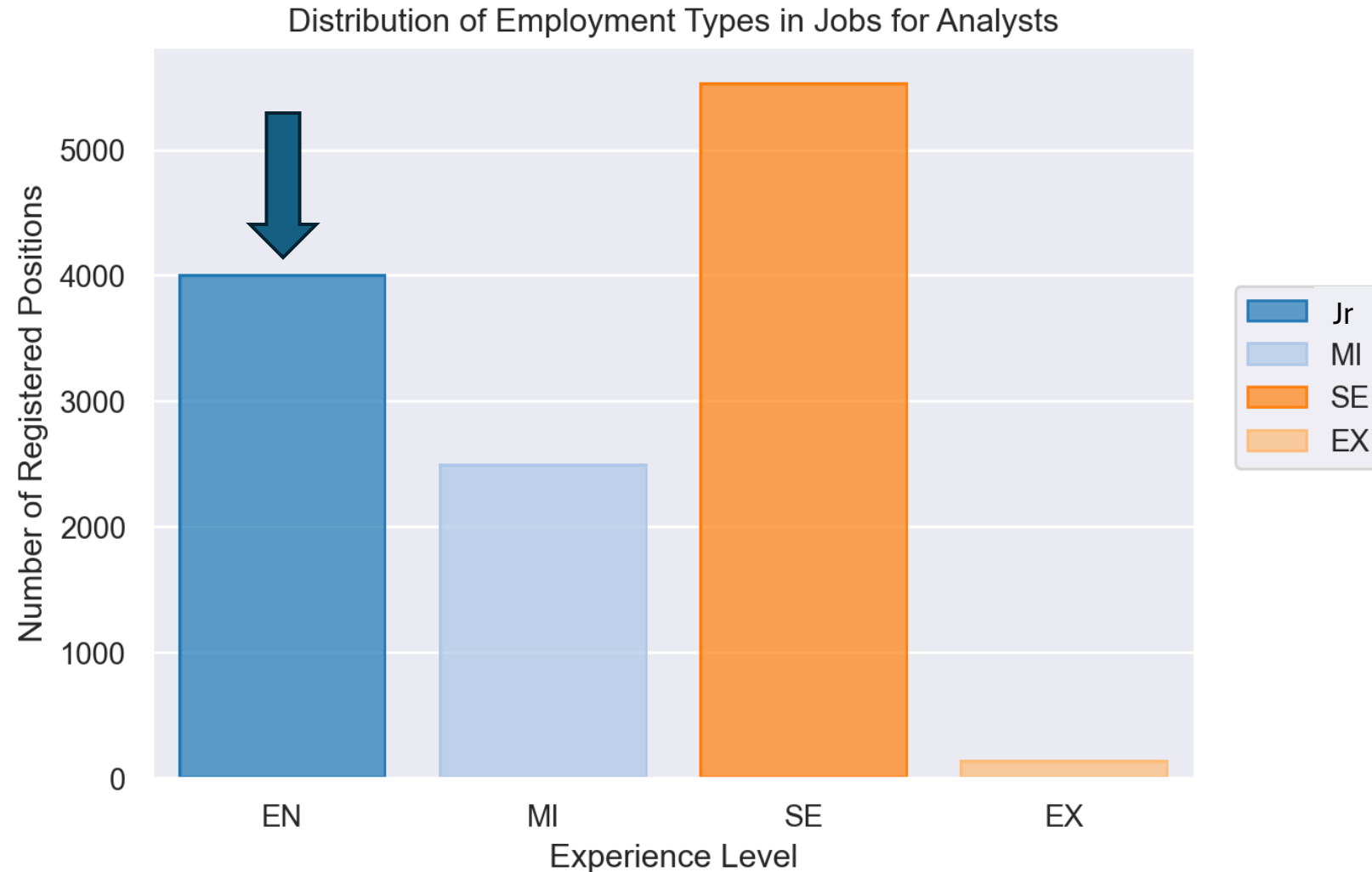
Data Analyst is the Top 1!
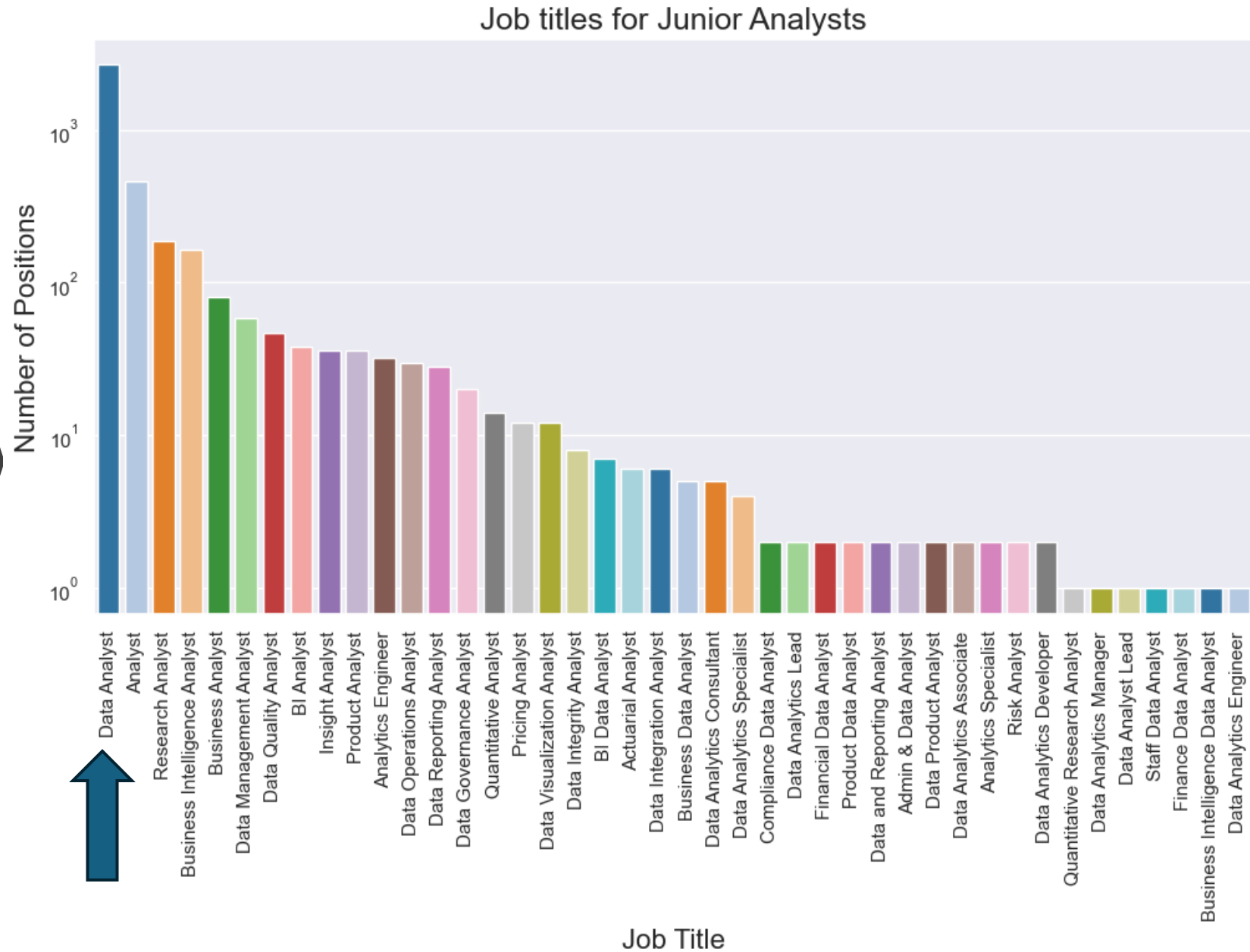

Top 10 positions suitable for Analysts

Experience level distribution in 56 job titles for Analysts:

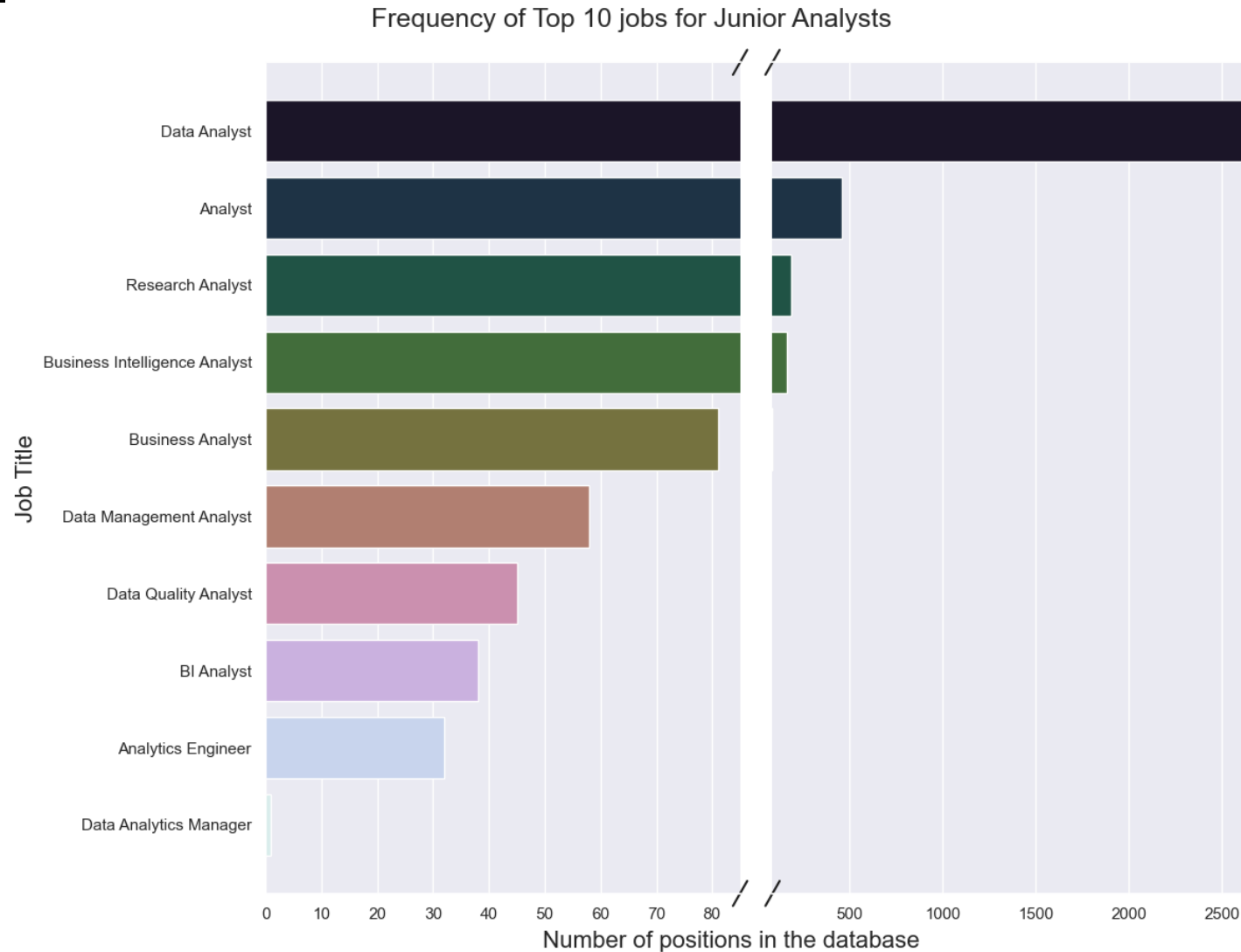Senior expertise (SE) dominates followed by the Entry level (EN).
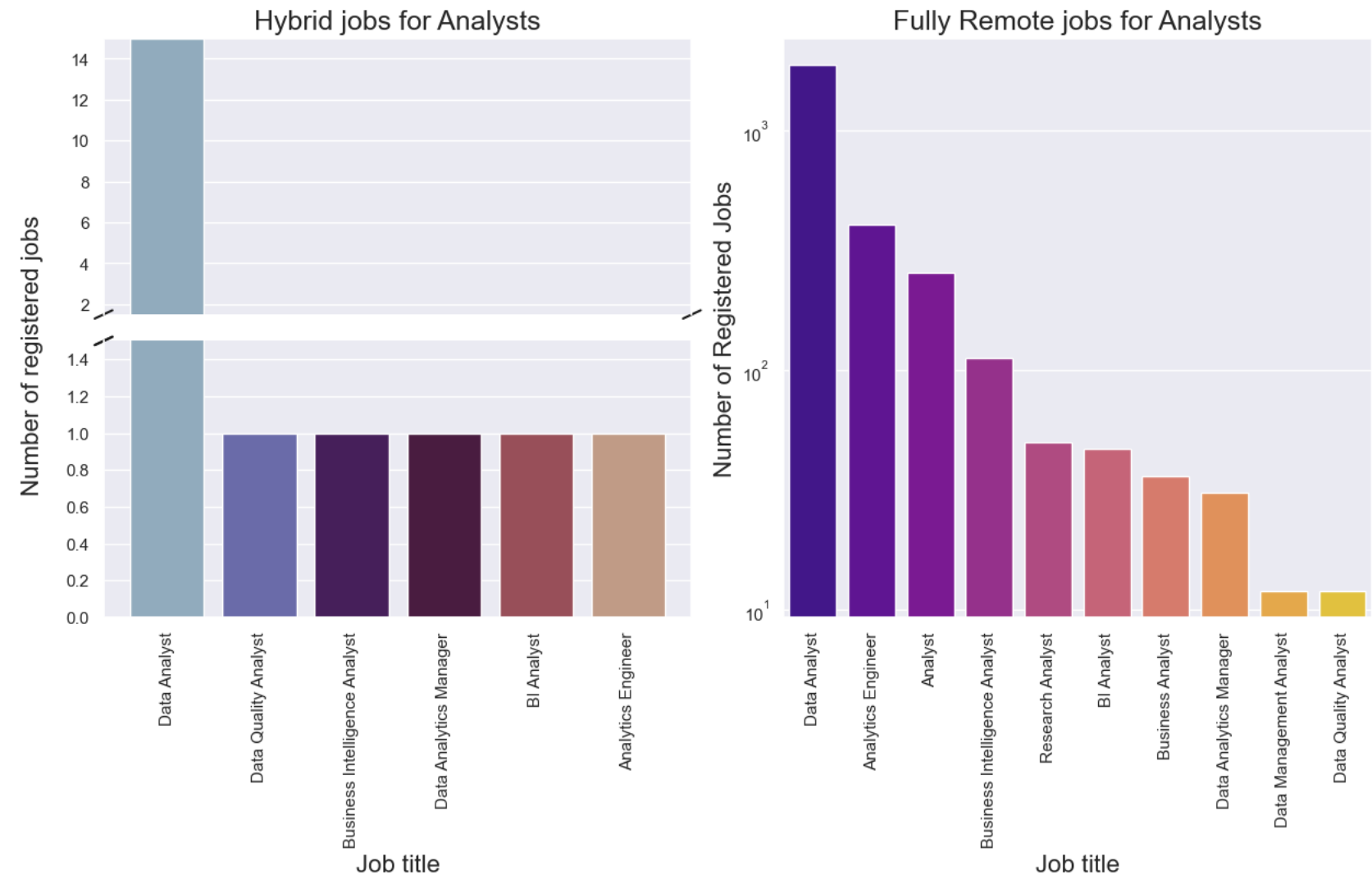
This could be encouraging to shift into DA!

Distribution of Employment Types in Jobs for Analysts

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Which jobs are suited for Jr level?
(42 titles)

Job titles for Junior Analysts

Number of Positions

Job Title

Data Analyst, Analyst, Research Analyst, Business Intelligence Analyst, Business Analyst, Data Management Analyst, Data Quality Analyst, BI Analyst, Insight Analyst, Product Analyst, Analytics Engineer, Data Operations Analyst, Data Reporting Analyst, Data Governance Analyst, Quantitative Analyst, Pricing Analyst, Data Visualization Analyst, Data Integrity Analyst, BI Data Analyst, Actuarial Analyst, Data Integration Analyst, Business Data Analyst, Data Analytics Consultant, Data Analytics Specialist, Compliance Data Analyst, Data Analytics Lead, Financial Data Analyst, Product Data Analyst, Data and Reporting Analyst, Admin & Data Analyst, Data Product Analyst, Data Analytics Associate, Analytics Specialist, Risk Analyst, Data Analytics Developer, Quantitative Research Analyst, Data Analytics Manager, Data Analyst Lead, Staff Data Analyst, Finance Data Analyst, Business Intelligence Data Analyst, Data Analytics Engineer

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...and for the Top 10 jobs for Analysts?

Frequency of Top 10 jobs for Junior Analysts

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Remote opportunities in Top 10 jobs for Analysts:

Hybrid jobs for Analysts

Fully Remote jobs for Analysts

Hybrid work is reported mainly for DA.

Time series of Top 10 jobs for Analysts:

Remote Ratio Evolution Over Time per Job Title
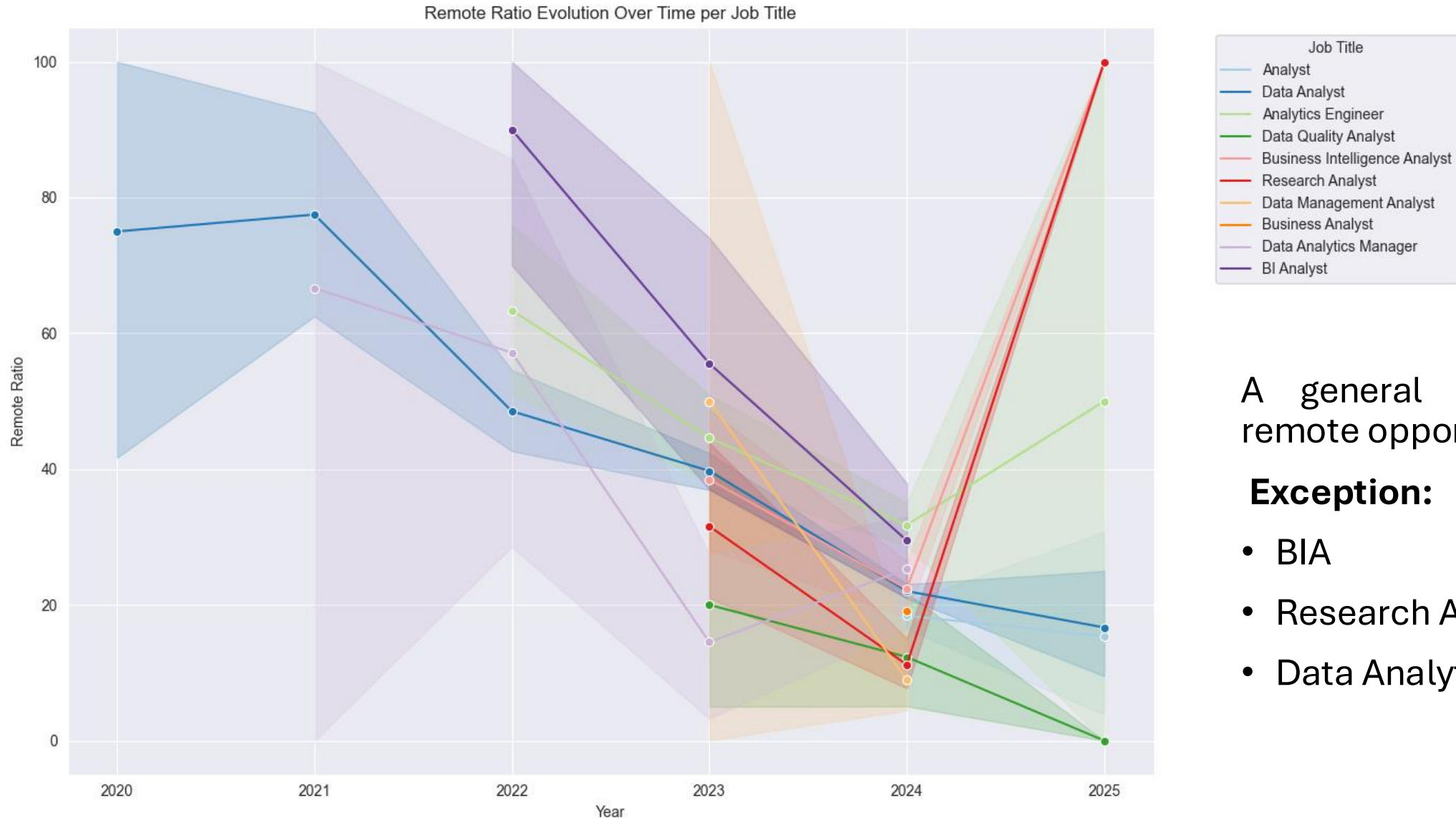
A general decrease of remote opportunities.

Exception:

- BIA
- Research Analyst
- Data Analytics Manager

Worldwide salary for Top 10 jobs for Analysts:

The mean salary (USD) for the top 10 jobs f oranalysts lies around 113K USD, while the **Data Analysts earn in average 107K USD.**

Salary Distribution of Top 10 Job for Analysts Worldwide
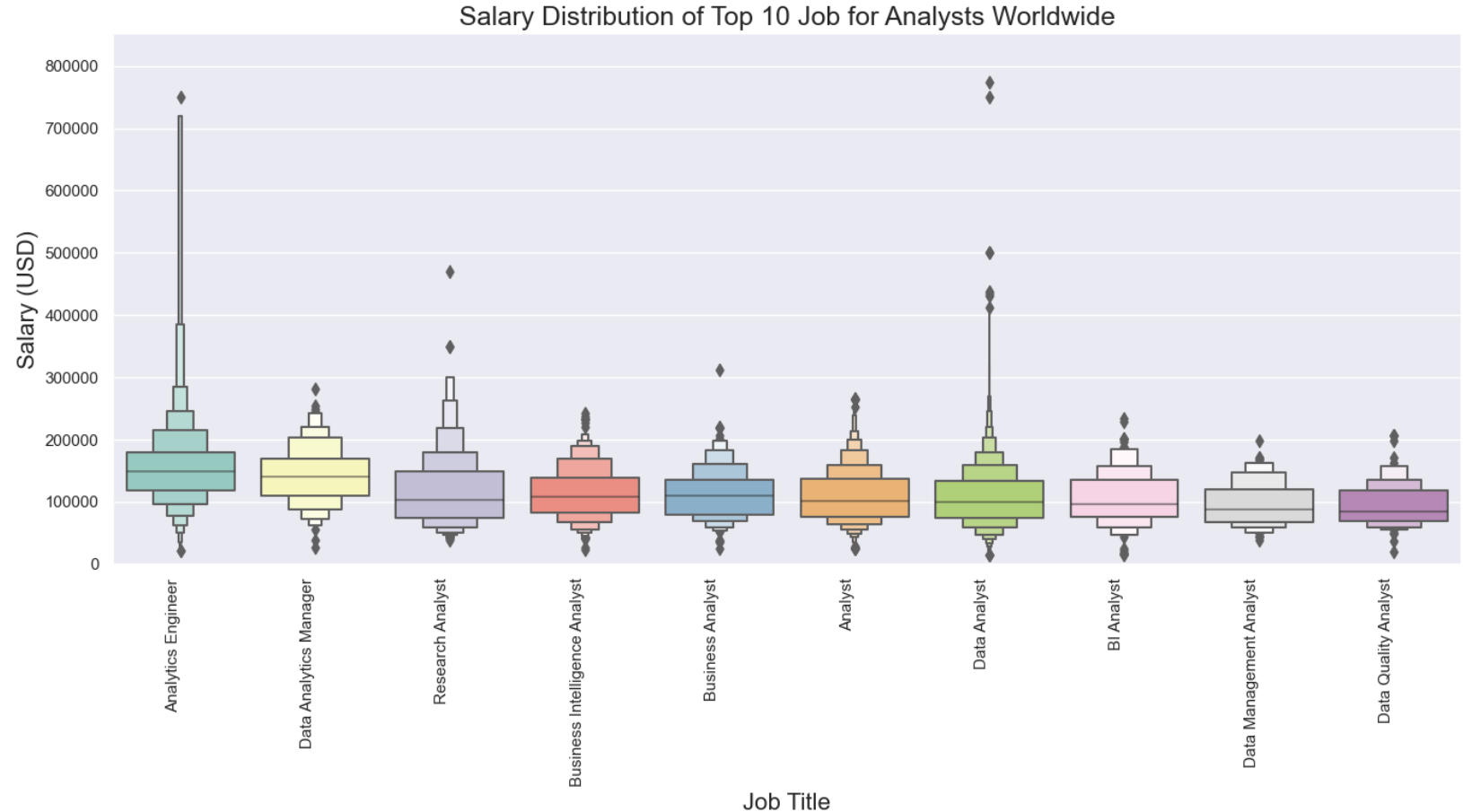
Recommendations to Jessica

Analysis of additional datasets are encouraged to compare trends.

According to the analyzed data:

➢ career shift opportunities are feasible for the Job title of Data Analyst,

➢ there may be opportunities for DA with Junior experience and mainly full-time mode,

➢ the mean salary worldwide for Data Analysts lies around 107K USD,

➢ relocation would not be necessary because Data Analyst positions showed hybrid and fully remote work.

Your questions are welcomed!

📋Our contact details:

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