



IWD– Redefine Possible Capstone Project :  
Data Analytics Track

# Linkedin Job Market Analysis

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# Today's Agenda



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# Project Objective

To analyze job listings from LinkedIn in order to understand the distribution of roles, companies, work types, and countries hiring for data-related positions.

## Key Questions :

- What are the most in-demand job titles in the data field ?
- Which companies and countries are hiring the most ?
- What types of employment and work arrangements are offered ?

This analysis aims to support job seekers, HR teams, and career advisors by providing insights into the current data job market.



# Data Challenges

- **Missing Values:**  
work\_type and employment\_type were completely empty.
- **Non-standard Locations:**  
"New York, NY" — country name not directly available
- **Unstructured Job Descriptions:**  
Descriptions were long and unstructured.

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# Data Cleaning

## Missing Work Type & Employment Type

Solution : Used the job link column to perform additional web scraping using Selenium .  
Visited each job URL and extracted the missing values from the original LinkedIn page.

## Unstructured Job Titles

Solution : Standardized job titles into broader categories (e.g., Data Analyst, Data Scientist)  
for consistency.

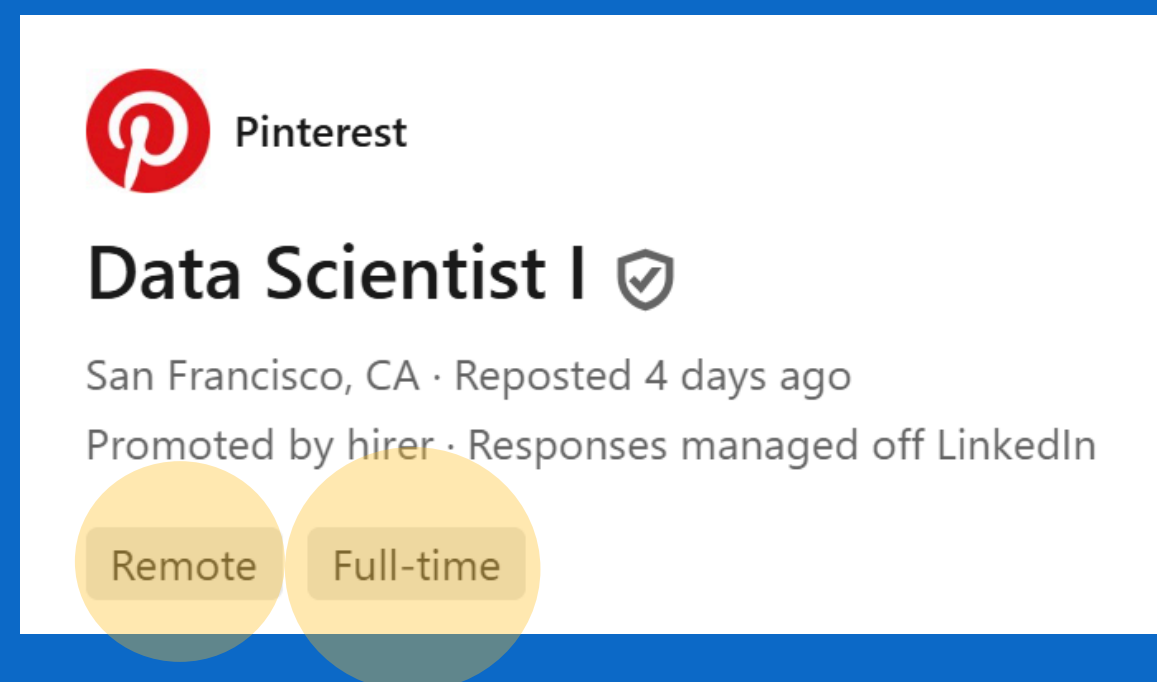
## Non-standard Location Format

Solution : Created a Python dictionary to map each location to its corresponding country.  
This enabled consistent geographic grouping in the dashboard.

# Missing Work Types

**While scraping job posts from LinkedIn:**

Some job posts did not specify a work type (remote, hybrid, onsite) — even on the original LinkedIn page.



**Why I didn't fill them manually:**

After reviewing several of these jobs, I noticed that:

Some companies decide work type later, based on candidate location or experience level. Other roles were listed as "open to discussion" or "flexible".

**Decision:**

Kept the work\_type as (Unspecified) to reflect real-world ambiguity.

This avoids making incorrect assumptions and keeps the data truthful and unbiased.



# Key Dashboard Elements :

## Job Roles Distribution:

Top demanded roles (e.g., Data Analyst, Data Scientist, ML Engineer)

## Work Type Breakdown :

On-site vs Remote vs Hybrid vs Unspecified

## Geographic Distribution :

Jobs by country (mapped using cleaned location data)

**Employment Type** : Full-time, Contract, Internship, etc.

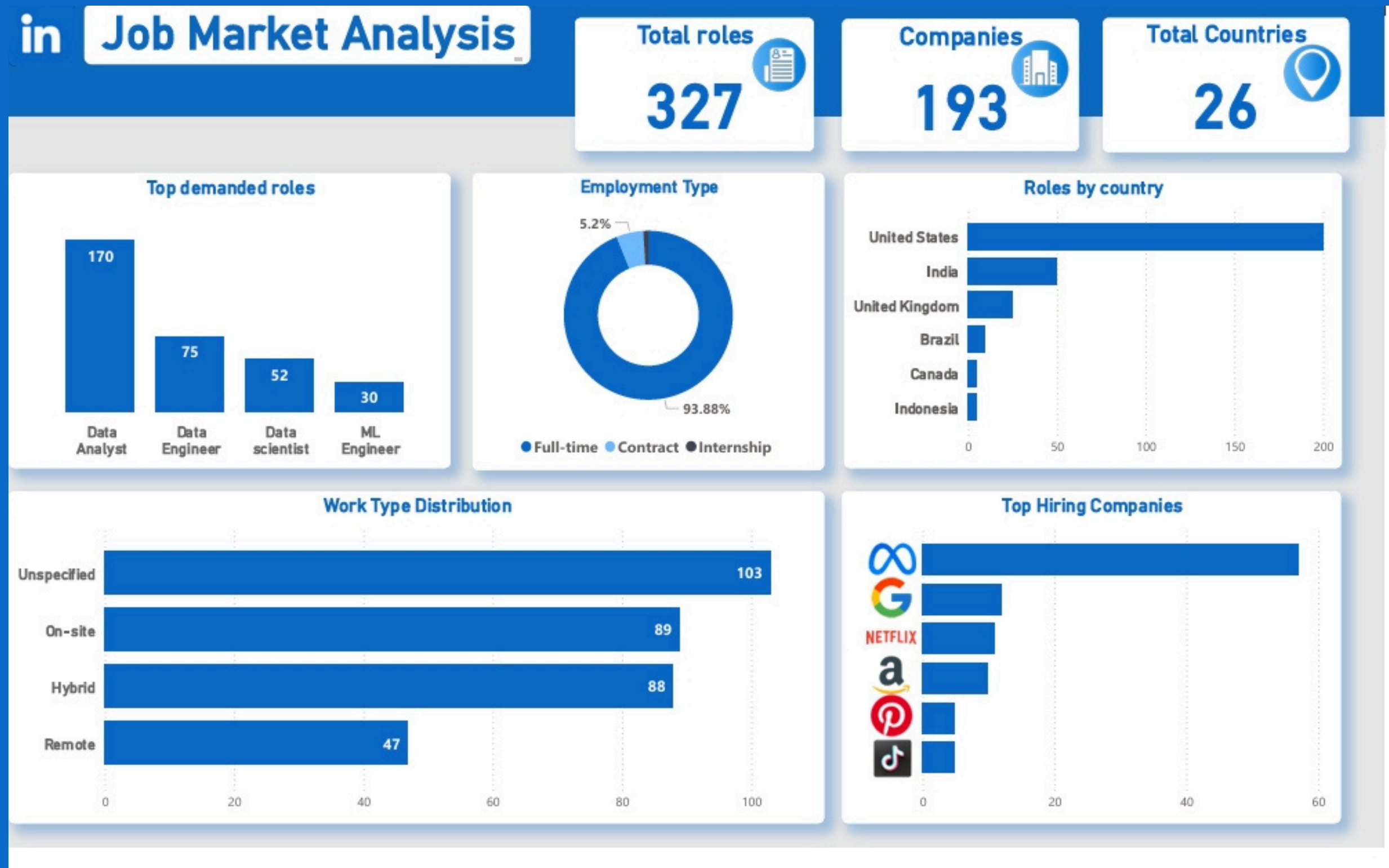
**Top Hiring Companies** : Companies with highest number of listings



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# DashBoard

The dashboard enables interactive filtering and offers a clear view of job market trends based on multiple dimensions.







**THANK YOU**