

How Has the Increase in Remote Jobs Shifted Online Job Markets Like LinkedIn?

This data is webscraped data from LinkedIn and has a vast amount of data on Jobs, including company, estimated salary, number of applicants/online views, and if the job is remote, among other columns. There is a clear disparity between the online traction towards remote jobs, especially as we have come out of the COVID-19 Pandemic in recent years. This poster aims to answer the question of “How Are Remote Jobs impacting Online Job Markets?”, while also getting a better understanding of what job factors push LinkedIn’s algorithm.

As a current Junior, I am beginning to search for Summer Internships, and will soon be in the Job Hunt, along with thousands of other college graduates. This dataset has helped me explore the competitiveness of online Job Markets, such as LinkedIn, and can use this data to query for the right jobs efficiently and increase my chances of landing a job right out of college. This data is for all people who use Online Job Search websites, such as LinkedIn, and want to get a leg up on other applicants with added knowledge of the market.

This Dataset was found on kaggle and has 124,000 rows, and 30 columns, along with 8 other smaller datasets, of which 2 I used to get 3 columns of company info. Due to it being web scraped, a good majority of the data had null values, and columns that needed functions such as datetime or a salary function to get standardized data. Most of my visuals were formed by aggregating and subsetting the data to examine key indicator columns.

Kaggle Dataset: www.kaggle.com/datasets/arshkon/linkedin-job-postings

R Packages Used: tidyverse, alluvial, treemapify, tigris, tidycensus, usmap, maps, scales, tm, tidyr, lubridate

The diagram illustrates the flow of job attributes and their impact on expected salary. It is divided into three main stages: Remote?, Experience Level, and Pay Period, which all lead to Expected Salary.

Remote? is split into 'No' and 'Yes'. 'No' flows into 'Associate' and 'Entry level' experience levels. 'Yes' flows into 'Mid-Senior level'.

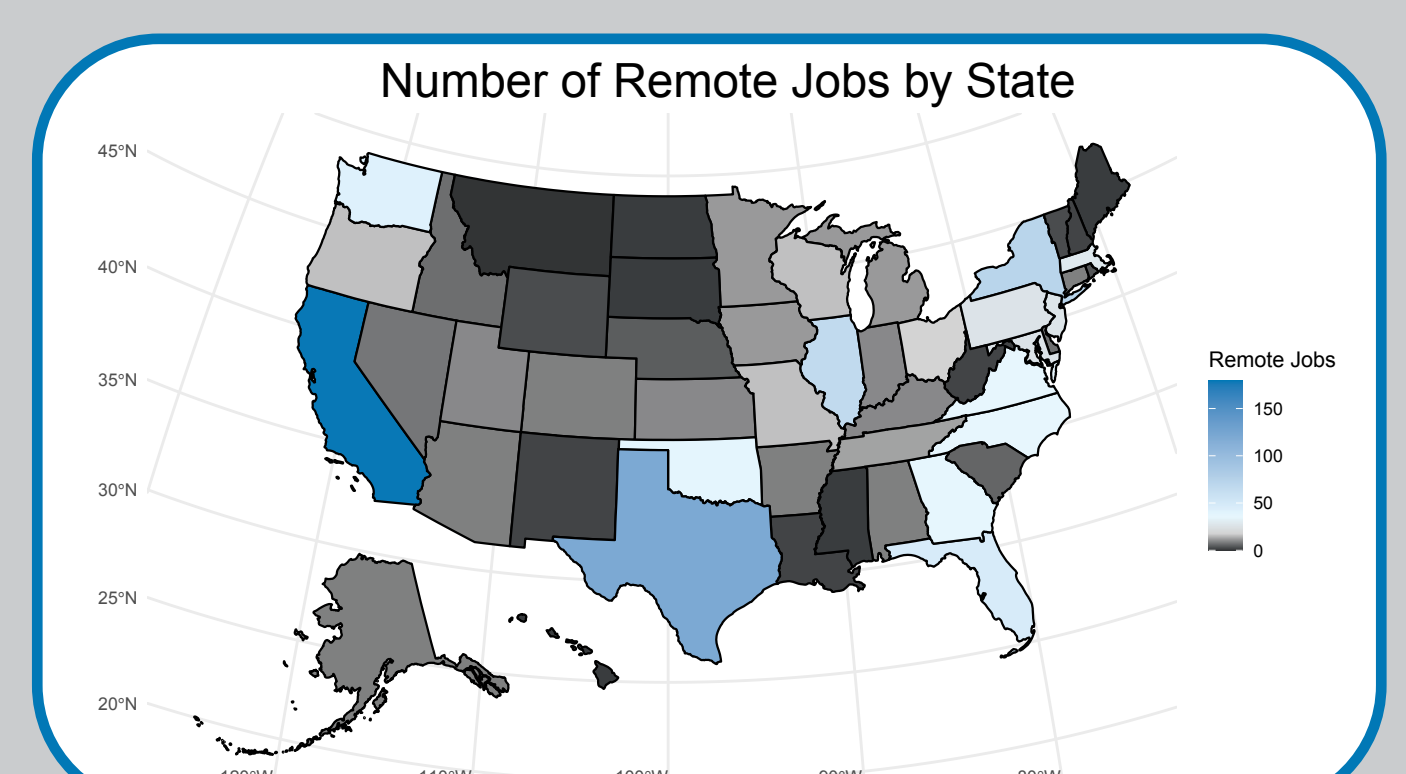
Experience Level is split into 'Associate', 'Entry level', and 'Mid-Senior level'. 'Associate' flows into 'HOURLY' and 'YEARLY' pay periods. 'Entry level' flows into 'HOURLY' and 'YEARLY' pay periods. 'Mid-Senior level' flows into 'YEARLY' pay period.

Pay Period is split into 'HOURLY' and 'YEARLY'. 'HOURLY' flows into 'Expected Salary' categories: '< \$55,000', '< \$85,000', '< \$125,000', and '> \$125,000'. 'YEARLY' flows into 'Expected Salary' categories: '< \$55,000', '< \$85,000', '< \$125,000', and '> \$125,000'.

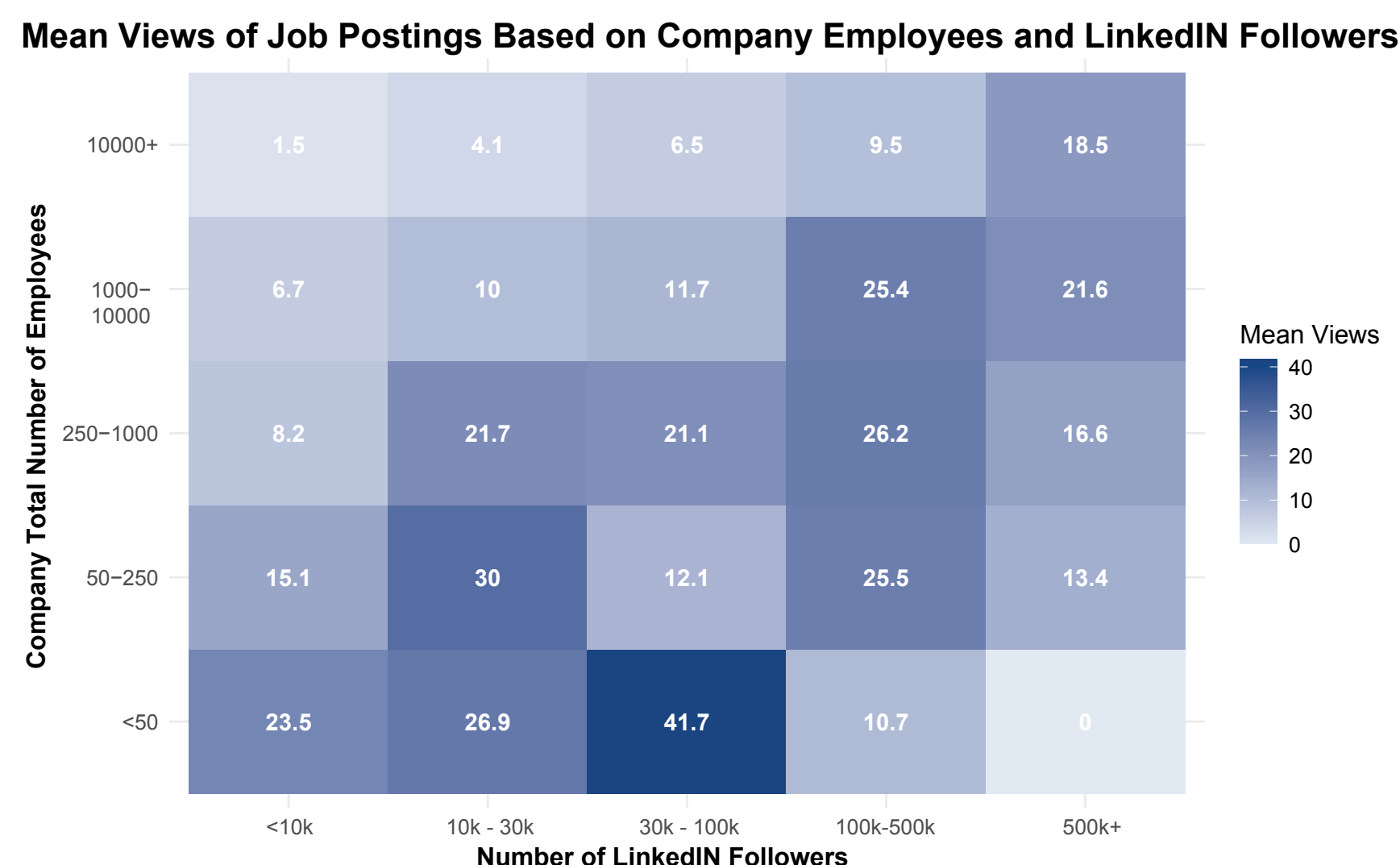
Expected Salary categories are: '< \$55,000', '< \$85,000', '< \$125,000', and '> \$125,000'.

What are the key factors driving the shift in remote job opportunities, and how do industry type, experience level, and geographical location influence these trends?

Managers, Engineers,
& Analysts w/ Most
LinkedIn Openings



This Word Cloud shows which job titles were most prominently seen on this LinkedIn web scraped data. This is great news for students who want to be engineers or managers in their near future!!



This map shows that the most populated states, have the most remote positions posted. This is not a surprised as these states have large cities such as Los Angeles, Houston, Chicago, and New York City driving the job market. This could be helpful information to students or job seekers who are in a gray state, as they can set their location to a major city for a remote job.

This dataset is limited to only scraped LinkedIn website data over a two week span of April 2024. In addition, a lot of the rows were deleted due to Null values, thus this is not a fully accurate representation of the Job Market. Future research and added data would be helpful in solidifying results of US Job Market Data.

Students should use the trends in this data when applying for jobs right out of college, especially when looking at where they want to work, what position they will have, and what industry they go in. The data suggests that Job Market needs more managers and engineers, and the Staffing/Recruiting industry has plentiful amount of jobs. Remote jobs offer higher pay, but require a higher starting experience level and are generally more competitive as more people can apply, decreasing your odds you will be the perfect candidate. Students should look for jobs in person, with smaller companies, as this is the lowest ratio of applies to views.