PYTHON PROJECT

TERM – 1

ANALYSIS REPORT ON JOB POSTINGS ON SHINE

GitHub link

https://github.com/Prashantkumartalan43/045043_Python_Project

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Project Objectives

- Data Collection and Scraping from a website
- Data Visualization of the scraped data
- Interpretation and Insights obtained from the data visualized
- Managerial Implications based on the insights

General Description of the Data

The code provided scrapes job data from a job search website (Shine.com) and constructs a dataset containing information related to job listings.

```
In [27]: df
```

Out[27]:

	Job Title	Employer	Job Location	Experience	Positions
0	Hiring for *HDFC ERGO*	Mars Consultancy Firm	Mumbai City	0 to 5 Yrs	80
1	RELATIONSHIP MANAGER	AVEGA BUSINESS SOLUTIONS PRIVATE LI...	Chennai	0 to 2 Yrs	8
2	Hiring for *HDFC ERGO* Outbound (SALES PROCESS)	Mars Consultancy Firm	Navi Mumbai,Thane, Mumbai City	0 to 5 Yrs	50
3	Tele Sales Executive	MEDALLION JEWELLERS PRIVATE LIMITED	elhi	0 to 1 YrD	10
4	RELATIONSHIP MANAGER	AVEGA BUSINESS SOLUTIONS PRIVATE LI...	angalore	0 to 1 YrB	3
...	...	...	...	...	...
69	HTML and PHP Website Developer	Narendra Sharma	ur,Bangalore, Kanpur, Lucknow, Pune	0 YrsSitap	5
70	Sales Executive	TRAIDENT BRAINS PRIVATE LIMITED	Mohali	0 to 2 Yrs	20
71	Agency Development Manager	Times Consultancy Services	Udaipur	1 to 6 Yrs	99
72	Import Export Executive	Qatar Manpower Agency	Delhi	0 to 2 Yrs	2
73	RELATIONSHIP MANAGER , SR.RELATIONSHIP MANAGER.	RCJ Employ HR Services LLP	Mumbai City	0 to 5 Yrs	5

74 rows × 5 columns

Job Title :
This column contains the titles of various job listings.

Employer :
This column includes the names of the employers or companies that have posted the job listings.

Job Location (Job Location):
This column specifies the location or locations where the jobs are based or offered.

Experience (Experience):
This column provides information about the expected or required years of experience for each job listing.

Positions (Positions):
This column represents the number of positions or job openings available for each job listing.

The data has been collected from multiple pages of the job portal, and each row in the DataFrame corresponds to a single job listing. The DataFrame provides valuable information for job seekers and employers interested in understanding the current job market, including the types of job positions available, the companies offering these positions, and the location and experience level associated with each job listing.

Analysis of Data

Descriptive Analysis

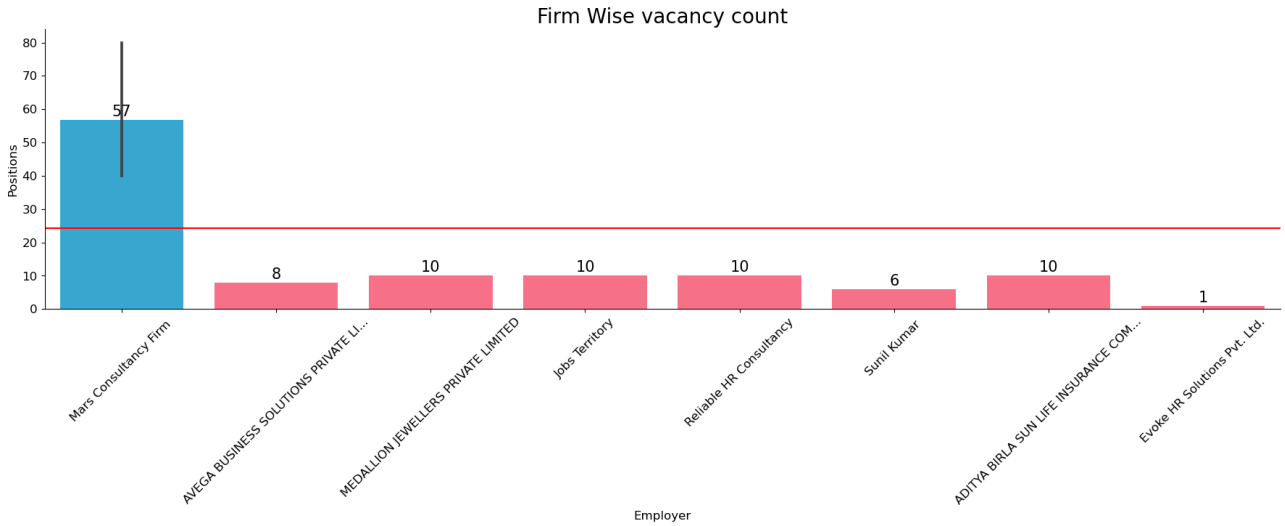
1.

	Positions
count	55.000000
mean	24.218182
std	27.646372
min	1.000000
25%	5.000000
50%	10.000000
75%	30.000000
max	99.000000

Count (n):
There are a total of 55 observations or data points in the dataset.
Mean (Average):
The average job posting count is approximately 24.22.
Standard Deviation (std):
The standard deviation is relatively high at approximately 27.65.
The high standard deviation indicates that the data points are spread out from the mean, suggesting variability or dispersion in the counts.
Minimum (min):
The minimum count observed is 1.
25th Percentile (25%):
The 25th percentile value is 5.
Median (50%):
The median count is 10.
Half of the observations have counts equal to or lower than 10.
The median is also close to the mean, suggesting that the data may not be highly skewed.
75th Percentile (75%):
The 75th percentile value is 30.
Maximum (max):
The maximum count observed is 99.

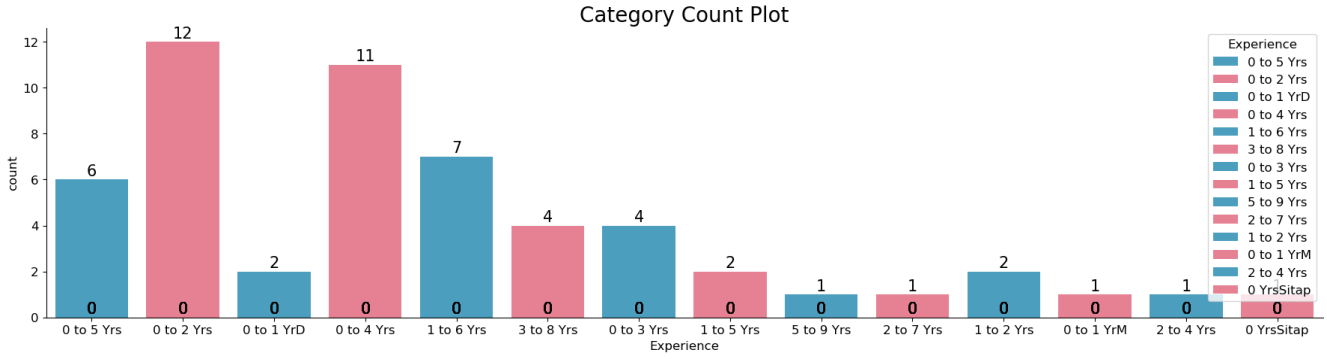
Statistical Analysis

2.



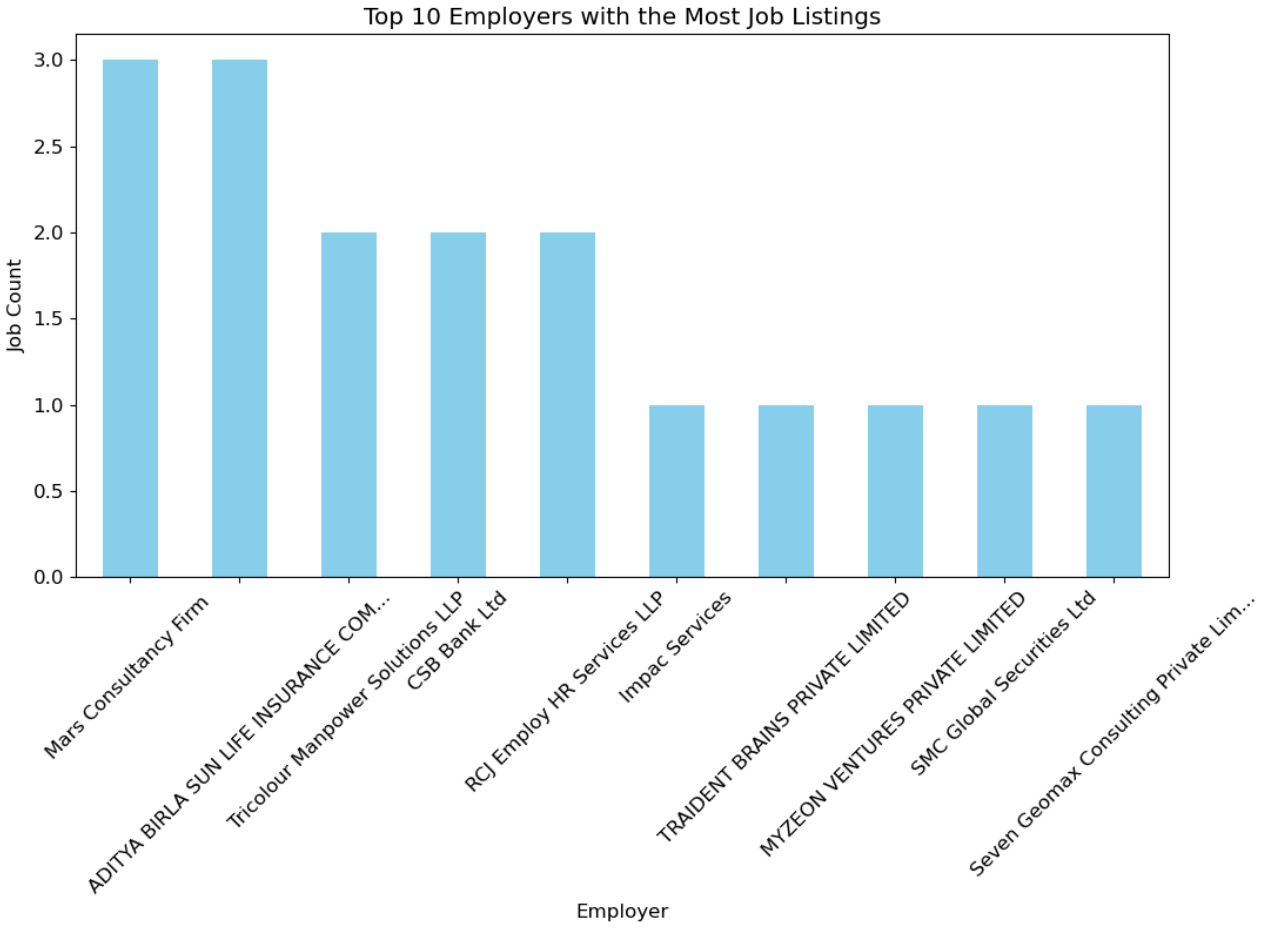
The number of vacancies in the industry is increasing. This suggests that the industry is growing and is in need of more workers.
The number of vacancies is highest for the Mars Consultancy Firm. This suggests that the firm is expanding rapidly and is hiring a lot of new employees.

3.



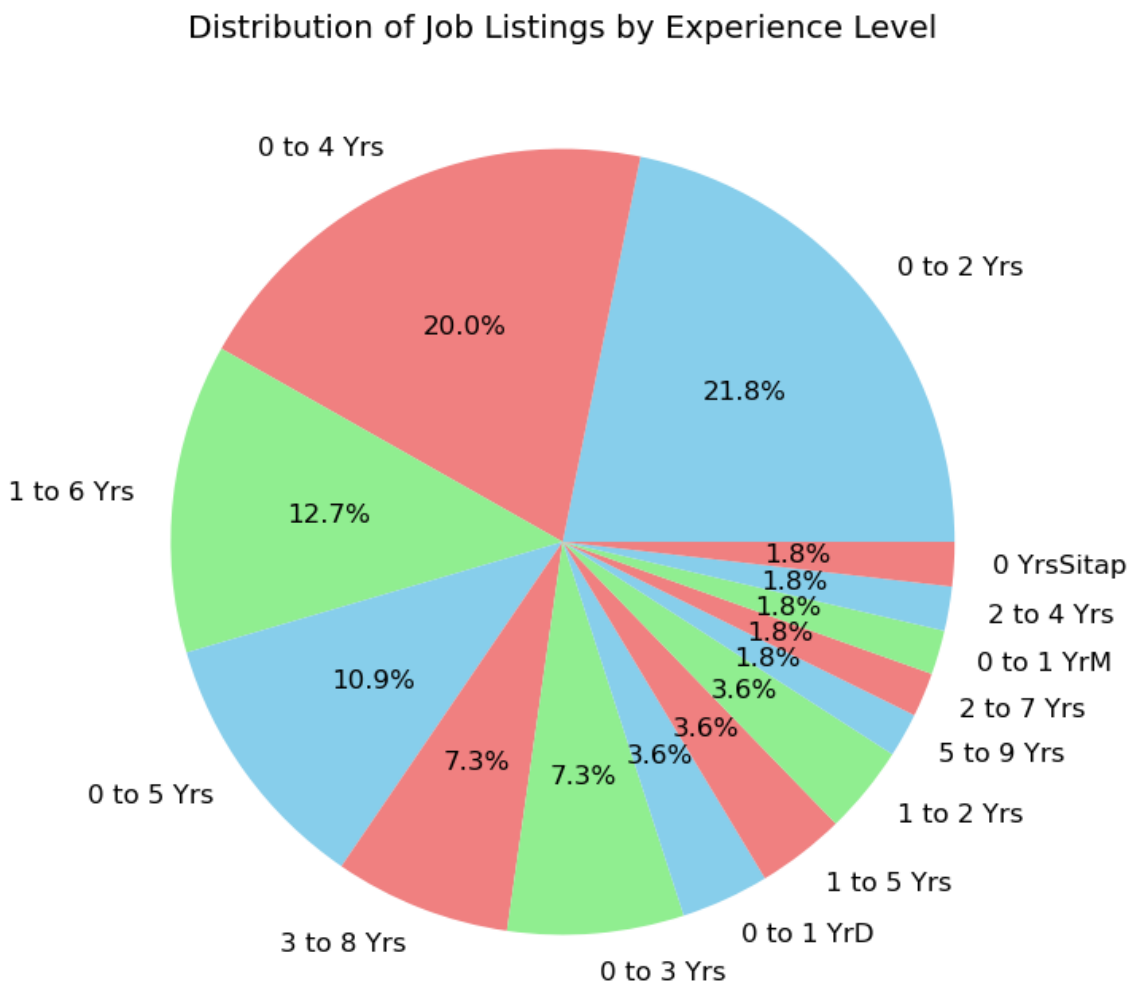
The count plot categorizes job listings by experience level, and each bar represents a specific experience level category.

4.



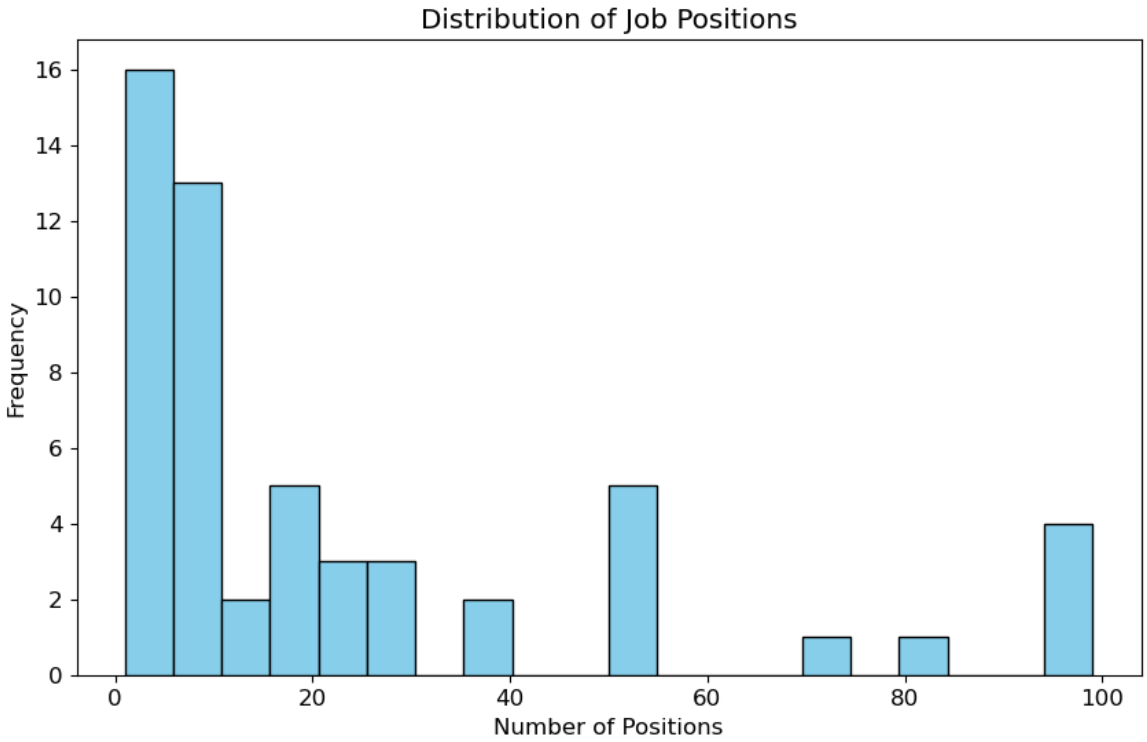
The top 10 employers are all in different industries, suggesting that the job market is diverse.
The number of job listings for the top 10 employers is relatively large, suggesting that there are many opportunities available.
The employer with the most job listings is Mars Consultancy Firm, suggesting that it is a large and growing company.

5.



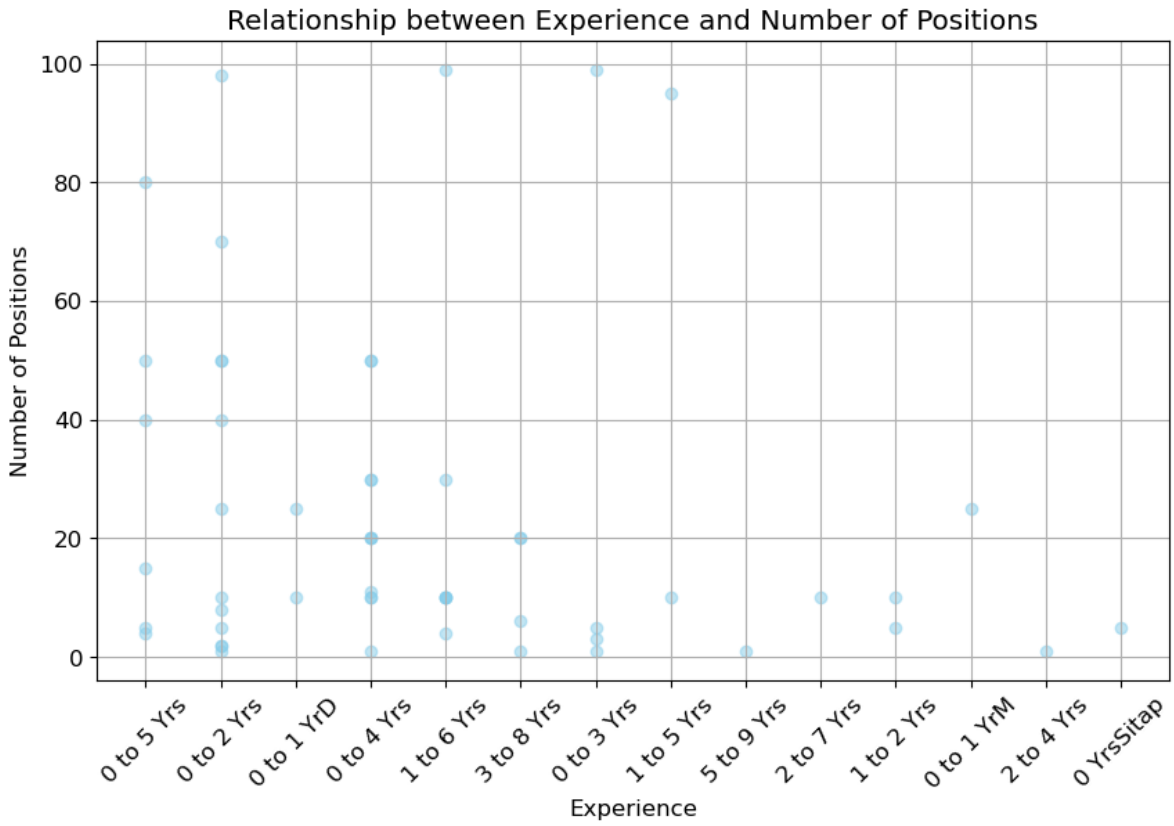
Most job listings are for people with 0 to 4 years of experience. This suggests that the employers are looking for entry-level or junior-level candidates.
There is a smaller number of job listings for people with 5 to 9 years of experience. This suggests that the employers are also looking for mid-level candidates.
There are even fewer job listings for people with 10 years or more of experience. This suggests that the employers are looking for senior-level candidates.

6.

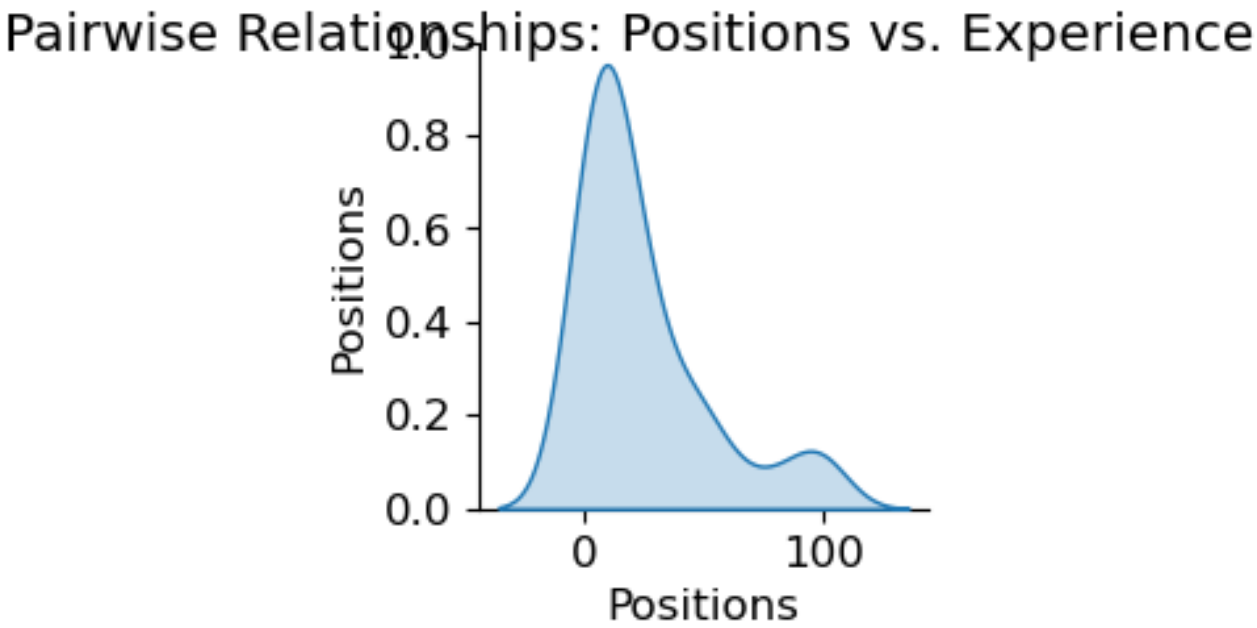


The job market is diverse, with a variety of different types of jobs available.
There are more opportunities for people with entry-level skills, as there are more jobs with 20 positions available.
There are also opportunities for people with more experience, as there are jobs with 40, 60, 80, and 100 positions available.

FINDINGS AND INFERENCES



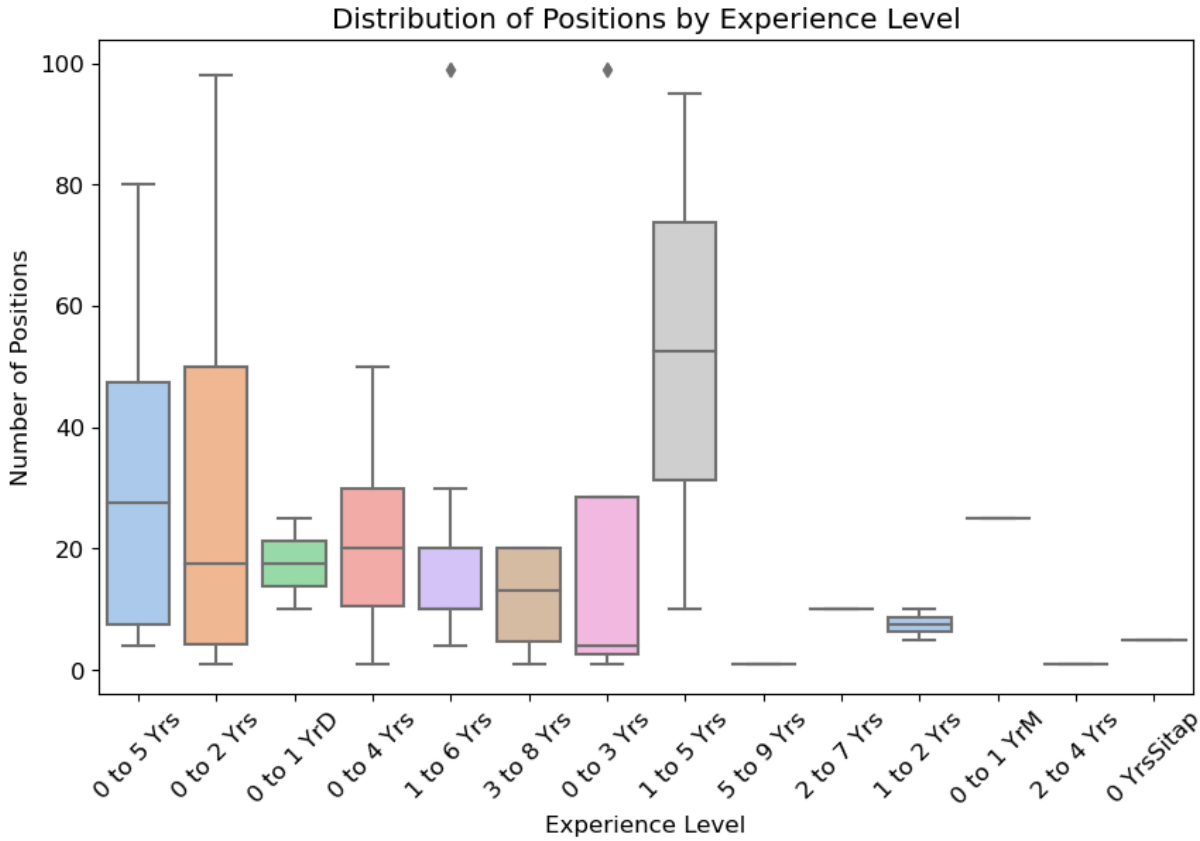
There is a positive correlation between experience and the number of positions. This means that as the number of years of experience increases the number of positions also increases.
The number of positions peaks at 5 to 9 years of experience. This suggests that people with this level of experience are most in demand.
There are fewer positions available for people with less than 5 years of experience or more than 9 years of experience. This suggests that employers are looking for candidates with a few years of experience, but not too much experience.



There is a positive correlation between experience and number of positions, but the correlation is not as strong as in the previous graph. This means that experience is still a key factor, but it is not the only factor that employers consider when hiring.

The number of positions peaks at around 5 years of experience. This suggests that people with this level of experience are most in demand.

There are still a considerable number of positions available for people with less than 5 years of experience or more than 5 years of experience. This suggests that employers are willing to hire people with less or more experience, but they are more likely to hire people with moderate experience.



There are more positions available for people with 0 to 2 years of experience than for people with any other experience level.
There are also a significant number of positions available for people with 3 to 5 years of experience.
There are fewer positions available for people with 6 years or more of experience.
Overall, the graph suggests that there are more positions available for people with some experience, but not too much experience. This could be because employers are looking for candidates who are still eager to learn and grow, but who also have some experience in the workforce.

Managerial Implications

The visualizations generated from the job data can provide valuable managerial implications for both employers and job seekers. Here are some managerial insights and actions that can be derived from the visualizations:

1. Top Employers with the Most Job Listings:

- *Employers*: Employers who are among the top 10 in terms of job listings may consider strategies to maintain their competitive position, such as continuously promoting job openings and improving their employer branding.
- *Job Seekers*: Job seekers can identify employers actively hiring and potentially focus their job search efforts on these organizations.

2. Experience Level Distribution:

- *Employers*: Understanding the distribution of experience levels in job listings can help employers tailor their job descriptions and requirements to attract candidates with the right skills and experience.
- *Job Seekers*: Job seekers can gauge the demand for various experience levels and customize their applications accordingly. For example, if most listings require 2-5 years of experience, job seekers in this range can target these opportunities.

3. Distribution of Job Positions:

- *Employers*: Employers can gain insights into the typical number of positions available for different roles and adjust their hiring plans accordingly. If there are fewer positions for certain roles, they may need to optimize their recruitment process.
- *Job Seekers*: Job seekers can understand the competition for positions in their field and make informed decisions about where to apply and how to differentiate themselves during the application process.

4. Relationship between Experience and Positions:

- *Employers*: Employers can analyze the relationship between required experience and the number of positions to identify patterns and optimize their job descriptions.
- *Job Seekers*: Job seekers can identify trends related to experience and positions and determine if there are specific experience levels associated with higher job availability in their desired field.

5. General Implications for Both Parties:

- Timeliness: The visualizations provide real-time insights into the job market. Employers can adapt their recruitment strategies based on the observed trends, and job seekers can tailor their applications to current market conditions.
- Competition: Both employers and job seekers can assess the level of competition in various segments of the job market. For employers, this can inform their competitiveness in attracting top talent.
- Data-Driven Decisions: Both parties can make data-driven decisions. Employers can make informed decisions about hiring, and job seekers can target their job search more effectively.