

Capstone Project Proposal

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Analysis of LinkedIn Job Postings

Project Description:

LinkedIn is a vital platform for professionals worldwide in the age of technology and digital networking. One of its critical functions is as a job portal where organizations post vacancies and job-seekers apply. This project aims to undertake a comprehensive statistical analysis of job postings on LinkedIn to glean insights into hiring trends, sought-after skills, geographic preferences, and various other dimensions that may shape the current employment landscape. The analysis will provide job seekers, HRs, and industry experts with data-driven insights to make informed decisions.

Dataset Description and Source:

The dataset in focus is sourced from Kaggle, titled “LinkedIn Job Postings.” It is available at LinkedIn Job Postings (<https://www.kaggle.com/datasets/arshkon/linkedin-job-postings/data>). This dataset comprises several attributes related to job postings on LinkedIn, including but not limited to job titles, company names, job descriptions, skills required, locations, and other relevant details.

Questions to Answer:

1. What are the trending industries/sectors with the highest number of job postings?

Real-world applicability: This will help job seekers target industries that are currently hiring the most.

2. Which geographic locations are most preferred by employers for specific roles or industries?

Real-world applicability: Job seekers can target their job search based on locations that have a higher demand for their skill set.

3. What are the most sought-after skills across various industries?

Real-world applicability: Professionals can upskill or reskill themselves based on the demands of the job market. Training institutions can also align their courses with the current demands of the market.

Planned Analysis:

- Descriptive Statistics: To understand the basic distribution and trends in the dataset like the average number of job postings per company, distribution of jobs based on location, etc.

- **Trend Analysis:** Analyze monthly or yearly trends in job postings, if the dataset has a temporal aspect.
Text Analysis: Dive deep into the job descriptions and required skills using natural language processing techniques to identify commonly demanded skills and job requirements.
- **Geospatial Analysis:** Using the location data to plot a heatmap of job postings, helping visually identify job hotspots.
- **Correlation and Regression Analysis:** Understand if there's any relationship between attributes, like if certain industries prefer specific locations, etc.