

# **Project Report: LinkedIn Job Trend Analysis**

## **Introduction**

LinkedIn has become one of the most popular platforms for job seekers and recruiters. With thousands of job postings uploaded daily, it provides valuable insights into emerging roles, in-demand skills, and city-wise hiring patterns. This project aims to analyse job postings from LinkedIn to uncover job market trends that can help students, professionals, and recruiters make informed decisions.

## **Abstract**

The project involves scraping and analysing job postings from LinkedIn using Python and visualizing results through Power BI. The main goal was to identify the most demanded skills, top hiring cities, leading companies, and the distribution of roles. The insights derived provide a clear understanding of the job market landscape across different geographies and industries.

## **Tools Used**

- Python (BeautifulSoup, Pandas) for web scraping and preprocessing.
- Excel for intermediate data cleaning and storage.
- Power BI for building interactive dashboards and visualizations.

## **Steps Involved in Building the Project**

1. Scraped LinkedIn job postings data including job title, skills, company name, and city.
2. Cleaned and structured the data to remove duplicates and standardize skill tags.
3. Analyzed frequency of skills, top companies hiring, and city-wise job availability.
4. Built an interactive Power BI dashboard to visualize insights such as top skills, cities, companies, and a role-skill matrix.

## **Key Insights**

- A total of 4,657 job postings were analyzed.
- 125 unique skills and 21 unique roles were identified.
- The most demanded skill is **R**, followed by SQL, Python, and Excel.
- **Bengaluru** and the **United States** are the top two locations with maximum job opportunities.
- Microsoft, GEICO, and Hirenxa are the top companies actively hiring.
- The role-skill matrix highlighted demand for Data Analysts, Business Analysts, and Data Scientists with skills like R, SQL, and Python being key requirements.

## **Conclusion**

The LinkedIn Job Trend Analysis project successfully identified job market patterns across skills, roles, companies, and cities. The results clearly show that programming languages such as R, SQL, and Python dominate the demand, while Bengaluru and the United States emerge as job hotspots. Top companies like Microsoft and GEICO are actively recruiting, signaling strong opportunities in the technology and data analytics domains. This analysis can help aspiring professionals align their skill development with industry needs and assist recruiters in targeting the right talent pools.