LinkedIn Job Trend Analysis - Project Report

Introduction

The job market is evolving with new skills in demand across industries. LinkedIn, as the largest professional network, provides valuable insights into job postings. This project analyzes LinkedIn job postings using web scraping to identify skill demand trends across cities and job roles.

Abstract

The project extracts job posting data from LinkedIn using web scraping. Data such as job titles, skills, and locations were collected, cleaned, and analyzed. The results highlight the most
in-demand skills across different cities and roles, providing useful insights for job seekers, educators, and recruiters.

Tools Used

Python (BeautifulSoup, Pandas) – for scraping and data analysis; Excel – for dashboards; Matplotlib & Seaborn – for visualizations.

Steps Involved in Building the Project

1. Data Collection – Scraping job postings from LinkedIn. 2. Data Cleaning – Removing duplicates, standardizing skills, and parsing data. 3. Data Analysis – Identifying top skills and building skill-role matrices. 4. Visualization – Creating charts and heatmaps. 5. Dashboard Creation – Designing an interactive Excel dashboard. 6. Report Preparation – Compiling findings into a structured report.

Conclusion

The project identified key skill demand trends across cities and roles. It provides a clear picture of which skills are most valued in the job market, helping professionals make informed career decisions. Future improvements may include real-time pipelines and expanding to global postings.