## In-Depth Analysis of the IT Job Market on LinkedIn (August 2023)

### Overview

Explore an extensive analysis of over 12,000 IT job postings on LinkedIn, now enriched with job skills data.

Each posting details attributes like title, salary, location, company information, and required skills, providing a comprehensive view of the IT job market.

- Key Analytical Que..

  1. Is the IT industry the leading sector in terms of job offers on LinkedIn compared to other industries?

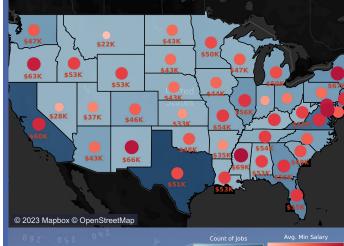




(02)



# US Job Landscape: State-Wide Job Opportunities and Salary Insights



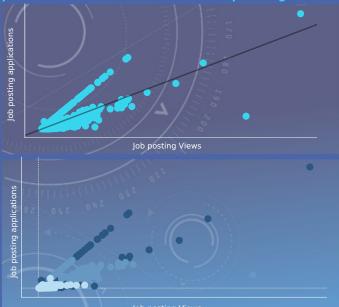
This interactive map presents a dual-layered view of the job market across the United States. The choropleth layer color-codes each state based on the volume of job offers, revealing regional variations in job availability. Simultaneously, the point map overlay provides a snapshot of average minimum salaries in each state, with point sizes scaling to represent salary levels.



This unique choropleth map unveils the global footprint of companies offering IT jobs in the United States. It highlights an intriguing trend: numerous companies headquartered in Europe, India, and China are actively posting job opportunities located in U..

## SUPERVISED & UNSUPERVISED MACHINE LEARNING (REGRESSION AND CL..

This section delves into advanced statistical analyses, exploring relationships across  $\,$  variables in the IT job market. Despite a general trend of weak or non-existent correlations, our exploration uncovers nuanced patterns and clusters that offer unique insights into the dynamics of the industry



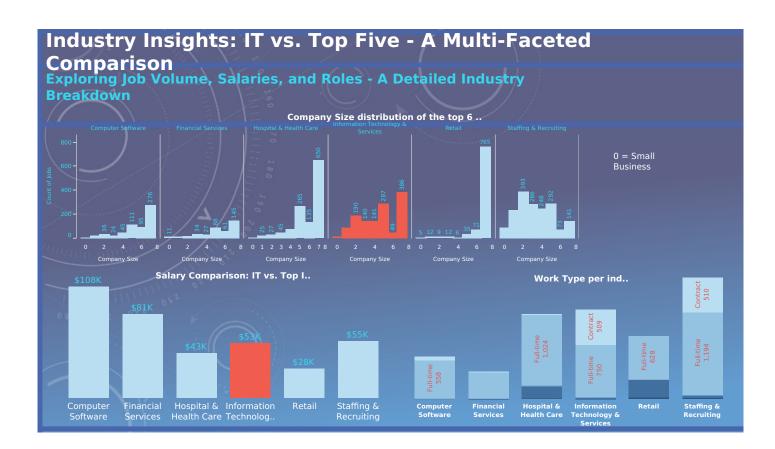
**Supervised Machine Learning (Regression Analysis): The model** for the combined industries seems to have a better fit than the model for the IT industry alone.

This is based on both a lower MSE and a higher R2 score. Job views in the IT industry are associated with a higher increase in job applications (higher slope), but the model is less predictive overall (lower R2 score) compared to the combined industries.

These results could suggest that while job listings in the IT industry might attract more applications per view, the behavior of job seekers in the combined industries is more consistent or homogeneous, leading to a model that can predict applications ..

Unsupervised Machine Learning (Cluster Analysis): The KMeans clustering analysis has revealed that the numerical variables within the LinkedIn IT job market dataset do NOT exhibit strong correlations or distinct groupings when considered in isolation.

This suggests that the complexity and nuances of the job market are not fully captured by numerical data alone. The dispersed nature of clusters across multiple visualizations indicates that the dataset may be inherently heterogeneous,...



DESPRITION INNER ANALYSIS GEOSPATIAL ANALYSIS MACHINE LEARNING IT VS REST OF FINAL CONCLUSIONS LINKS AND OBJECT. **INDUSTRIES** 

## Conclusions: In-Depth Analysis of the IT Job Market on LinkedIn (August

This comprehensive analysis provides a multi-dimensional view of the IT job market on LinkedIn, revealing trends in salaries, job types, and employer diversity. It highlights the dynamic and globally interconnected nature of the IT industry, offering valuable insights

for spaintas addition (\$5%) and \$50K.

2. California ranks fifth in average minimum salary at \$60K, while Texas is lower at \$50K, suggesting these states may be more attractive to entry-level professionals.

Experience Level Demand:

1. The majority (60%) of IT job openings target mid-senior level professionals, but opportunities for entry-level positions are also

- Employment Type and Leading Employers:

  1. Full-time positions dominate the IT job market, comprising 58% of the offers.
- 2. Top employers include Verizon, Booz Allen Hamilton, and Amazon Web Services, with Verizon leading significantly.

1.Texas and California lead in the number of job postings, indicating a high demand for IT professionals in these states. The geographical analysis reveals a diverse range of opportunities across various states.

1. Interestingly, companies based in India and Europe are actively offering IT jobs in US locations.

1.Supervised Machine Learning Analysis: The combined industries model shows a better fit than the IT industry alone, with a lower MSE and higher R^2 score. IT job views correlate with a higher increase in applications but exhibit a less predictive overall model.

2. Unsupervised Machine Learning Analysis: The KMeans clustering reveals no strong correlations or distinct groupings in the IT job data. The complexity of the job market transcends numerical data, suggesting the need for mixed data type algorithms.

1.IT job market shows a diverse range of company sizes, unlike industries like retail or healthcare, where large companies dominate job postings. This diversity offers IT professionals flexibility in choosing employers.

