

Navigating the Job Market: Optimizing LinkedIn Postings for Greater Reach

Date: April 12th, 2024

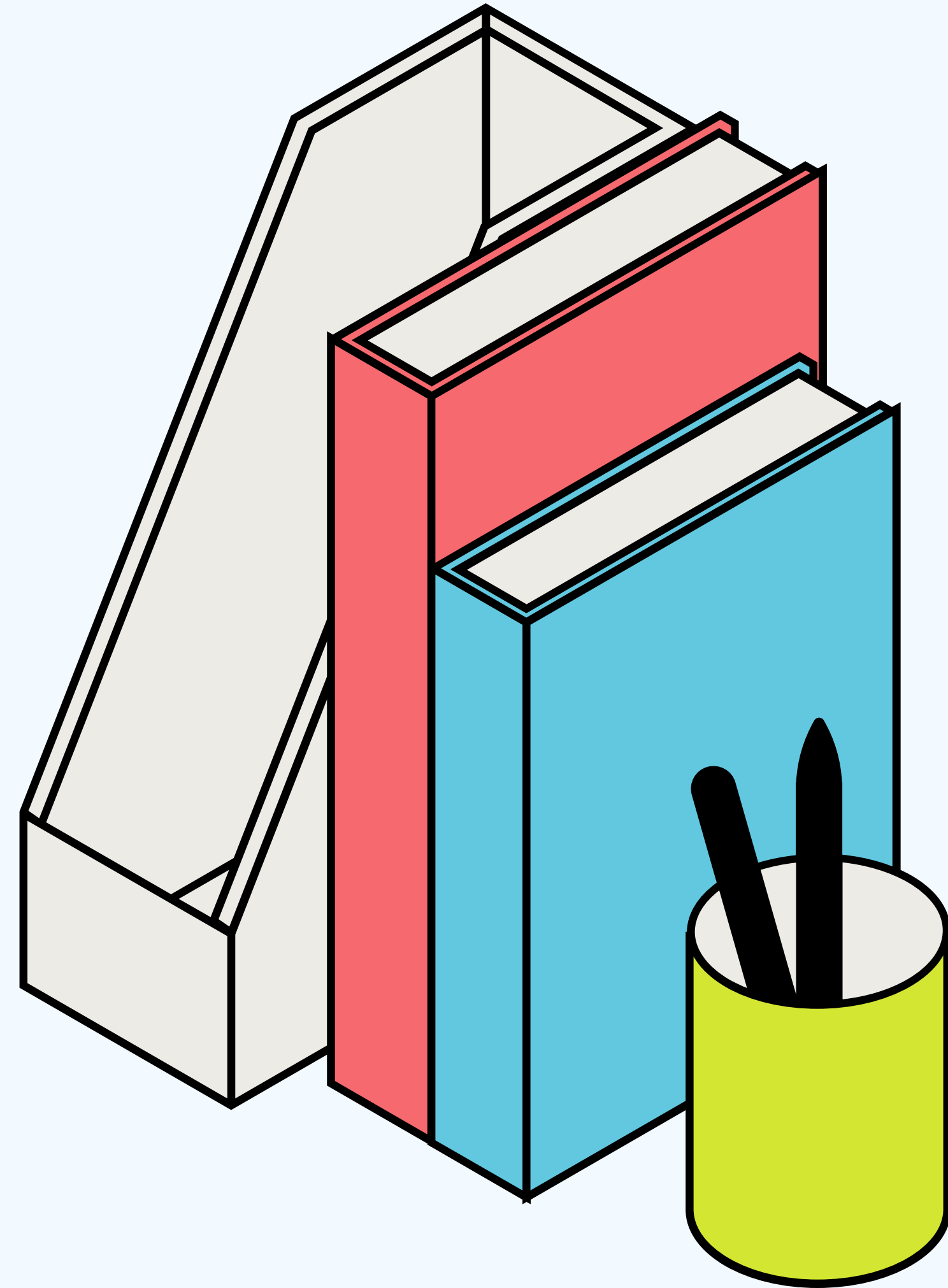
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BrainStation Data Science Bootcamp



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“900M+ Members Worldwide”

“20 Million Job Postings Every Month”

**“140 job applications submitted
every second”**

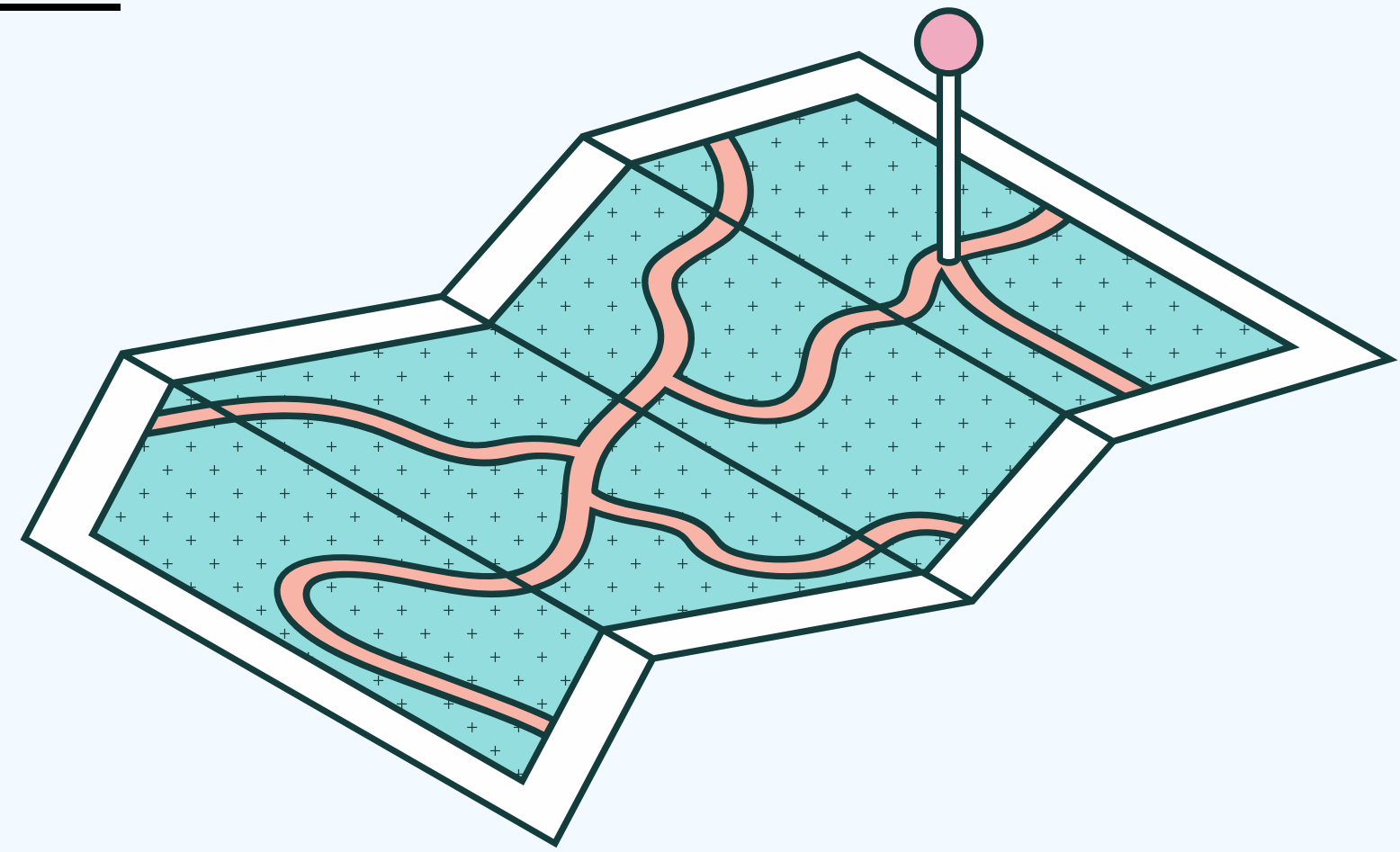


Problem Space

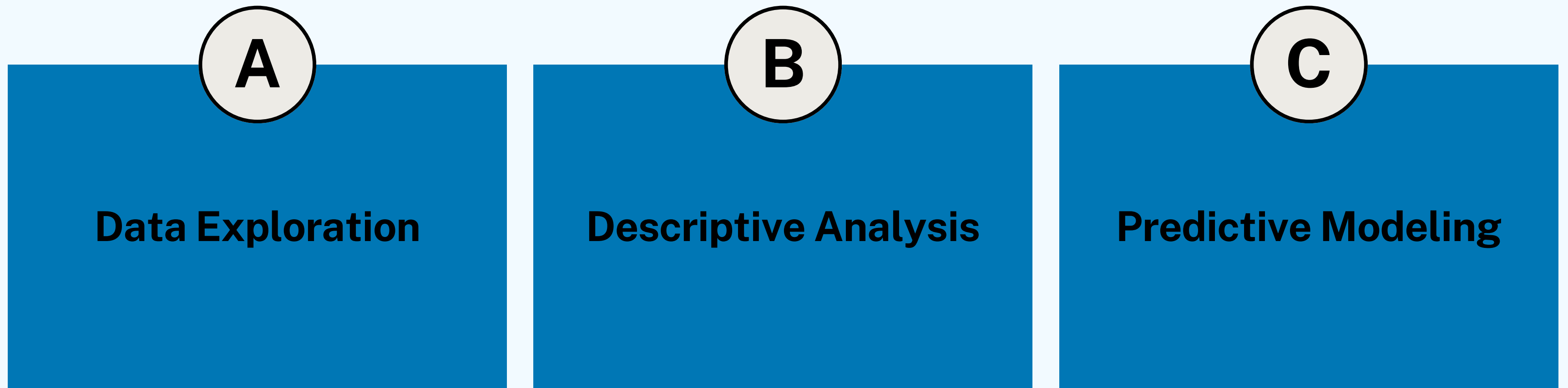
Analyze the ‘views’ metric to uncover relationships among various job attributes within the dataset.

Target Variable: Number of Views

Key Variables: Title, Listed Time, Application, Work Type, Experience Level



Data Science Solution



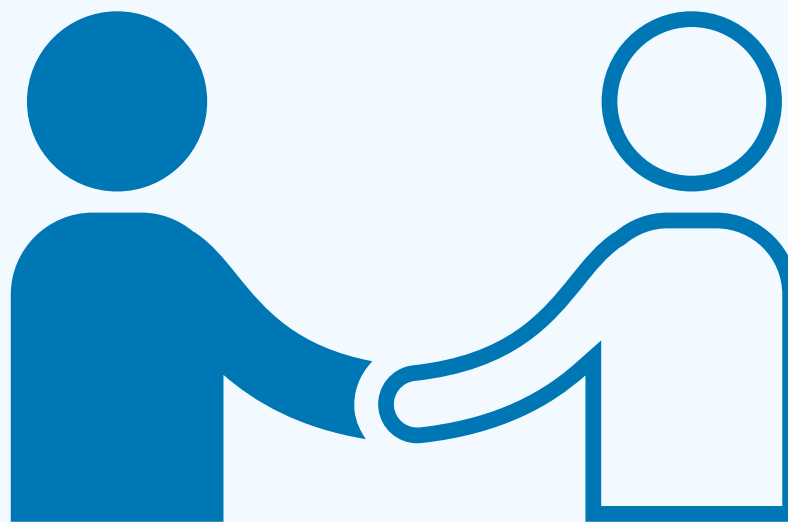
Impact

- **Hiring Impact:** Every minute, 6 people are hired through LinkedIn
- **Economic Influence:** LinkedIn ads reach approximately 6% of the global population
- **Business Leads:** About 80% of B2B leads generated through the platform

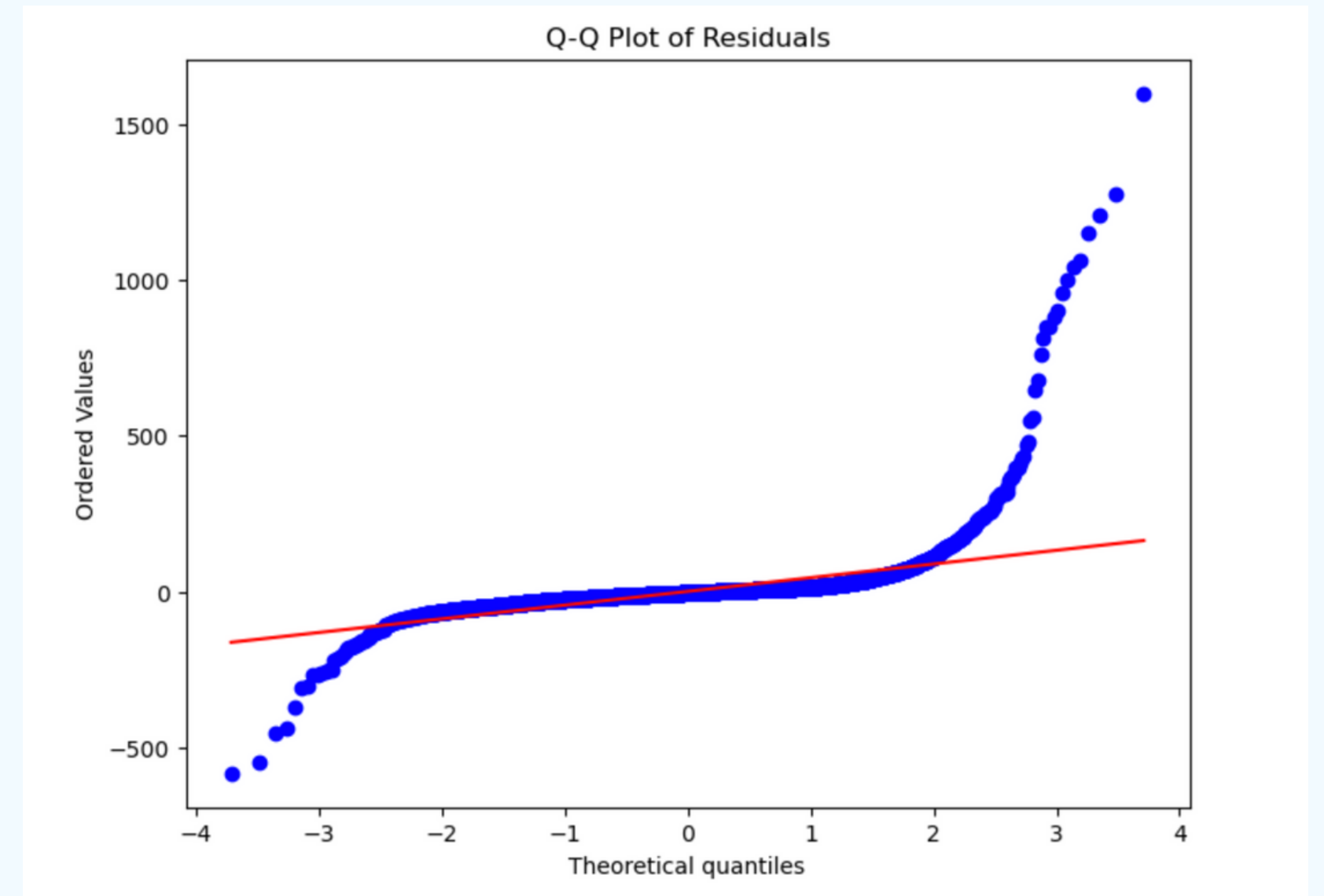
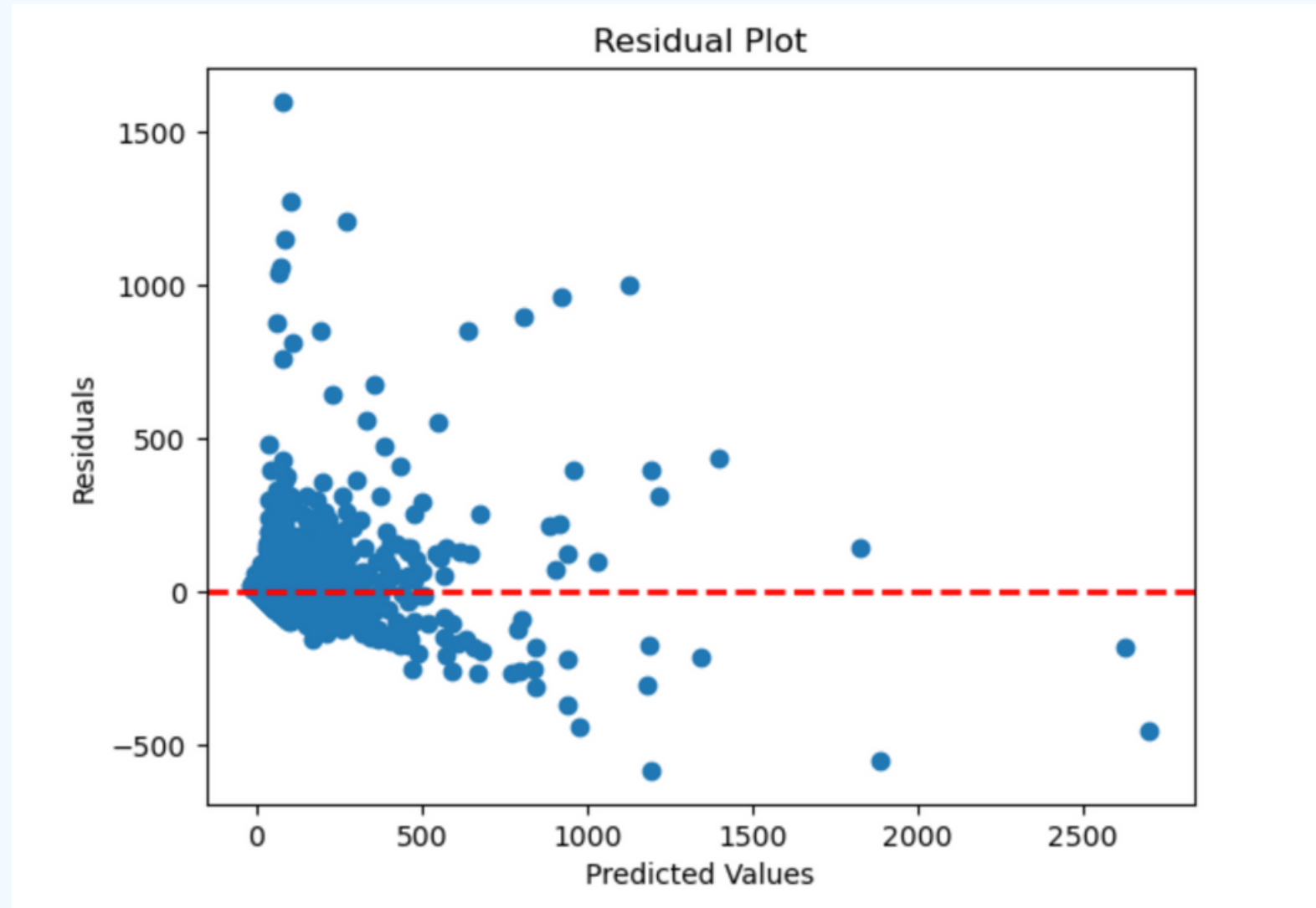
AFFECTS BOTH RECRUITERS AND JOB SEEKERS

Companies can optimize their job postings and recruitment strategies

Job applicants can improve their chances of securing relevant job opportunities



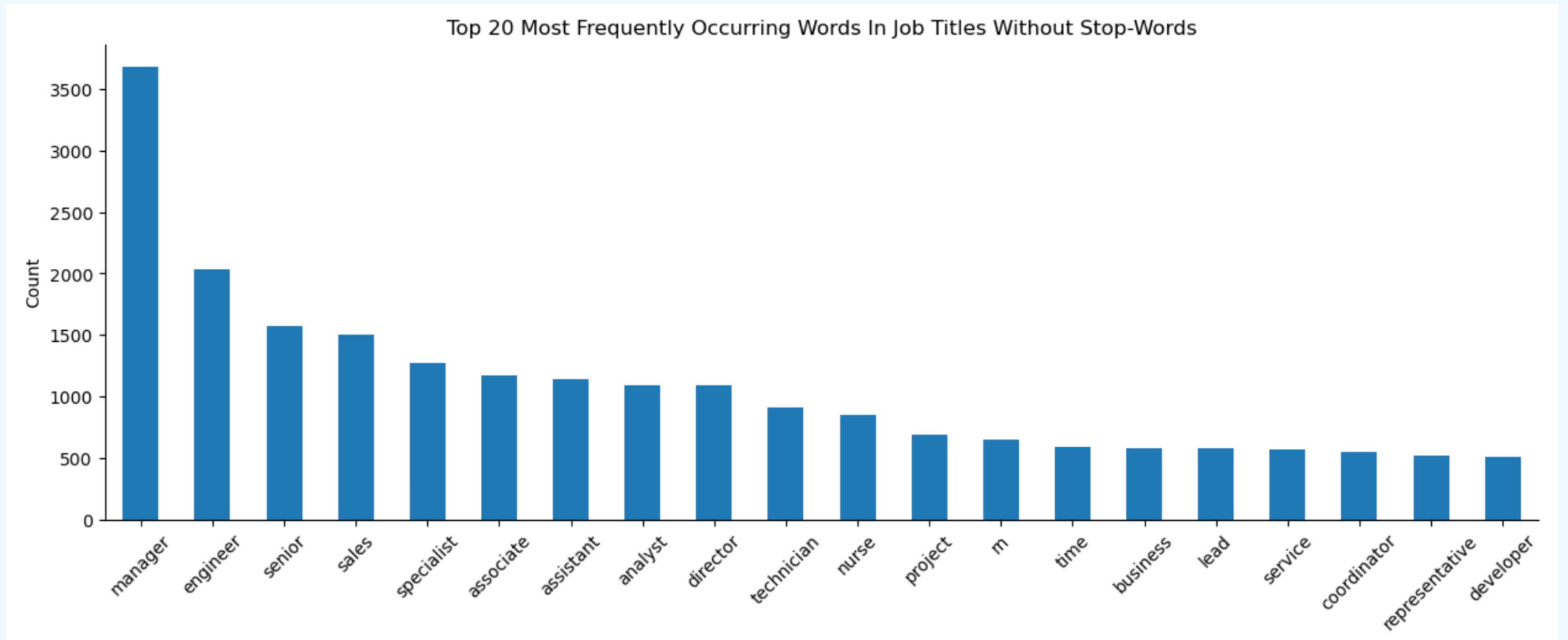
Linear Regression



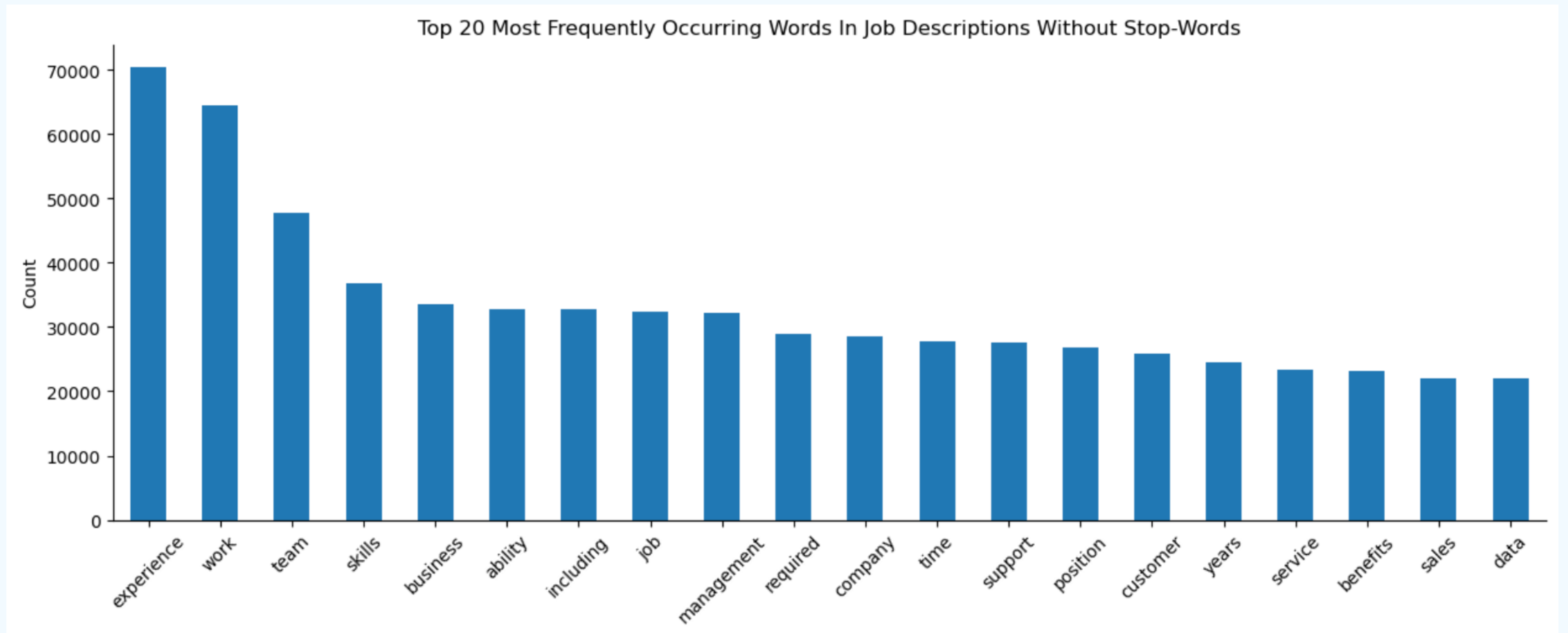
Baseline Model Evaluation Metrics

Model	MAE (Train)	MAE (Test)	R-squared (Train)	R-squared (Test)
Linear Regression	25.70	25.75	0.7391	0.7126
Random Forest Regressor	7.49	19.72	0.9633	0.7674
XGBoost Regressor	13.19	20.65	0.9594	0.7116

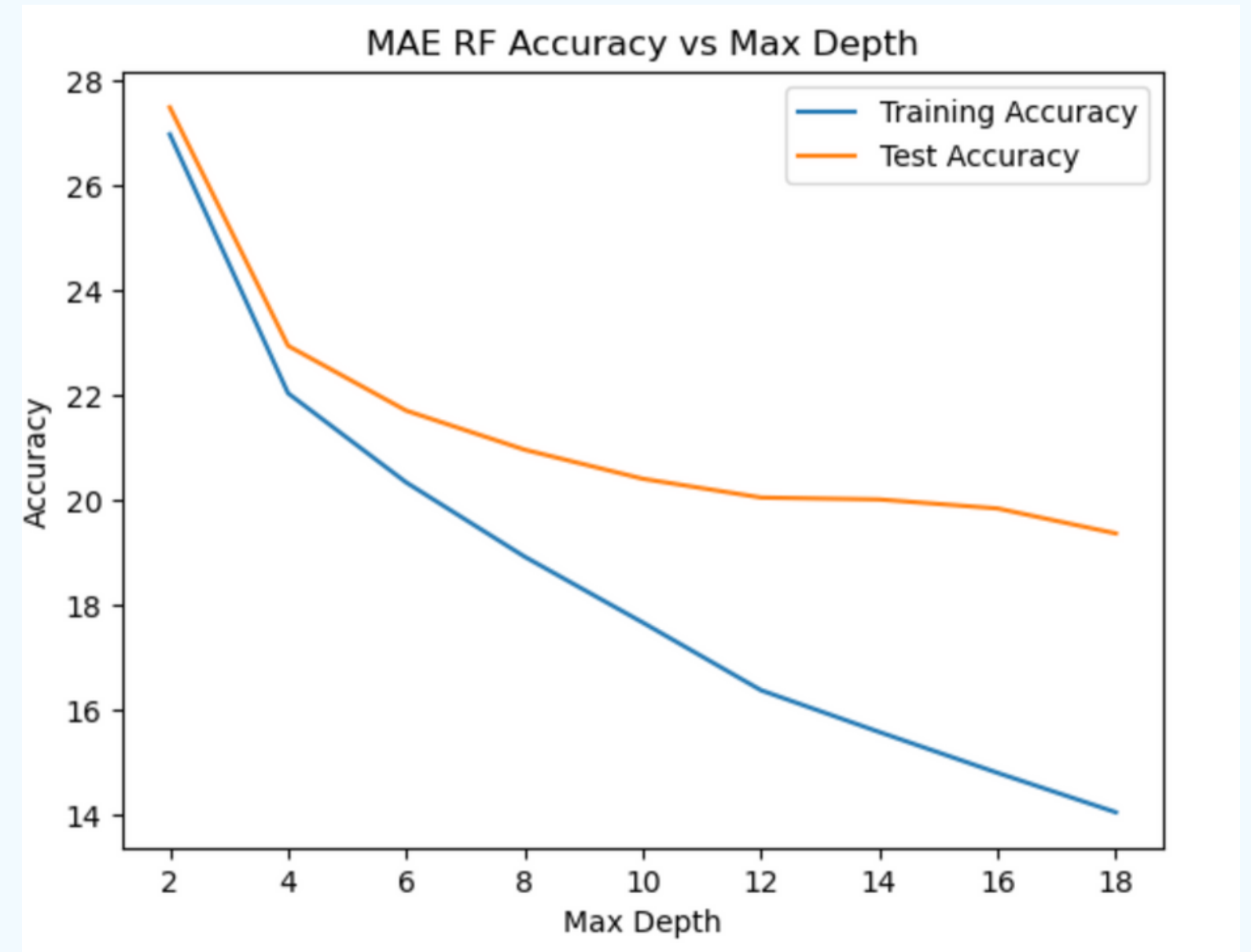
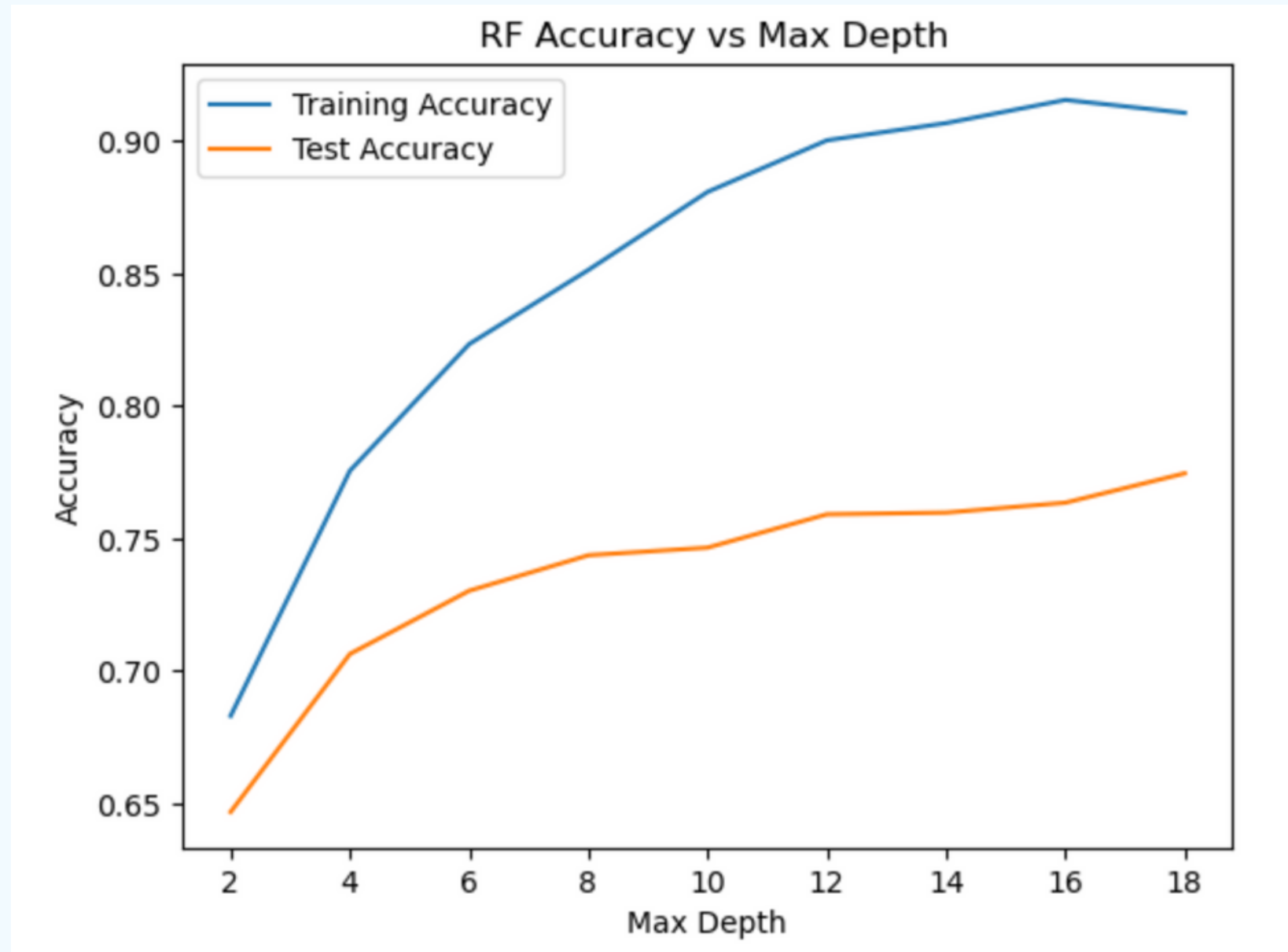
NLP - Title



NLP - Description



Hyperparameter Tuning



Random Forest Regressor

Model	MAE (Train)	MAE (Test)	R ² (Train)	R ² (Test)
Random Forest	16.65	20.26	0.9177	0.7570

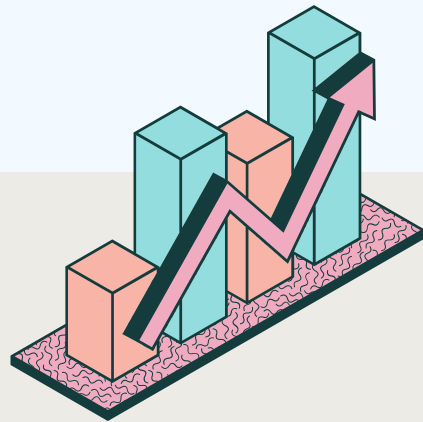
XGBoost Regressor

Model	MAE (Train)	MAE (Test)	R ² (Train)	R ² (Test)
XGBoost	12.44	19.86	0.9695	0.7337

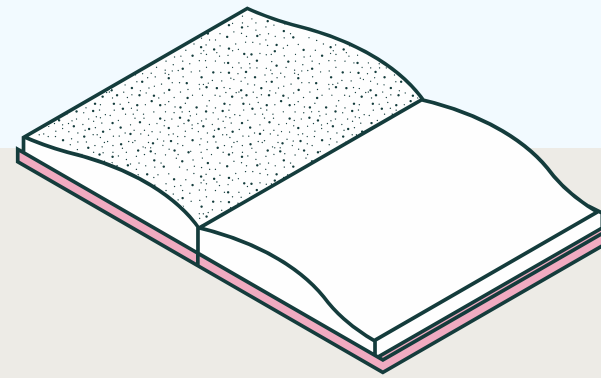
Evaluation Metrics

Model	MAE (Train)	MAE (Test)	R-squared (Train)	R-squared (Test)
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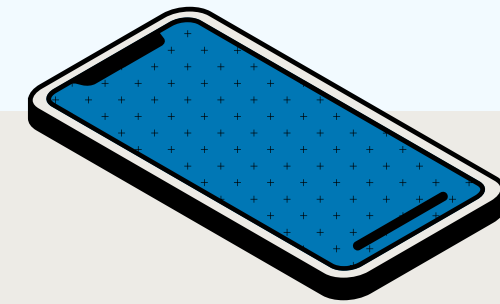
Next Steps



**Improve the model
performance**



Advanced Text Processing



Generate interactive UI

**Thank you for
Listening.**

