



#### CONTACT

- jakubryb92@gmail.com
- Brooklyn, NY
- ## github.com/Jakubryb

#### SKILLS

Data analysis









### JAKUB RYBICKI

DATA SCIENTIST

#### SUMMARY

Junior Data Scientist with [#] years of experience in [area of expertise]. [Major data science accomplishment or project]. Skilled in [top skills]. Passionate about [data science-related passions].

#### EXPERIENCE

#### Geotechnical Engineer NYSDOT

Oct 2017 - Present

Geotechnical analysis and design of deep and shallow foundations, earth retaining systems, thrust blocks and ground improvement methods

## Agenda

**Business Understanding Data and Preparation Modeling Evaluation and Recommendations Future Investigations** 

# **Business Understanding**

## Improve our odds

















Data

Modeling O

Eval

**Future** 

## **Applicant Tracking Systems**

3 1 2













**Tailoring our Resumes** 













# Data Understanding and Preparation

## **Scraped Data**

## **8,000+ Resumes**

- Indeed
- LinkedIn

## ~700 Job Postings

- Indeed
- GlassDoor













## Modeling

## Modeling

- Cosine similarity using TF-IDF
- Change key words
- Add words unique to job post

**Data** 

Repeat

**Business** 



Eval

Future

#### Jakub Rybicki

Brooklyn, NY 11235 | 718-288-9978 | Jakubryb92@gmail.com | github.com/Jakubryb | medium.com/@jakubryb92 | linkedin.com/in/jakub-rybicki-2b4124115

#### Data Scientist

Data scientist and machine learning engineer with a background in civil and geotechnical engineering. Experienced in data engineering, statistical analysis, machine learning, and deep learning. My goal is to use and manipulate data to determine new and robust business decisions.

#### TECHNICAL SKILLS

CRM, Python, SQL, Machine Learning, Data Mining, OOP, scikit-learn, NumPy, Pandas, Keras, Scikit-learn, Matplotlib, Seaborn, Statsmodels, SciPy, NLTK, GitHub, Matlab.

#### TECHNICAL PROJECTS

#### Critical Factors of King County Home Prices

Determined key factors driving home prices in King County, WA.

- Explained 72% of variance in home prices with just 3 crucial predictors according to OLS.
- Sourced outside GIS data to measure the impact of school district zoning and determined it to be crucial.
- Cleaned and explored 21,000+ entry dataset and built and evaluated 6 models in an iterative process.
- Made sure our models complied with the assumptions of linear regression.

#### Chicago Car Crash Analysis -

Pinpointed the primary contributory causes of car accidents which were not related to human error.

- + Cleaned and performed EDA on millions of entries across 3 datasets from the City of Chicago.
- + Used logistic regression and classification methods to model and predict whether accidents were preventable.
- + Grouped individuals by age to see which age demographic was involved in the most crashes.

#### EMPLOYMENT HISTORY

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#### Research Assistant | SUNY University at Buffalo | Buffalo, NY

02/2017 - 09/2017

- Geomechanical assessment of seabed subsidence/upheaval impacts on stability of offshore foundation piles
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08/ 2021 - 12/2021

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May 20





# Resume Cosine Similarity Score

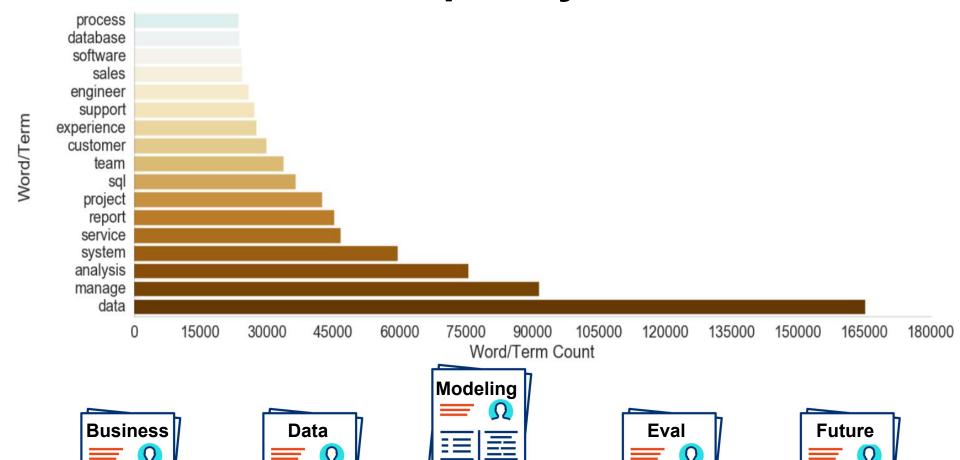
0.7093







## **Noun Term Frequency in Resumes**



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May 201





## Optimized Resume Cosine Similarity Score

0.8019







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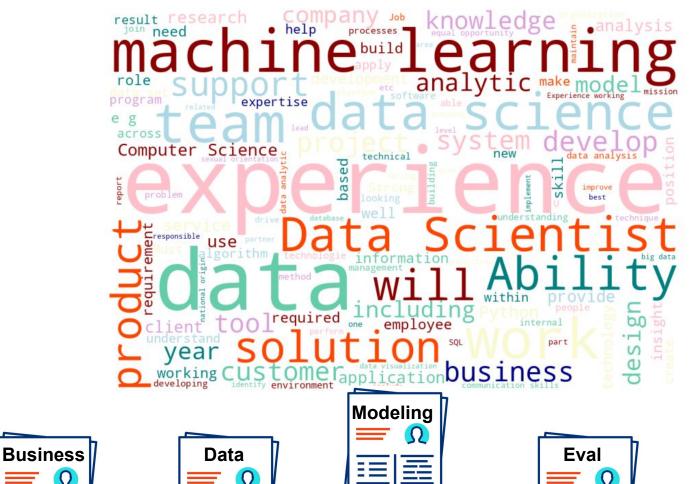
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## **Job Post Keywords**



**Future** 

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# Optimized Job Post Cosine Similarity Score

0.8531







# Evaluation & Key Takeaways

## Factors to Evaluate/ Revise







**Role Match** 

**Experience** 

Skills











## **Future Research**

## **Future Work**







**Dream Jobs** 

Performance in actual ATS

**Program** 











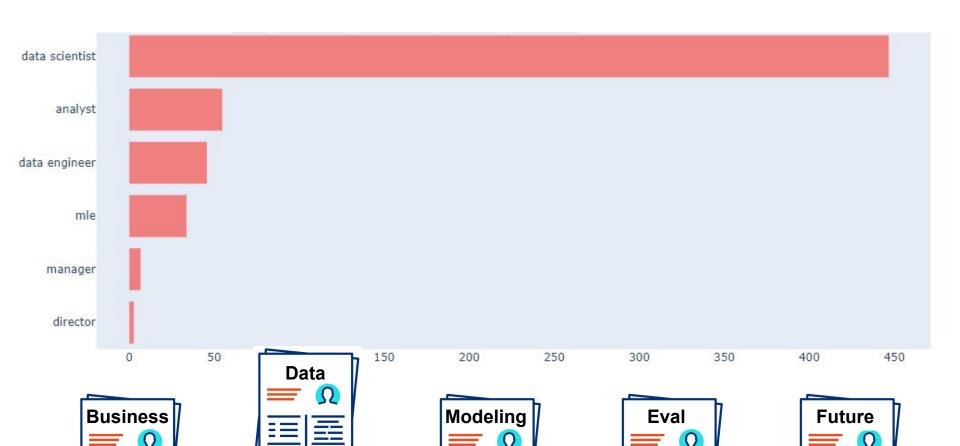
## Thank You



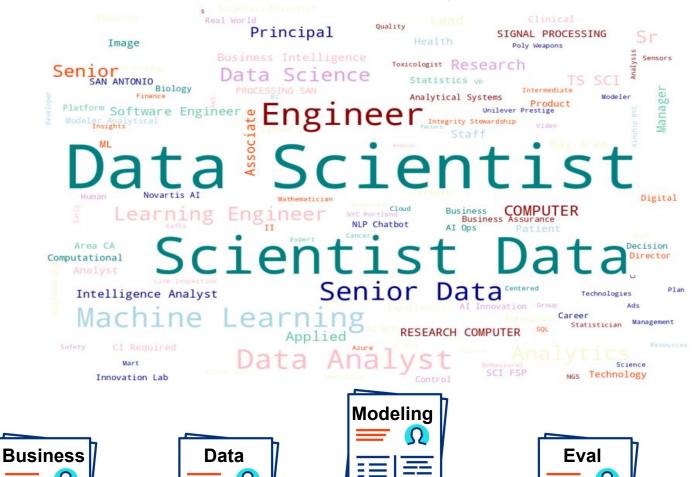
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## **Questions?**

## **Job Post Positions**



## Resume Keywords



**Future** 

## **Future Work**

Tailor towards jobs I'm especially interested in

- Make a program to upload resumes and suggest changes
- Run through an ATS system to see how much an improvement this makes







