

Abstract geometric lines in the top-left corner of the slide, consisting of several thin, black, overlapping lines that form a complex, non-representational shape.

# STATE OF THE TECH LABOR MARKET

Natalya Doris

# AGENDA

Project Objective

Data

The Big Picture

Modeling

Dashboard Preview

Conclusion and Next Steps

# PROJECT OBJECTIVE

Given the massive layoffs in tech, I wanted to take a deeper look at the state of the industry to get a sense of what is really going on behind the scenes. This project analyzes the market both from a layoffs and jobs posting perspective, as well as predicts what the near future might look like for the industry.

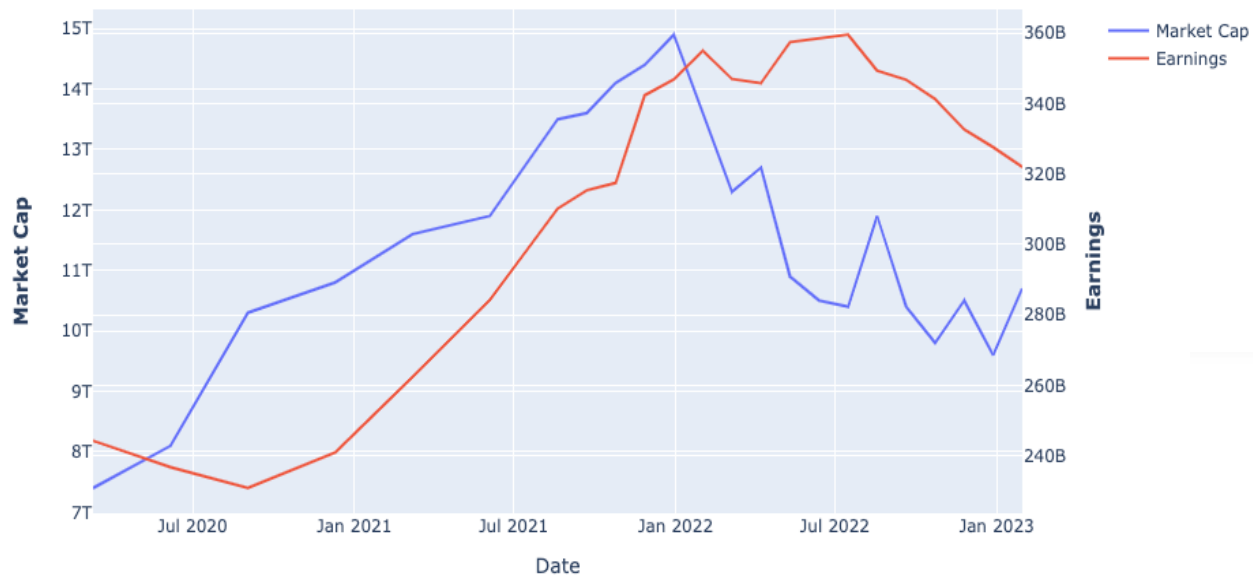


# DATA

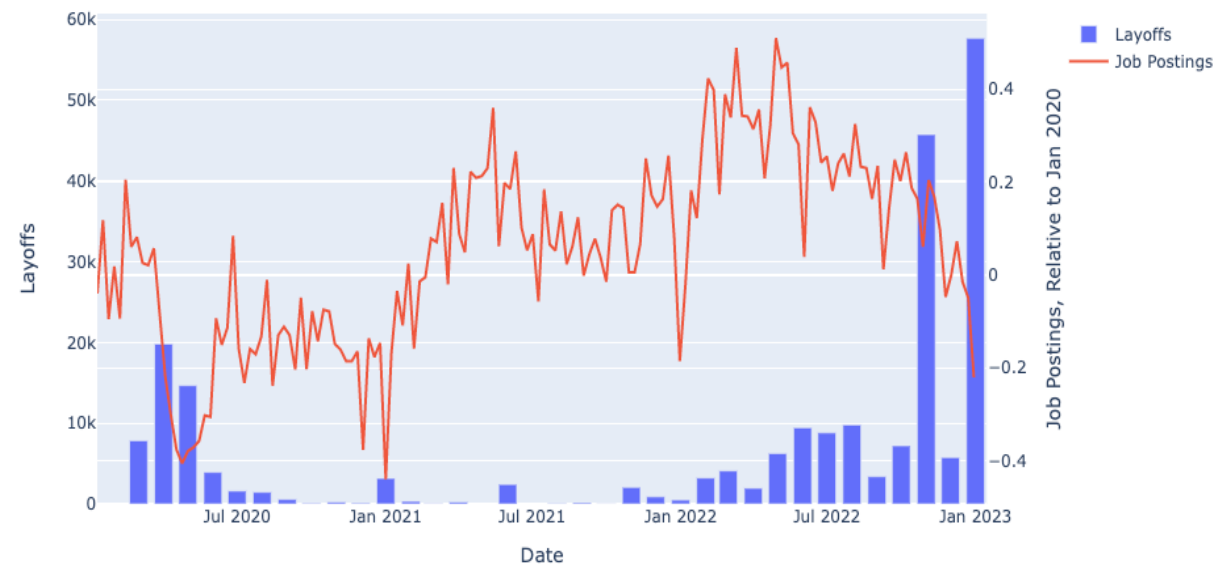
- [Layoffs.fyi](#)
- [Census API](#)
- [Crunchbase](#)
- [US Bureau of Labor Statistics](#)
- [Simply WallStreet](#)
- [Indeed / Lightcast](#)
- [Kaggle](#)
- [Yahoo Finance](#)

# THE BIG PICTURE

Tech Sector Market Cap & Earnings



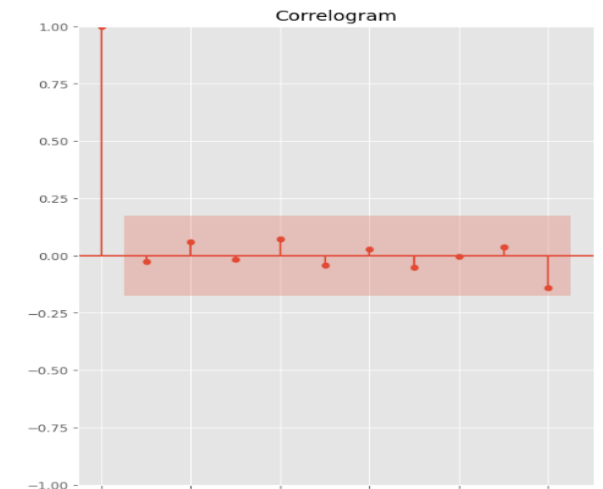
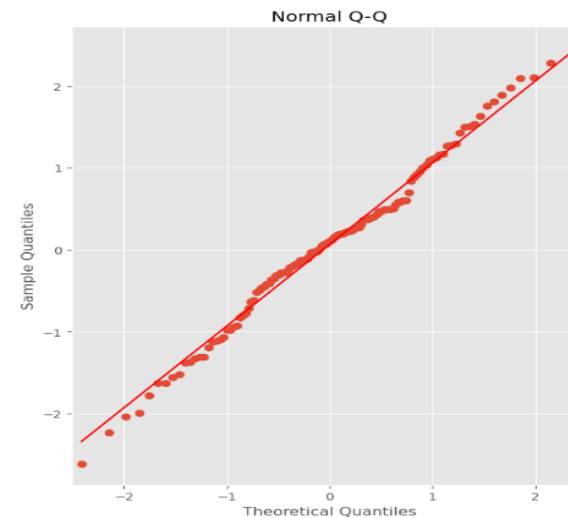
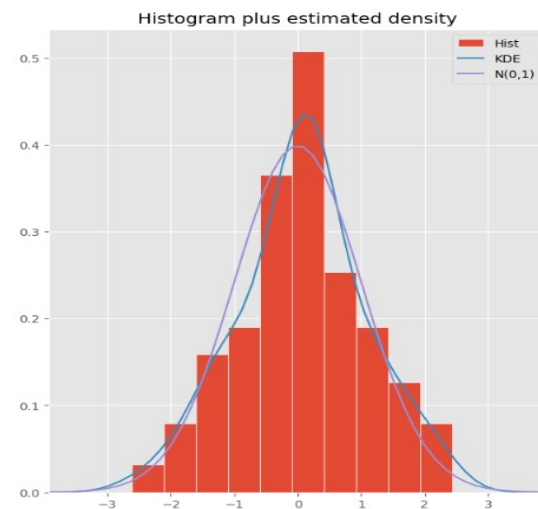
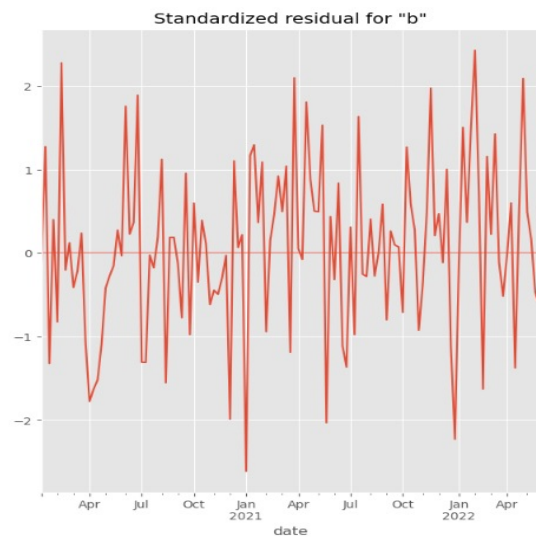
Layoffs and Job Postings



# TIME SERIES MODEL – JOB POSTINGS

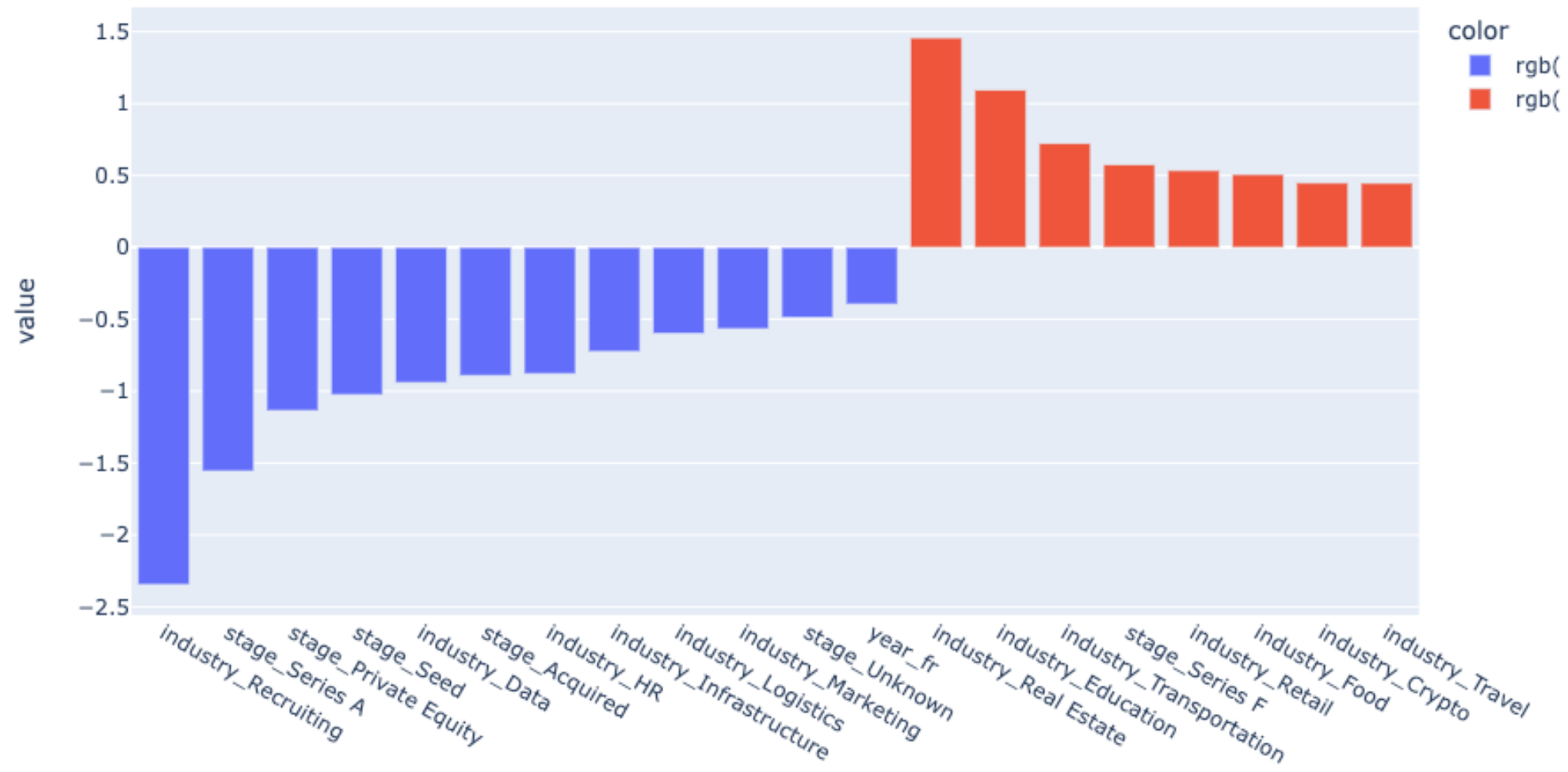


# TIME SERIES MODEL - EVALUATION



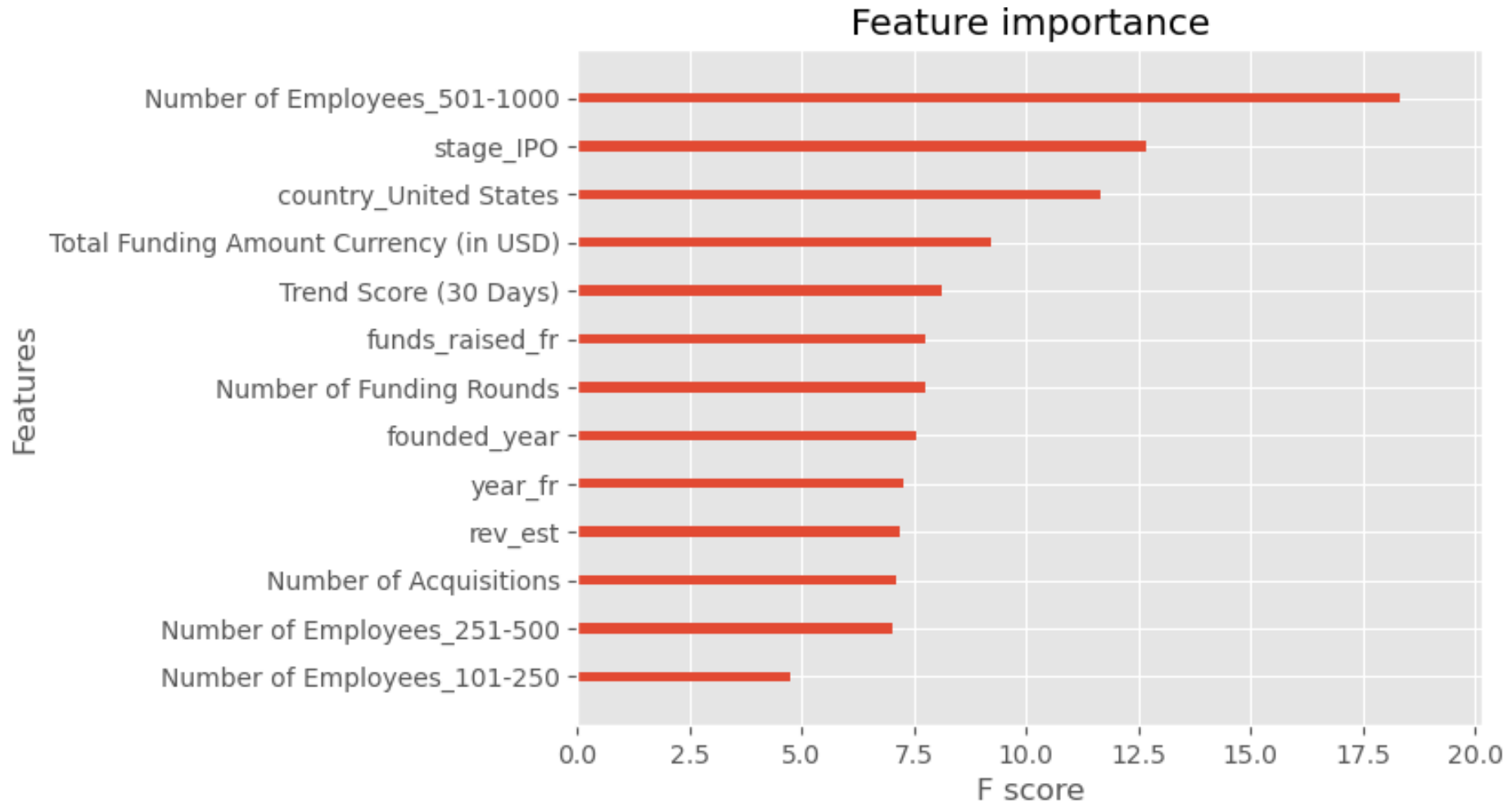
# LAYOFF FREQUENCY PREDICTION – FEATURE IMPORTANCE

## LOGISTIC REGRESSION COEFFICIENTS

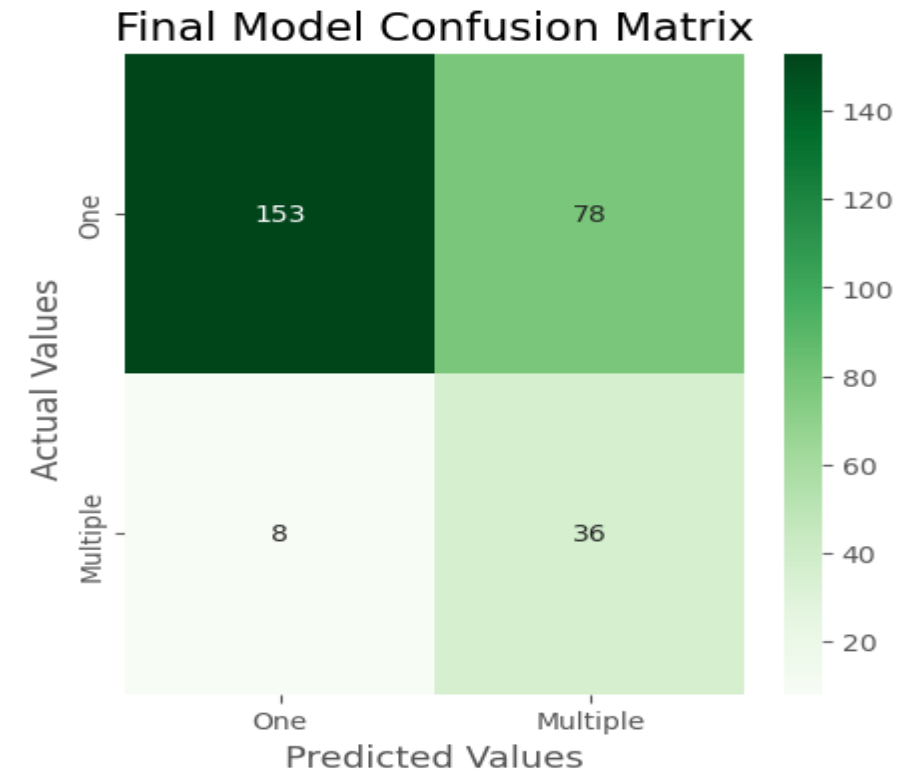
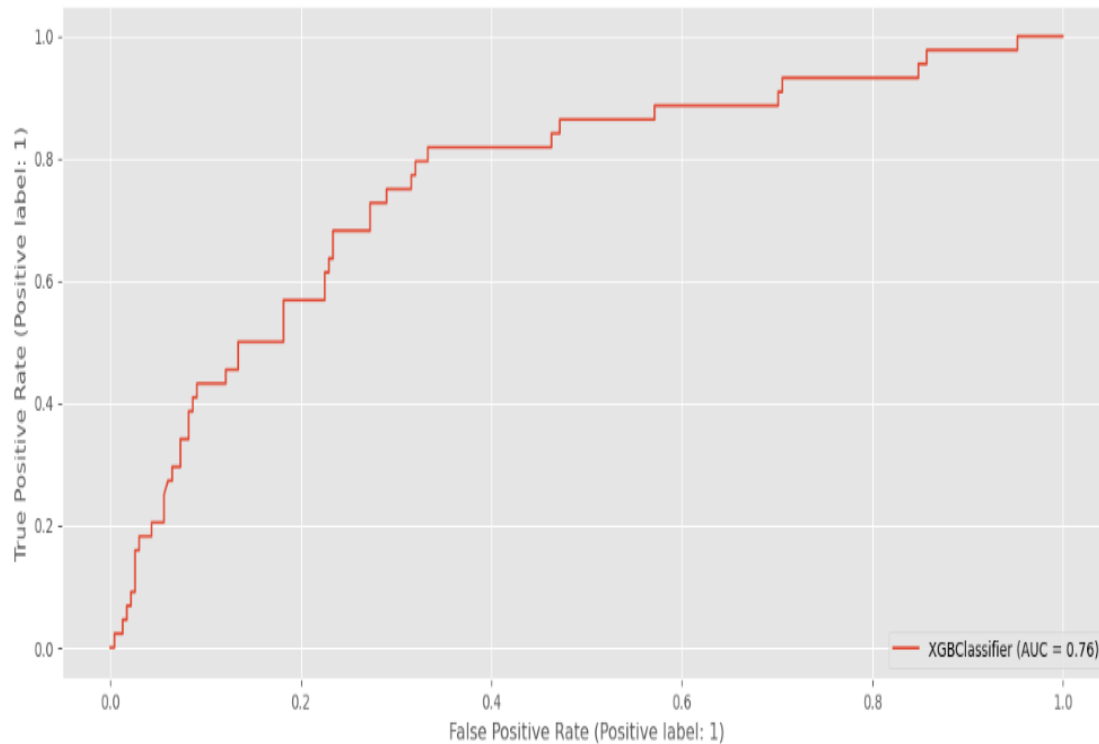




# LAYOFF FREQUENCY PREDICTION – FEATURE IMPORTANCE FINAL MODEL



# LAYOFF FREQUENCY PREDICTION - MODEL EVAL



# State of the Tech Labor Market

Economic Conditions

Tech Layoffs Dashboard

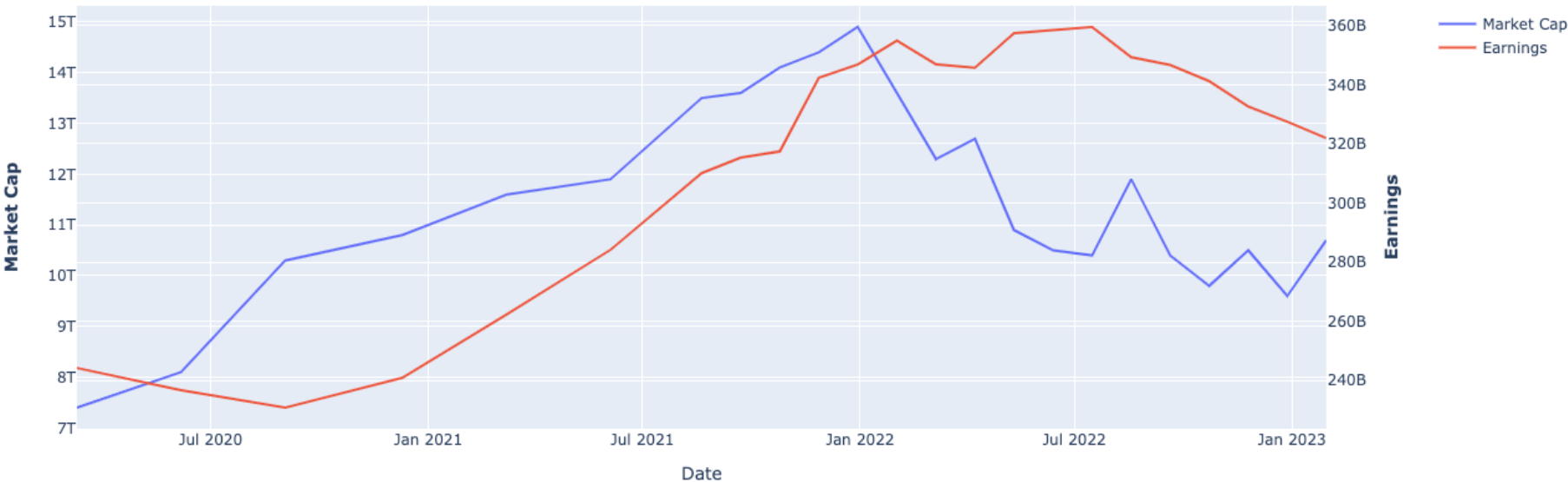
Job Postings

Given the massive recent layoffs in the tech sector, I thought it would be helpful to take a deeper look at the state of the tech market to get a sense of what is really going on behind the scenes -- and to see whether there is hope for any of us out there who are looking for a job.

This dashboard is split into three sections - the first will give a general sense of economic conditions in the sector and more generally, the second will take a closer look at recent layoffs and predict whether companies will experience multiple rounds or just a one off, and the third will focus on job postings.

## Tech Sector Market Cap & Earnings

Source: Simple Wall Street



DASHBOARD PREVIEW



## CONCLUSION AND NEXT STEPS

- THERE IS HOPE. Job postings should remain stable for the next year, meaning there are opportunities for laid off employees
- Larger companies tend to see more rounds of layoffs – be proactive if you are an employee at one of these firms
- Next steps: gather more company data to feed into classification model, gather data as far as specific roles laid off & posted to match laid off employees with job postings that may fit their background



# THANK YOU

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