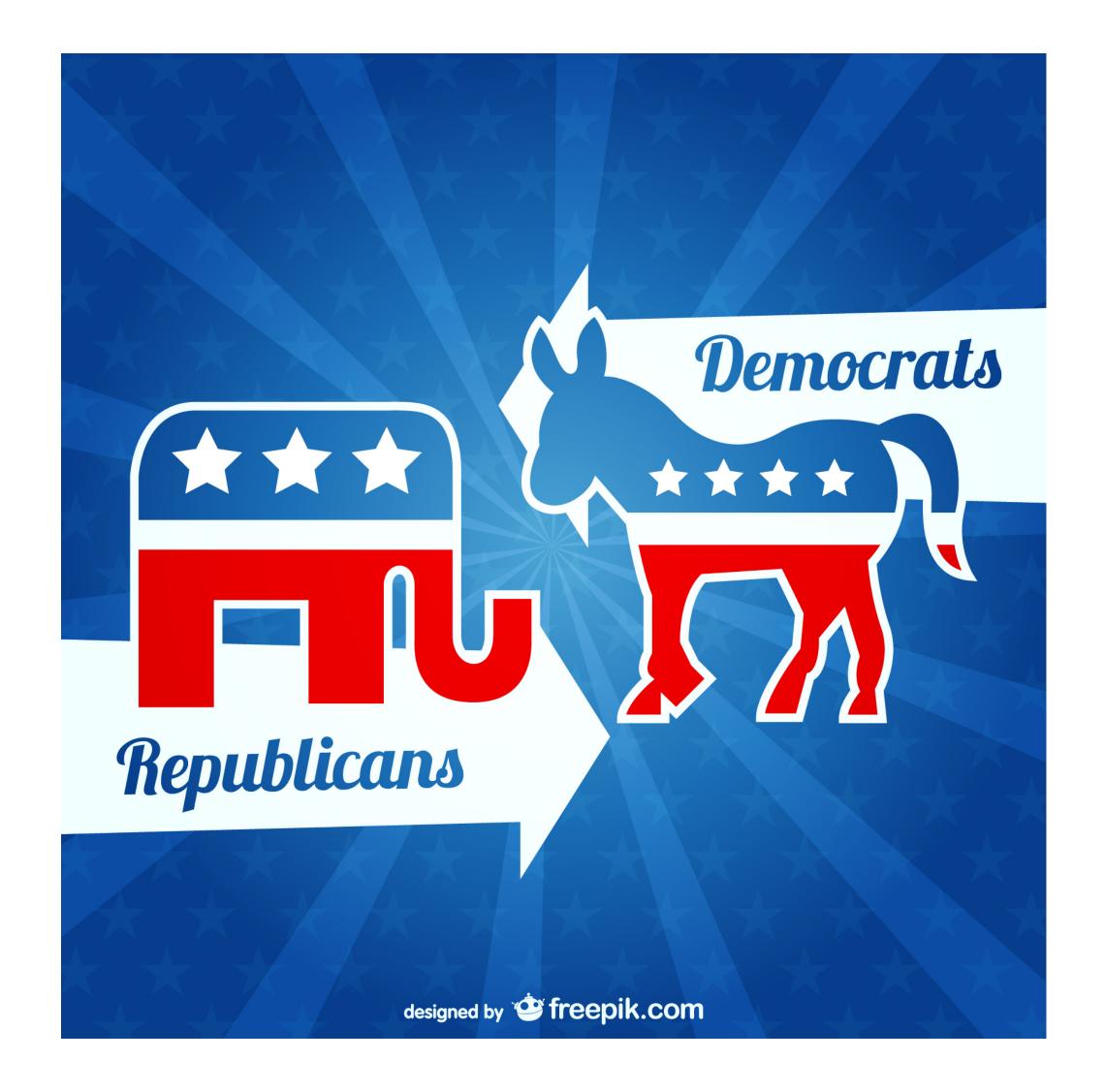
Republican vs. Democrat Subreddit Analysis

Reddit API Scrape

Left vs. Right Media Bias

When is news not news?

- Hyper-Partisanship
- 24/7 News Cycle
- Networks Chasing \$\$\$
- Consumer Responsibility



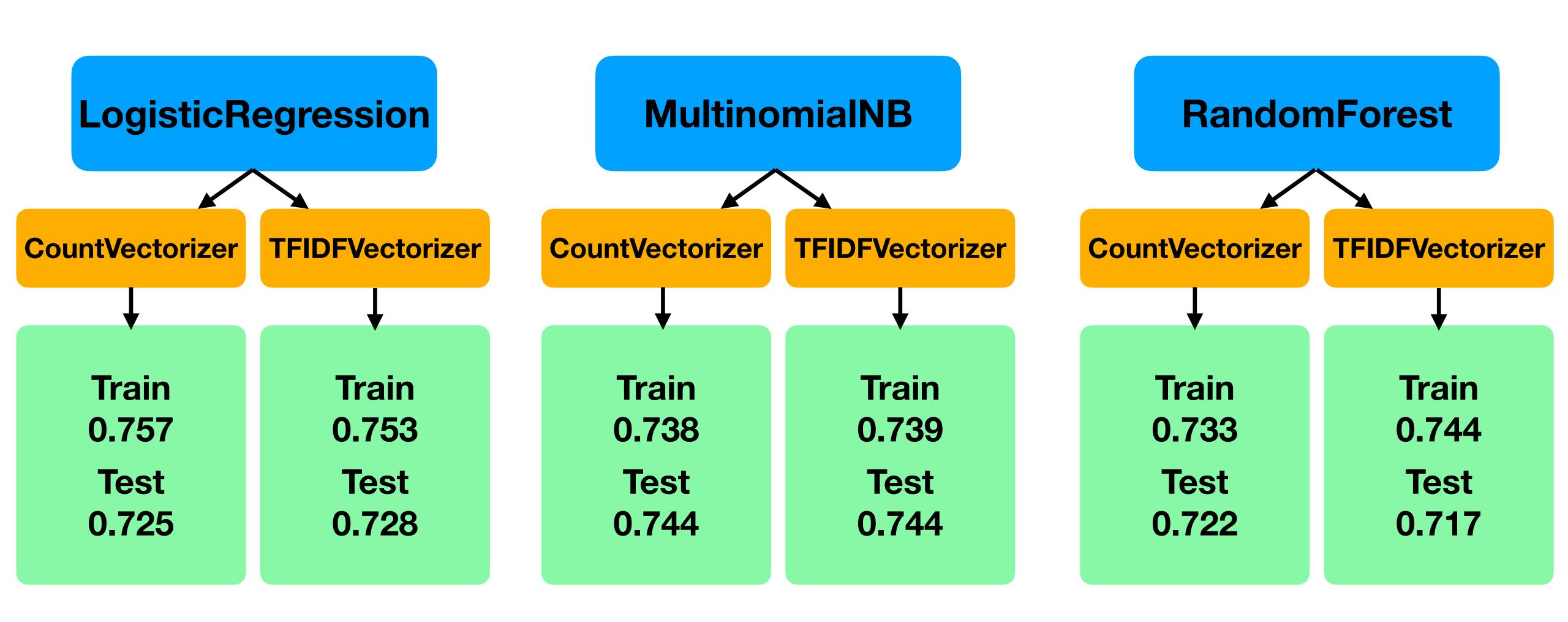
Data Collection

- Republican Subreddit
 - 189,000 Subscribers
 - Primarily News Content
 - 758 Unique Posts
 - 65 Unique Users
 - 113 Unique Sources

- democrats Subreddit
 - 435,000 Subscribers
 - Primarily News Content
 - 717 Unique Posts
 - 188 Unique Users
 - 148 Unique Sources

Methodology

75% of the time it works every time



Production Model Optimization

MultinomialNB CountVectorizer ColumnTransformer

- CountVectorizer 'title' and 'domain'
- Accuracy Score 74% → 92%

```
Pipeline

ctx: ColumnTransformer

cvec

CountVectorizer

CountVectorizer(max_features=3000, min_df=2, ngram_range=(1, 4))

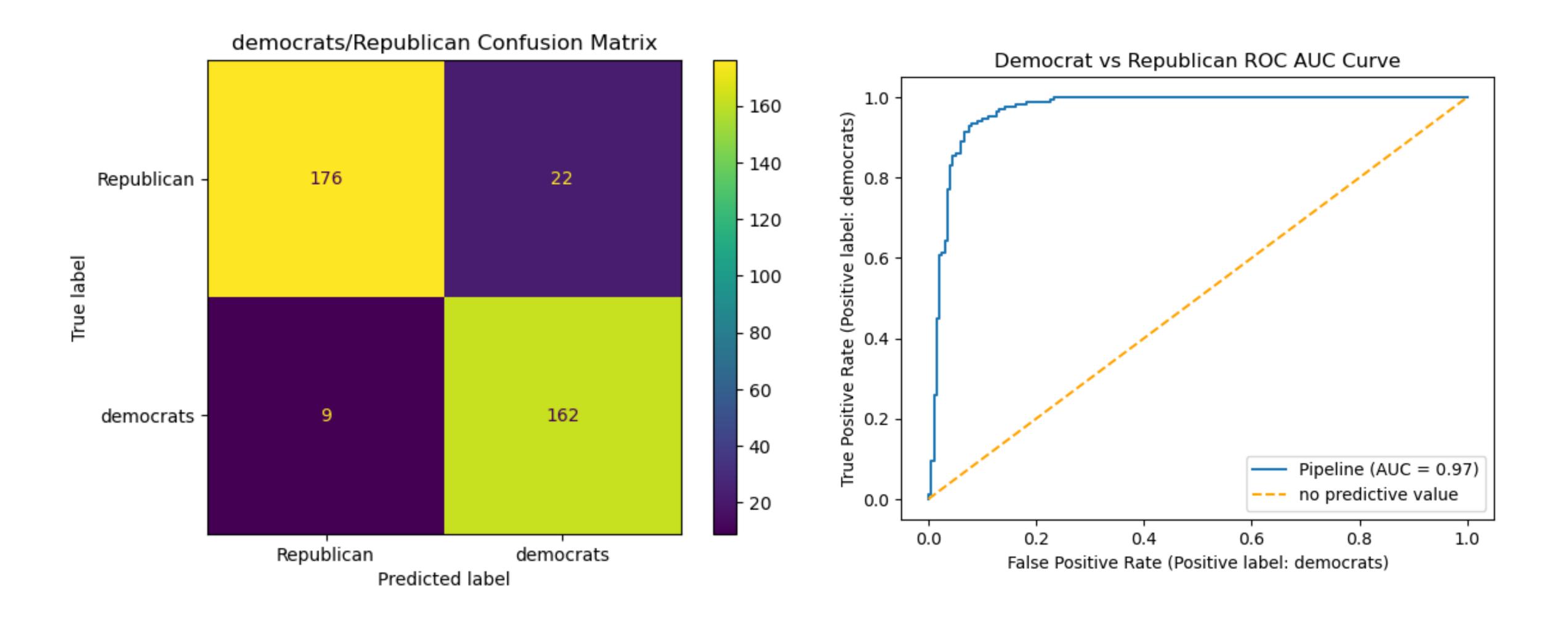
DenseTransformer

DenseTransformer()

MultinomialNB

MultinomialNB()
```

Production Model Evaluation



Conclusion

- Achieved 92%
 Accuracy
- Recommendations
 - Larger Dataset
 - Further model/ transformer optimization
 - Sentiment Analysis

