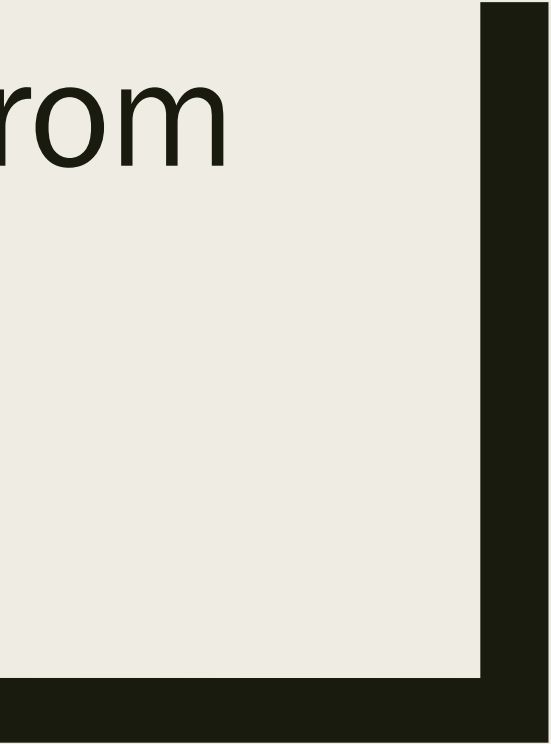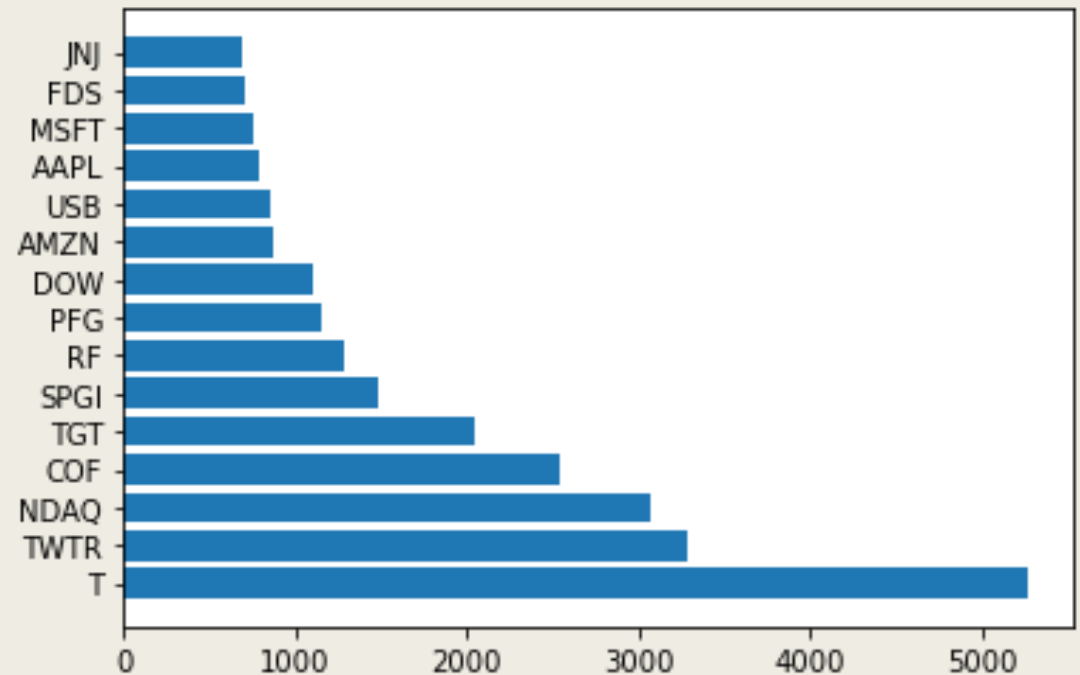# Deriving Alpha from News: GDELT

Ty Painter
Capstone Update #9
4/27/22

Data Processing

- Weekend news → assigned to Friday

- Holiday news → assigned to previous market day

- No news → Lookback period
  - *70%: 1 day prior*
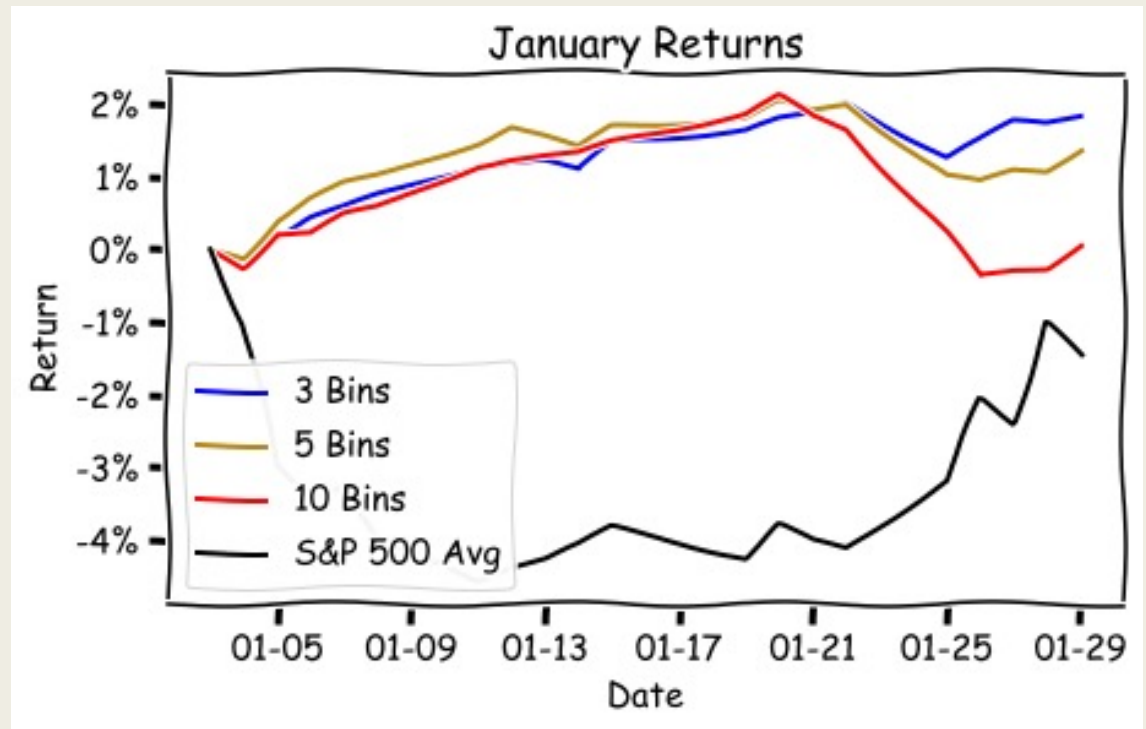 - *20%: 2 days prior*
  - *10%: 3 days prior*

Portfolio Construction

- Long-short portfolio
  - *3 bins (338 total stocks)*
  - *5 bins (202 total stocks)*
  - *10 bins (100 total stocks)*
- Ordered by aggregated feature score
  - *Multiplied negative sentiment scores by -1*
  - *Scaled sentiment scores, read score, and volume count*
  - *Aggregate mean*

Performance

Portfolio	Raw Return	Relative Return
S&P 500 Avg	-1.48%	----------------
3 Bins	+1.85%	+3.33%
5 Bins	+1.38%	+2.86%
10 Bins	+0.07%	+1.55%

January Returns

Next Steps

- February and March are running on EC2
  - *Q1 should be finished by next Wednesday*
  - *Use GPUs to finish all of 2021*
- Construct additional portfolios
  - *Order by net sentiment score*
  - *Factor weighted by % of absolute sum of scores*
- Finish final paper & presentation
- Organize GitHub