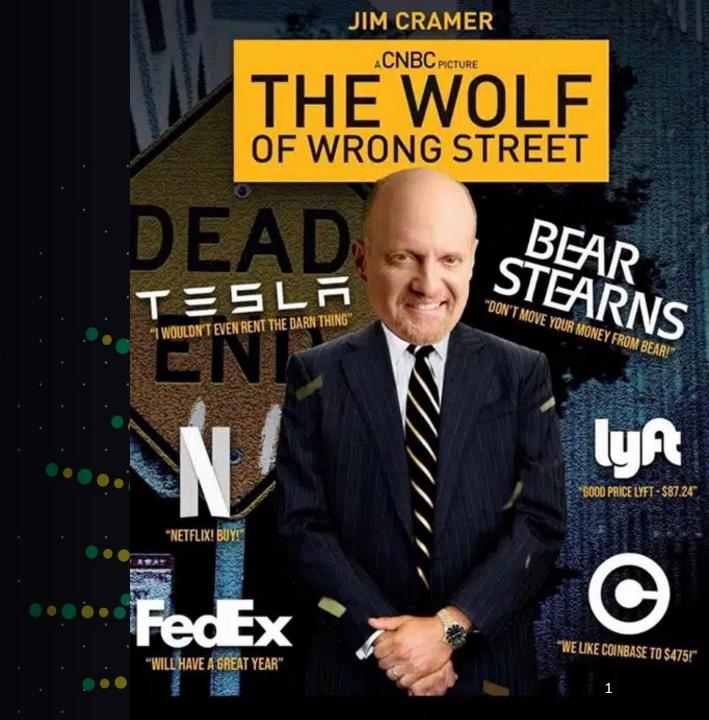
## FINA4350 Group 1 Inverse Cramer with sentiment analysis

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## Jim Cramer

- American television personality, former hedge fund manager
- Host of CNBC's Mad Money.



## \$TSLA



#### Cramer on Banks

# Jim Cramer says he's intrigued by these 10 top-performing S&P 500 stocks

PUBLISHED WED, FEB 8 2023 6:42 PM EST

- 1. Tesla
- 2. Align Technology
- 3. Catalent
- 4. Warner Bros. Discovery
- 5. Meta Platforms
- 6. Nvidia
- 7. Royal Caribbean
- 8. Carnival
- 9. SVB Financial
- 10. Norwegian Cruise



#### The Cramer Effect

- whatever Jim Cramer predicts, the opposite happens.
- SeekingAlpha: 20.13% return through the inverse Cramer strategy in 2021.
- The Inverse Cramer ETF: \$SJIM outperforms S&P



#### Studying the Cramer Effect with NLP

- Stock pick and return correlation (1 month, 3 month, 6 month)
  - Cross-sectional: correlation with returns
  - Time series: The strength of this effect across time
- Questions:
  - "Does this effect have any statistical significance? Or is it just cherry-picking?"
  - "When did this effect start?"
  - "Can we derive alpha from this effect?"



Portfolio

7

#### The model

- Vader Sentiment Analyzer
- Large Language Models
  - BERT finetuned on financial sentiment analysis (FinBert)
  - Meta's LLaMa
  - OpenAI's gpt3.5
- Experimentation:
  - Prompts, finetuning

#### Data Sources

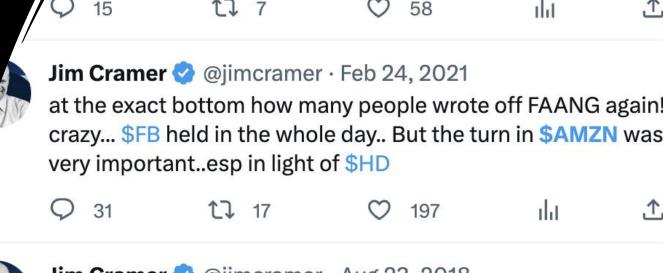
- TheStreet
  - The Street, a financial news and literacy site.
  - Summary of every Mad Money episode, every call on every segment on the show.
    - Lightning Round, Game Plan, Sell Block, Am I Diversified?, Mad Mail, and 10 others.
  - Experiment: "which segment has the biggest effect?"



### Twitter

- Twint
  - Web scrapper for Twitter
  - No authentication
  - Use a proxy list to avoid exceeding the rate limit
  - Filter by hashtags / cashtags
- Sentiment analysis
  - Positive / negative / neutral





That was wrong with \$MSFT? I forget. How about \$AMZN??



Jim Cramer 🔮 @jimcramer · Aug 23, 2018 Yes, i think \$FB sold you out. Yes.. \$AAPL, \$IBM, \$CRM, \$GOO would not sell you out....\$AMZN would not sell you out...



tht



Jim Cramer 🤣 @jimcramer · Oct 27, 2019 You know i concur re: \$AMZN



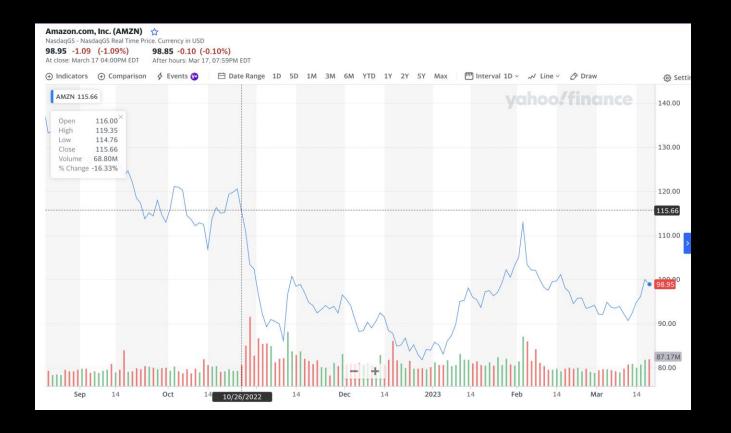
Larry Malinowski @Malinowski\_L · Oct 27, 2019

Replying to @jimcramer

Anytime Amazon falls it's a buying opportunity for others. The is still great.

## Sentiment analysis





#### Yahoo Finance

- Yahoo Finance API
  - Following 30 / 90 / 180 day return
  - Compare with overall market performance
- Potential challenges
  - What if Jim is referring to a certain industry / sector instead of a specific stock?
    - ETF!

#### References

- MSN Does the Inverse Jim Cramer Strategy Actually Work?
- <a href="https://quantbase.substack.com/p/building-the-inverse-jim-cramer-index">https://quantbase.substack.com/p/building-the-inverse-jim-cramer-index</a>