



2020/Spring - Analytical Methods III Project Proposal

Member 1
Member 2
Member 3
Member 4



Problem Statement

- Analyze the relationship between Netflix weekly web sentiments and stock price; also check the impact of new releases on both sentiments and stock price during the same period



Inputs

- Web articles about Netflix
 - Data Source – Webhose.io
 - Time Period – 30 Days
- Netflix's stock price data over the same period
 - Data Source – iexfinance
- List of new releases
 - Data Source
 - <https://www.marketwatch.com/story/heres-everything-coming-to-netflix-in-february-2020-and-whats-leaving-2020-01-26>



The Process

- Data Cleaning
 - Removing Stop words, special characters
- Removing duplicate article
 - Deduping (Simhash, word2vec)
- Entity Recognition
 - Spacy.io, IBM Watson NLU
- Cluster modelling
 - Cluster LDA, Gensim Model
- Topic Taxonomy
 - Word2vec
- Stock Data Comparison
 - Python packages - Matplotlib, plotly
- New Releases Impact



Result

- Present the analysis in the form of comparison chart
 - Relationship between web sentiment and stock price
 - Relationship between new releases and web sentiment
 - Relationship between new releases and stock price