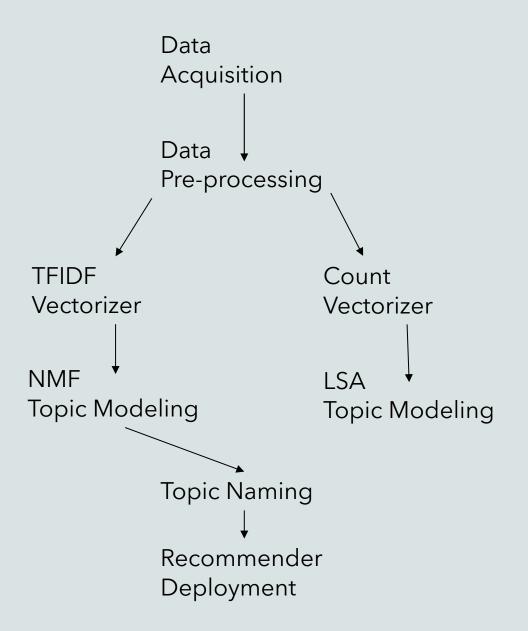


### Reddit Thread Recommender

- Timothy Tsung

#### Goal

Build NLP unsupervised learning model Create a recommender based on user input



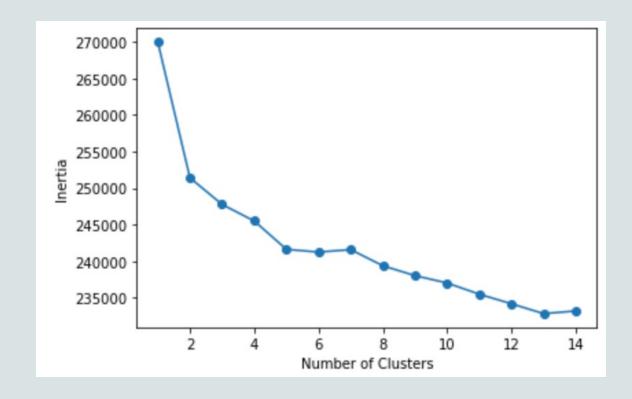
#### Workflow

- Data downloaded as .csv file
- Preprocessing using regex
- Scikit Learn NLP tools
- Streamlit app deployment via py script

### Count Vectorizer Inertia

#### le7 1.20 1.15 1.10 100 100 1.00 0.95 0.90 0.85 12 Number of Clusters

# TFIDF Vectorizer Inertia



# Topic 1 discordhtps, automaticaly, questions, bot, concerns, action, moderators, contact, performed, submission Topic 2 click, models, make, money, learn, onlyfans, new, bevy, content, sexy

#### Topic 4 meow, taiwan, belgium, koala, fortnite, zamn, femboy, china, amogus, models

meow, fortnite, taiwan, belgium, koala, china, zamn, femboy, amogus, cat

Topic 5 youre, dont, cant, ratio, cringe, care, yo, sex, bitches, baka

Topic 3

# LSA Topic Modeling

Some topics did not really make sense

```
Topic: 'NFT Buy/Sell General Discussion '
discordhtps, buysel, discusion, everything, live, thank, us, share, subreditmesagecomposetornft, submision
Topic: 'Onlyfans'
models, click, onlyfans, learn, bevy, directory, sexy, content, new, money
Topic: ' Moderator Channel '
discords, chanelhtps, fil, contactreditmods, aproved, formhtpsformsgleebzpvoxmnhaxc, alow, removed, doesnt, fil
Topic: 'NFT Theft'
luscious, godbye, preparing, strets, stole, ruin, prepare, lawyer, youi, theft
Topic: 'Random'
karma, however, contributions, postcoment, engage, automaticaly, combined, award, wait, ask
Topic: 'Crypto Discussion'
dont, game, im, buy, art, crypto, make, money, know, could
Topic: 'NFT Giveaway '
discord, fre, giveaway, chanel, adres, verify, drop, server, upvote, send
Topic: 'NFT Art '
links, submit, discordhtps, hashtags, coment, title, ad, alow, however, removed
Topic: 'Opensea'
latest, colection, everyonei, herehtpsopenseaiocolectionhelkity, zombie, kity, check, arts, leaving, opensea
Topic: ' Metamask '
metamask, key, want, ned, xcedaedcfebaefafeb, xabdbafefdaccbbcdfbe, xccdceffefbcfd, xdfcacbeefafbeccdef, xfeffe
deskcomhcenusarticlesnfttokensinyourmetamaskwaleti
```

#### NMF Topic Modeling

Topics made more sense

#### **Reddit NFT Thread Recommender**

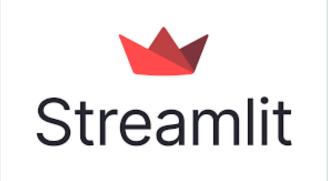
Welcome to my recommender system. Please choose a topic from the drop-down menu for several reddit link suggestions.

Select your topic:

```
Crypto Discussion
```

```
0: "https://old.reddit.com/r/Games/comments/rxb8cv/sega_promises_to_avoid_nfts_if_gamers_think_its_a/hrl4k18/"
1: "https://old.reddit.com/r/ethfinance/comments/rpgcip/daily_general_discussion_december_27_2021/hq4yyqn/"
2: "https://old.reddit.com/r/FuckNFTs/comments/tttebo/help_us_protect_the_fuck_nfts_sign_on_rplace/i32d5vx/"
3: "https://old.reddit.com/r/ubisoft/comments/rb3k84/we_must_stop_quartz_now_before_it_spreads/hnrk2f3/"
4: "https://old.reddit.com/r/g4tv/comments/qx5hqm/please_never_do_a_segment_on_nfts_again/hl887yw/"
```

# Recommender App Deployment





# Thank you