Reddit News Recommender

Natural Chan

Background

- News Source
- Frequently Updated
- Context
- Recommend Related Posts



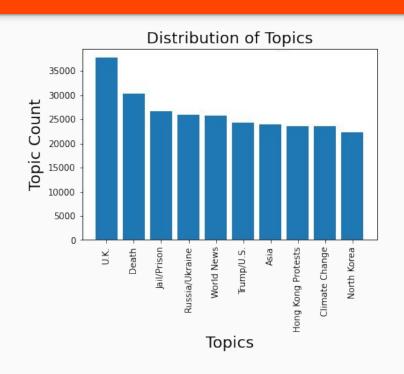
Data Ingestion & Storage



- PRAW (Reddit API Wrapper)
- PushShift API
- PMAW (PushShift Wrapper)
- /r/news & /r/worldnews
- SQL

Processing/Modeling

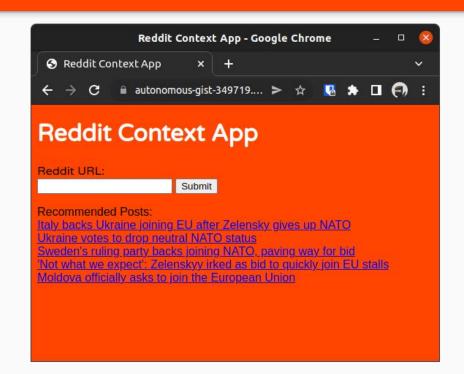
- Custom Tokenizer
- CountVectorizer
- Topic Modeling
- Pickle Vectorizer, NMF
- Store DTM with SQLAlchemy



Deployment

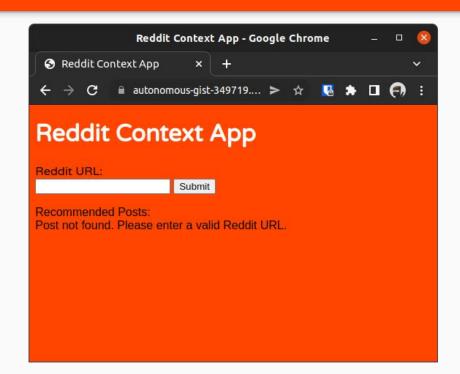
- Flask -> Google Cloud
- Input Reddit URL
- Output 5 Related Posts

"Finland's Parliament approves NATO application in historic vote [188-8]"



Testing/Robustness

- UDFs
- cron
- Input validation
- Only accept Reddit URLs



Conclusion



- Stored/Access data w/ SQL
- Trained & Pickled models
- Created Flask App
- Deployed using GCloud