

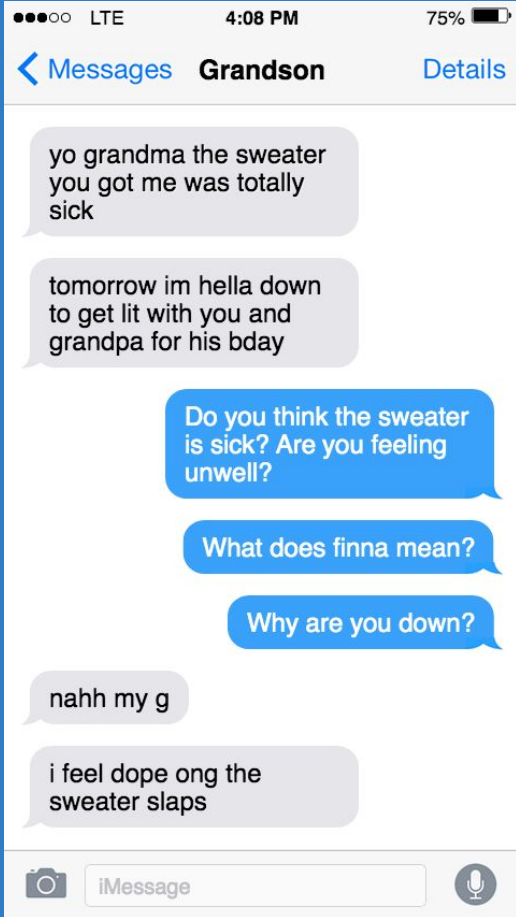


SlangSwitch

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**Consider
This**



Objective

- Translate slang into more formal text
- Bridge generational gap with language
- Analyze demographic predictors such as regional and age-based identification based on language



Text Translation

- Utilized Styleformer, a neural language style transfer framework, to convert slang/informality to a more formal language
- Built on top of the popular Hugging Face transformers library and trained on hundreds of slang phrases



Hugging Face

Datasets included:

Yahoo Formality Dataset

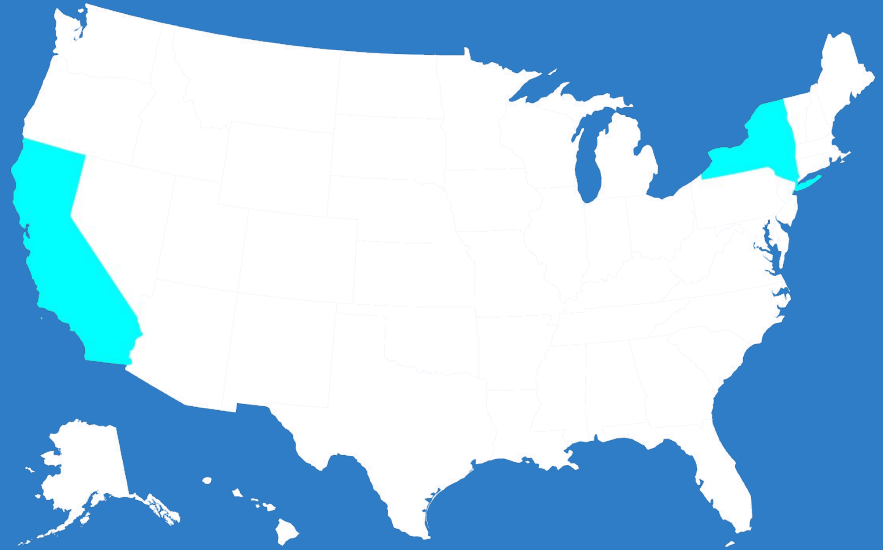
TV Shows Dataset

Slate Star Codex Dataset



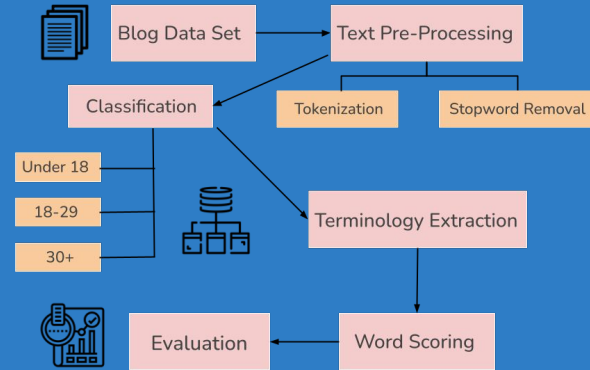
Regional Identification

- Web scraped slang for different regions including California and New York
- Matched regional slang words to a given input using Regex



Age Prediction

- Web scraped slang to create age-based dictionaries by frequency: >18, 18-29, and 30+
- Employed terminology extraction to tally slang occurrences and forecast author's age group



Sentiment Analysis



- Utilized TextBlob, a Python library for Natural Language Processing (NLP)
- TextBlob actively used Natural Language ToolKit (NLTK) to achieve its tasks.



Percent Analysis



- Utilized Open AI's API to gather slang words and return the percentage of slang used in the entire input sentence



SlangSwitch



A Slang to Formal Translator

Input:

Enter slang here

I

Output:

Translate

Predicted Region:

Predicted Age:

Percentage of Slang:

Sentiment Analysis:



Mouse



Pen



Rectangle



Stickers



Eraser





Thank You!