



SlangSwitch

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Consider
This

●●●○ LTE

4:08 PM

75% 

 Messages **Grandson**

Details

yo grandma the sweater
you got me was totally
sick

tomorrow im hella down
to get lit with you and
grandpa for his bday

Do you think the sweater
is sick? Are you feeling
unwell?

What does finna mean?

Why are you down?

nahh my g

i feel dope ong the
sweater slaps



iMessage



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

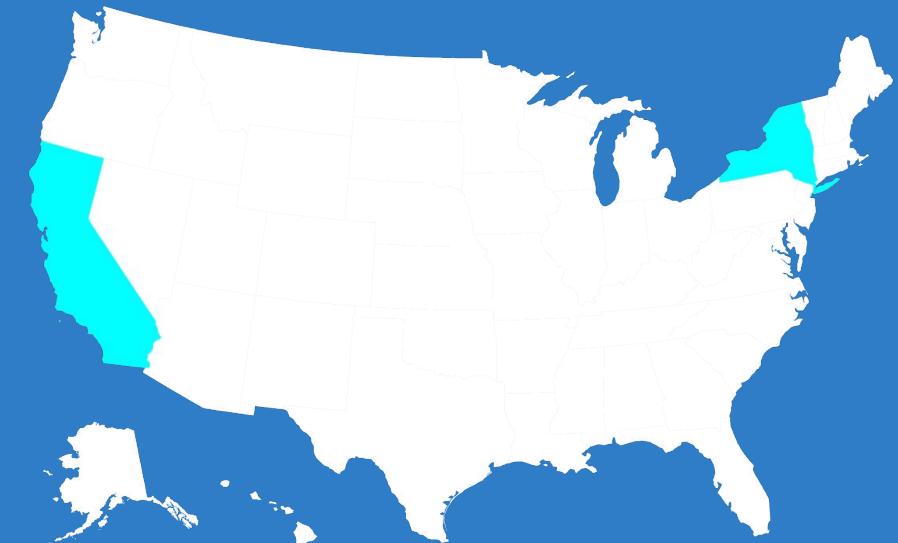
TV Shows Dataset

Slate Star Codex Dataset



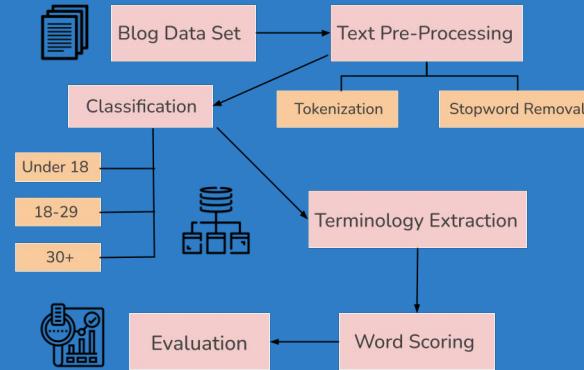
Regional Identification

- 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:



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 Messages

Grandson

Details

yo grandma the sweater
you got me was totally
sick

tomorrow im hella down
to get lit with you and
grandpa for his bday

Great to hear! I knew
that sweater would suit
you well.

Grandpa and I are
looking forward to having
fun with you tomorrow

fosho fosho the colors
were dope

good looks send me the
addy when you can

Thank You!