

SlangSwitch

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Objective

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

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A Slang to Formal Translator

Input:
"OMG! It's finger-lickin' good."

Translate
Predicted Region: California
Predicted Age: 18-29
Percentage of Slang: 60%

Output:
"Oh my God, I'm enjoying it so much."

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A Slang to Formal Translator

Input:
"i loooooooooooooooove going to the mall."

Translate

Predicted Region: New York
Predicted Age: 0-18
Percentage of Slang: 16.67

Output:
"I enjoy going to the mall."

Text Translation

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

Regional Identification

- Web scraped slang for three regions: California, New York, and Britain
- Matched regional slang words to a given input using Regex

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A Slang to Formal Translator

Input:
"my bro needs a proper mate"

Translate
Predicted Region: Britain
Predicted Age: 18-29
Percentage of Slang: 50%

Output:
"My brother needs a friend."

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A Slang to Formal Translator

Input:
"They gotta be a geezer"

Translate

Predicted Region: California
Predicted Age: 30+
Percentage of Slang: 40%

Output:
"They have to be an older person."

Age Prediction

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