



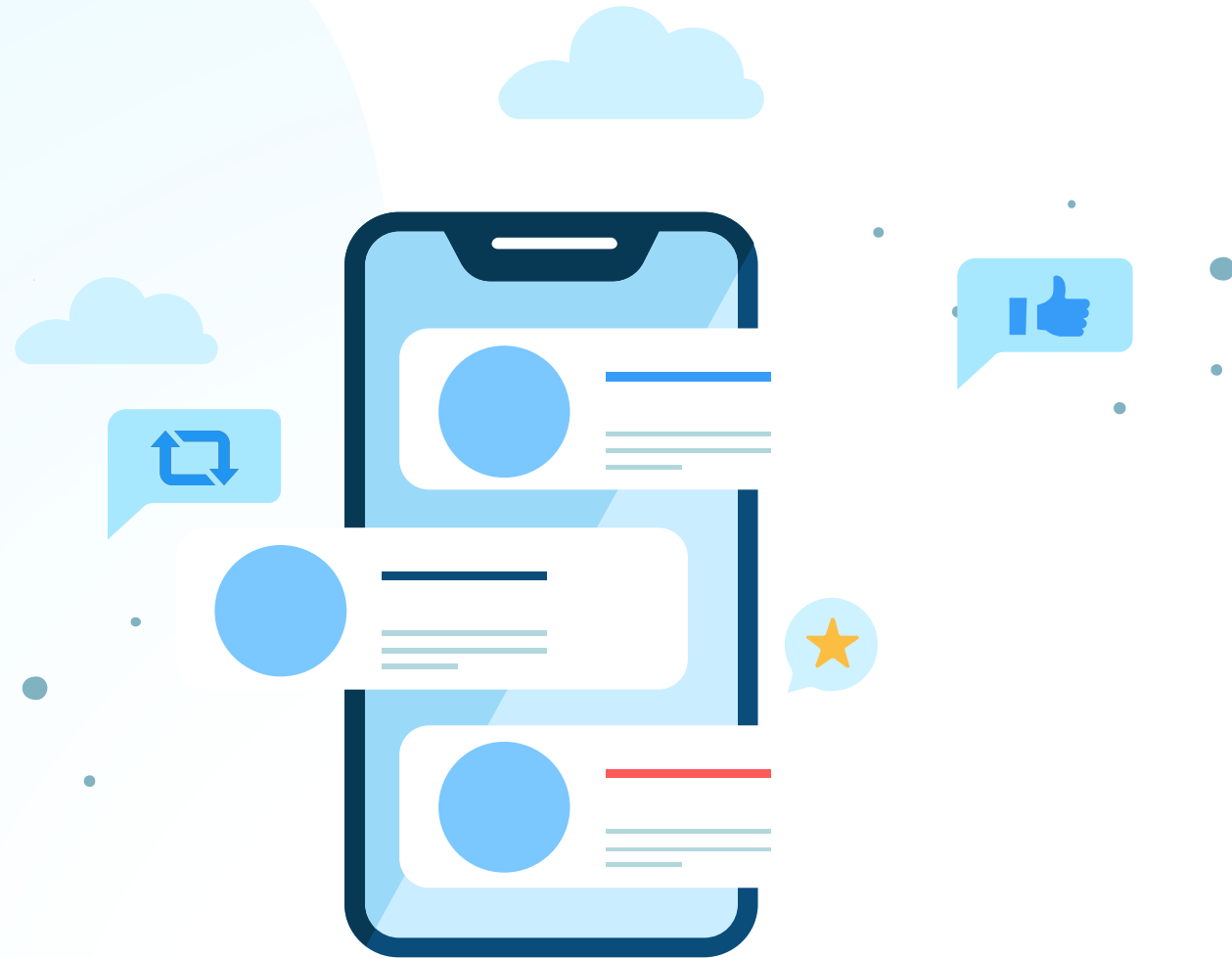
Tweet as Trump

Let users tweet as the former president and see their predicted number of retweets



Motivation

- Donald J. Trump has been a controversial figure on Twitter since he stepped into the White House in January 2017
- Until the platform eventually suspended his account in January 2021
- People are often curious about what it's like to be such a controversial figure on social media and what kind of posts receive the most attention





Live Demo

Go to the page [→](#)

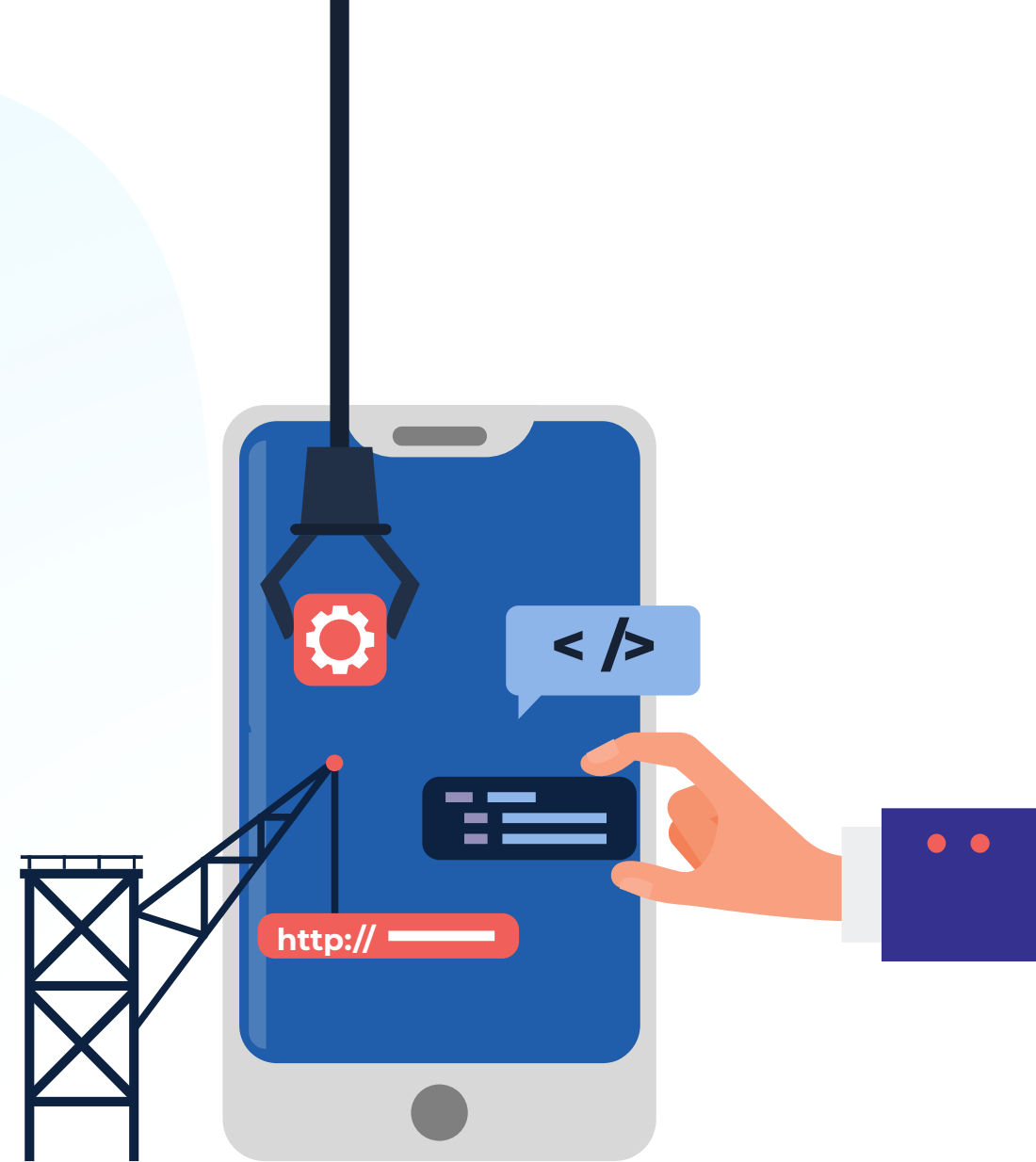
Data

- Combine two datasets on Kaggle to get **14,219** observations of Trump's tweet contents and retweets from 2017 to 2021
- A lot of effort went into processing the texts:
 - Remove punctuations;
 - Remove URLs;
 - Remove stopwords ("I", "you", "do", "by", etc.);
 - Lemmatization ("better" → "good", "cats" → "cat")



Model

- Architecture:
 - Embedding layer to allow words with similar meaning to have a similar representation
 - Bidirectional LSTM layer to help model understand the “context” before and after any word
- Success criteria:
 - Test Mean Absolute Percentage Error (MAPE) $< 40\%$
 - Calculated test MAPE: 38.35%



Interesting Insight

- Within the dataset, 13 of the tweets are non-English
 - به مردم شجاع و رنج کشیده ایران: من از ابتدای دوره ریاست جمهوریم با شما ایستاده‌ام و دولت من همچنان با شما خواهد ایستاد. ما اعتراضات شما را از نزدیک دنبال می‌کنیم. شجاعت شما الهام بخش است
 - Trump has actually tweeted these
 - As an example, in January 2020, he tweeted in Farsi to express support for Iranians' protest
- The most common tweets after lemmatization and stopwords removal:
 - "thank": 63 times
 - "make america great": 52 times



THANK YOU

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