

#### **Text Suggestion Presentation**

https://cwl286.shinyapps.io/TextSuggestion/

## Introduction

#### Objective

- · Build a predictive model of English text
- · Develop an interface for our model via a Shiny application.
- · When a user type text, he can see predictions for his next word

## Background

• Final task in the Data Science Capstone to create a usable data product

#### Data

- Provided by the Data Science Capstone
- en\_US.blogs.txt, en\_US.news.txt, en\_US.twitter.txt

# Model

- · Apply N-gram to build our model
- · (N-gram: a contiguous sequence of n items from a given sample of text)

## Preprocessing

- · Remove URLs
- · Remove punctuation
- · Remove numbers
- · Remove English stopwords
- · Remove special characters

#### N-gram

· Train Bigram, Trigram, 5-grams and 7-gram

# **Application Features**

- Automatic suggestion
- · Build your own model
- · Generate "composition"
- · Interactive selection
- Suggestion visualization

#### How to use

- Type a text for suggestions for the next word. Suggested words are in the Wordcloud and the bar chart.
- · Click the word cloud and the bar chart as an input
- Suggestions are automatically updated if Auto-Suggestion is selected
- · Can build your model by uploading a text file.
- · After you built your model, you can select to use our default model or your prediction model.
- · Our application can generate an English-like composition based on your input.

## **Futher Information**

- Shiny application: Text Suggestion
- View Source
- View course information (Data Science Capstone)
- Report bug

