



Natural Language Processing and Sentiment Analysis of the Interstellar Travel Industry

Fennec Nightingale + Matthew Lipman
April 23, 2021

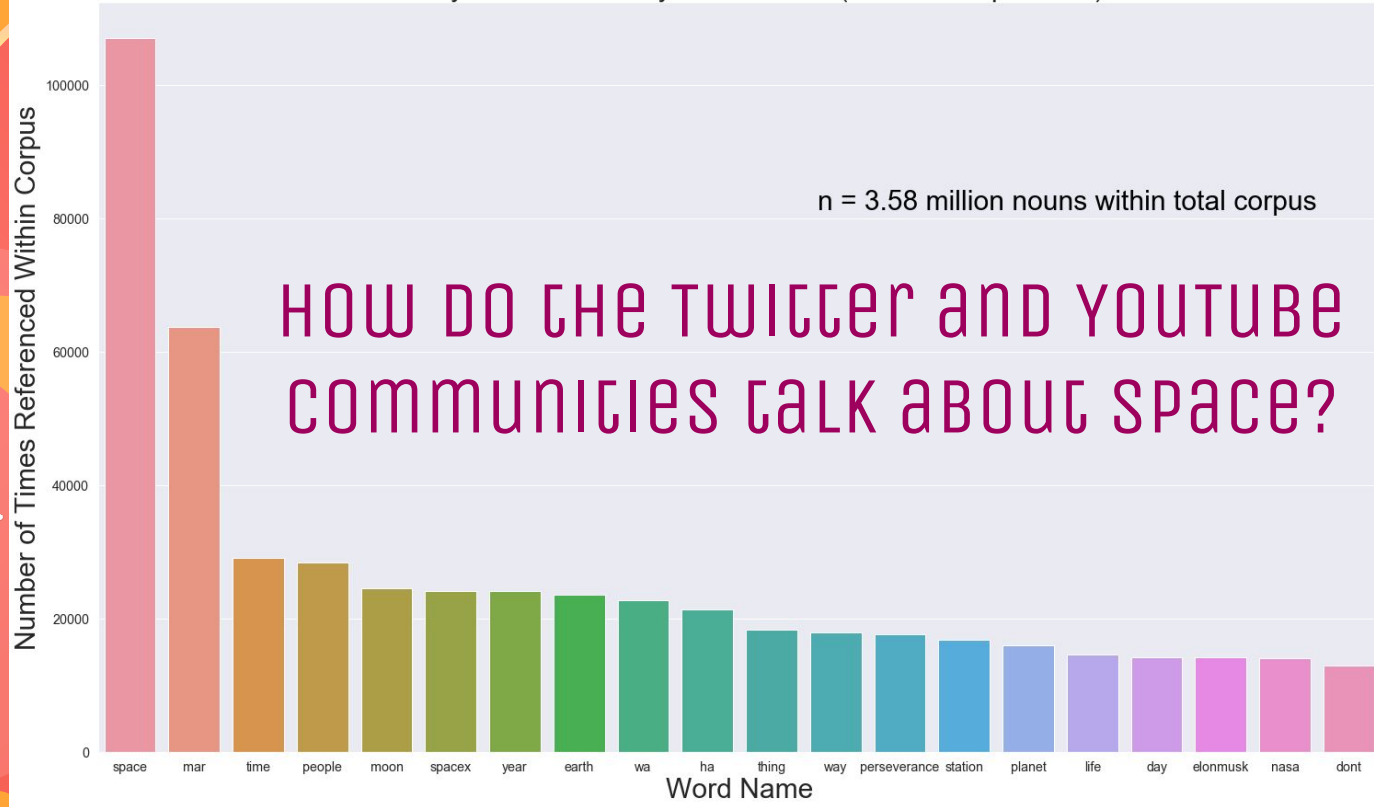


BUSINESS PROBLEM

“It’s a fixer upper of a planet, but we can make it work.”

—ELON MUSK

Twenty Most Commonly Used Nouns (Without Stop Words)



METHODOLOGY

01

— data collection

03

— clusterization

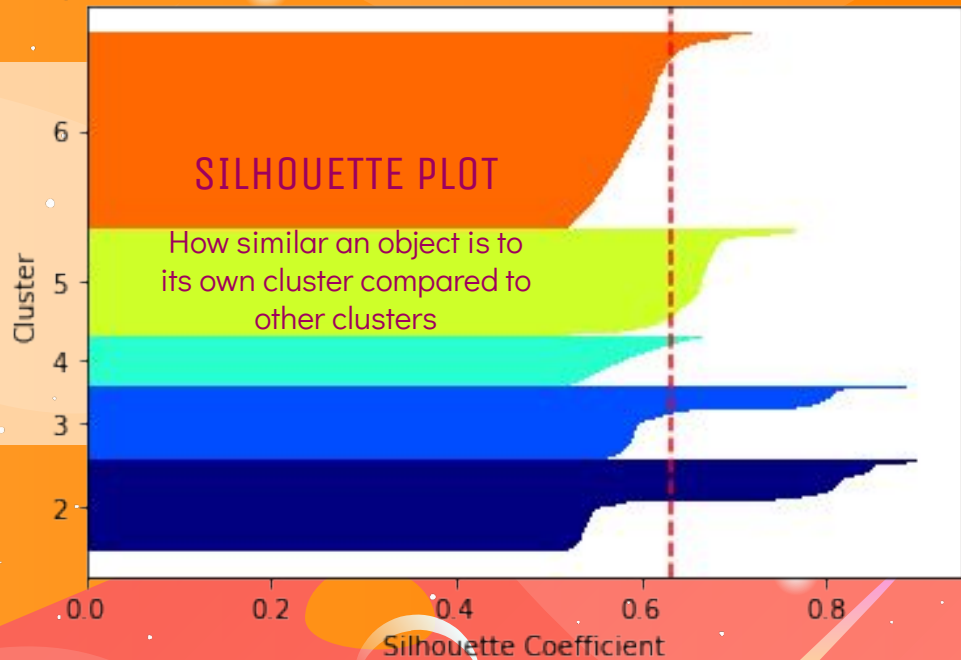
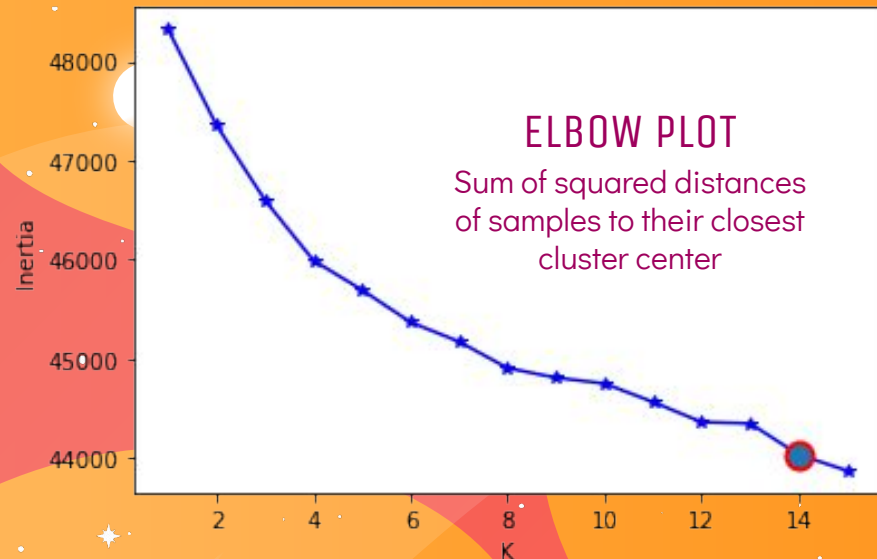
02

— preprocessing

04

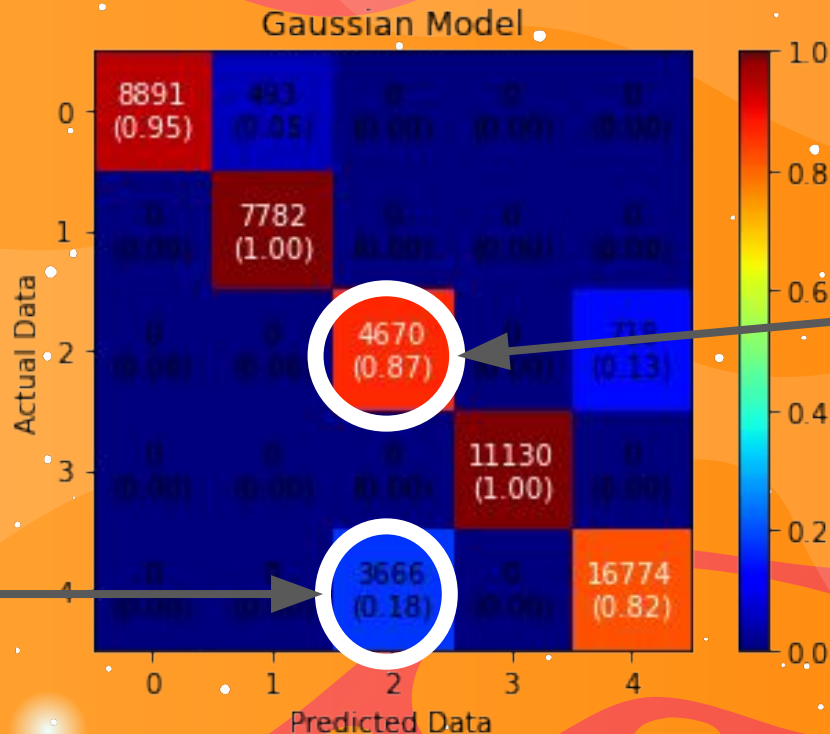
— MODELING

THE RESULTS: FINDING THE RIGHT CLUSTERS



THE RESULTS: MODELING

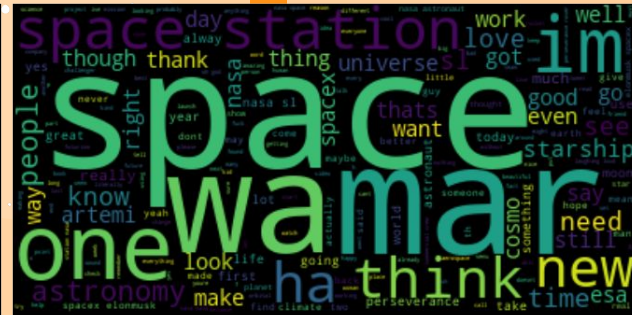
CLUSTERS 0,1,2
ACCURATE!



87% CORRECTLY
CLASSIFIED

FALSE NEGATIVES /
FALSE POSITIVES

ACCURACY = (FALSE POSITIVES + FALSE NEGATIVES)/TOTAL*100% = 93%



EVOKE EMOTION

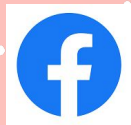
The power building an emotional response adds tremendous value to your marketing capabilities

FUTURE WORK



incorporate more platforms

- Reddit
- Facebook
- Instagram



time series analysis

- Looking at change of space sentiment after major events
- Long term study of how specific words have changed in sentiment

The background is a vibrant space-themed illustration. It features a large, textured yellow planet in the upper center, a smaller white crescent moon to its right, and a white rocket ship with a yellow flame trail flying from the right towards the center. The background is filled with various shades of orange, red, and pink, with numerous small white stars and streaks of light. The text 'THANK YOU!' is written in a large, purple, sans-serif font across the middle of the image.

THANK YOU!

Please do not hesitate to reach out to request any additional information.

Fen: fenneccharcles@gmail.com

Matt: matthewrlipman@gmail.com

www.github.com/Fennecnightingale/space-hospitality

APPENDIX

Training Accuracy Score : 92.32000000000001
 Training Precision Score : [0.99390345 0.80843589 1. 0.85376908 0.98553626]
 Training Recall Score : [0.99843064 0.99823926 1. 0.75230938 0.8667815]
 Training F1 Score : [0.9961619 0.89336751 1. 0.79983451 0.92235211]

Training residual count:
 0 361764
 2 18617
 1 1

Testing Accuracy Score : 91.91
 Testing Precision Score : [0.82732448 0.48480663 1. 0.79819688 0.99144473]
 Testing Recall Score : [0.99771167 0.99480397 1. 0.76399759 0.86922776]
 Testing F1 Score : [0.90456432 0.65191147 1. 0.78072289 0.92632237]

Testing residual count:
 0 49634
 2 2240
 1

Testing R2 Score: 0.7479017913768848
 Testing R2 Score: 0.8799230883065321
 Cross validated model accuracy:
 Testing:
 0.96 with a standard deviation of 0.00
 Training:
 0.92 with a standard deviation of 0.00

Testing R2 Score: 0.7479017913768848
 Testing R2 Score: 0.8799230883065321

