





紧 TIMES

PRICE 3d

GARDENING &c.

LONDON EDITION

DEATHS (continued) EE.—On Jon. 9, 1947, at 196, Mode Volt. Contain Transmire, density bread bushed of Expense, again 63. September of Colders Coventions on Transmire, Jun. 14, at 12,30 p.m. No. hy request.

ore, he recurses to the property of the control of

6. Fullestone.
6. Fullestone.
Fulles, Birox Rosero, V. 1947, at 36, Noseth Parley, Birox Rosero, Veralismente, fuller et aux Petales, Birox Bostone.
6. Fulles, Birox Bostone.
6. Fulles, Birox Bostone.
6. Fulles, and T. 1947, at Kaney Shanka.
6. Groom of the State S. 1947, at Kaney Shanka.
6. Groom of the State State

Constituted by Mariana S. 1947, at Pedron Imperators & Maria Structure in Constitution.

CR. Dought son of William H. Taphen, of Hambases, St. Mary's Church, Decem. and 92. No. by represent to 1947, our modernty of "Th

BRY.—Ge Jon. E. 1947, very modeledly, of The Lindensame, Marky Cohestance, believed wife of THRY, and desert breast marker of Overscole, Ruth Lucas, and Particle Handles. Principles, Markets Cherth, New Romanny, In-dee Chestenday.

ONEAN.—On Jon. 8, 1947, or 5, Adamson Rose, Triangue Turman, believed moutair of Gorbas code, in four Table part. Francis to morrow that it is a superstance of the Table of Javich Comments of 1142 agent to Proper Land. N. W. 19. Adamson Small Convention Property Land. N. W. 19. Adamson Small Convention Property Land. N. W. 19. Adamson Small Convention Property Sci. 19. Adamson Property

SECRETARY OF STA. P. PARTY WILLIAM ASSETT TOWNER TOWNERS TOWNERS TOWNERS TOWNERS TO THE PROPERTY OF THE PARTY OF THE PARTY

ON.—On Jan. 30, 1347, of mentagain. Jon. Lipras, Prints, Vision of Writtle, Chalender, Eds. grank-lared hardward flowers, and dreads of Jan. Mary, and Georgia, 2005 31. Business, Charet, 2.32 jun., Monday, Jan. 13. No flower ULEXT.—On Jun. 8, 1347, or Robert, Mary, Friend and for all tests cook in Can familiar Business and Canada Mary.

I. Rich, widow of Cart. Personne Wanter Trington on Jan. 7, 1947, at Brighton

or Elizabeth Creat Wattractics, former by aged 91.

DEFORESE. On Jan. 8, 1947, at Sunner Colose Management.

Management Courts Navour Witnessen.

t Locking, Somerer, Jun. 9, grid ABD: - Con. Jan. 1, 1941, peacefully, a the Ray Manay Woodwane, M.A. B.D. have of C.M.S., James Mission, and Reuter of

IN MEMORIAM

POLE, Helian ... In facing and happy means tone on all at White Cottlers.

should, who dead so Aberparaph on 210. In it came with you every step of the way. Management. To 22 house memory of Fattorney, France.

Fake News Classifier

Decide and the property of the

British and Control State Control State and the British and the Control State Control

Russian Employee and the first successive and

NEW 1840 LAGONTA Balow, V.12 cileadur. Band Band, Village and College and Coll

A MAZING OFFORTUNITY to ensure percent, A MAZING OFFORTUNITY to ensure percent, and the second of the control o

PERSONAL

for Limit, E.C. A. CORET, does not encourage at a N. LMFT. POCKET does not encourage at a presented to the honorals. Give not of them a property of the second and the second in the name to mention a set to The Street I contaching the property of the second second in the second property of the second second second in the second property of the second and Johnson, In making Construct Volument and Superiors of Communications and Exceptions of the Superiors of the Superiors of the Superiors of the Superiors of Constructions of

3 loves the Americanity-Box member the event

The state of the s

AND AND STREET, THE STREET, TH

SOON DESCRIPTION OF THE PROPERTY OF THE PROPER

The second secon

Controlled the said of the sai

STAMP COLLECTING

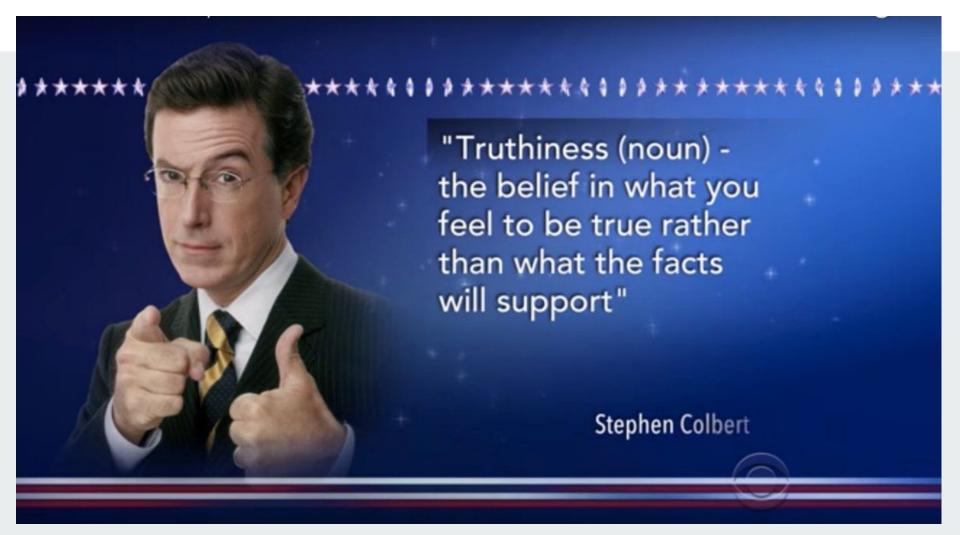
Art About the bear of the property of the prop

of New Source of Children in all Marine and New Source of Control Cont

BEANNOY Fine Consequence on CREAN BRIL Standing an approved solution on CREAN BRIL Desired log an approved solution for the contraction of the

Reque Brotach aucherome in the state resourced amounts per la section of the sect

The second secon



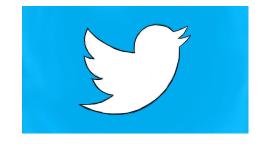
Agenda

- 1. Overview
- 2. The Approach
- 3. Findings
- 4. Next Steps
- 5. Conclusion



Overview

Twitter has a fake news problem.



EMG Consulting has been retained to build a model to predict when an article may include misleading information to inform users when that is the case.





The Approach

- Model built based on roughly 38,500 articles from 2016-17 on US and world news, with over 9 million words in total — approx. 55/45 real/fake split
- Make predictions by assigning numerical values to words in each article, then training model to draw a distinction between real and fake articles based on these values
- Emphasis on creating a model that is accurate overall costs associated with incorrect predictions in either direction!

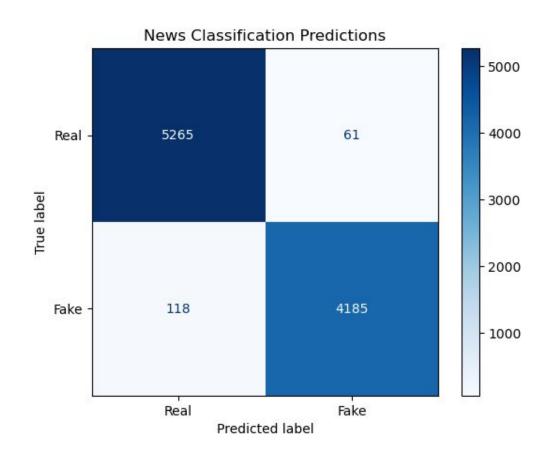


Finding #1: The model works - but we'll need to scale it.



The model is very accurate when making predictions on topics it is trained on.

- Final model was a Linear SVC.
- Roughly 98.1% accuracy on unseen data.
- However, narrow scope of training data means model would have to be scaled before deployment to public.



Finding #2: When predicting "real" vs. "fake" news, pay attention to adjectives and adverbs - they can tip you off.





'Fully committed' NATO backs new U.S. approach on Afghanistan

Donald Trump Sends Out Embarrassing New Year's Eve Message; This is Disturbing



...some are not.

Potential Shift: Trump Warns Israel, 'New Settlements May Not Help Peace in Middle East'

Trump hits back at Clinton, with a golf ball, on Twitter



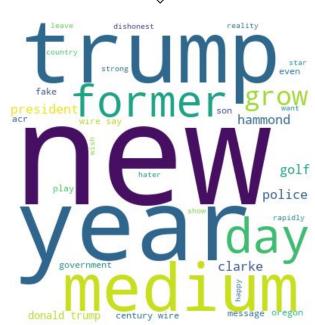




True negatives (real news, predicted real)

True positives (fake news, predicted fake)

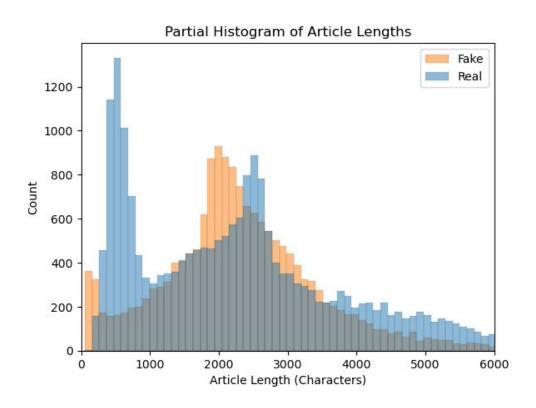




Finding #3: Some fake news spreads in video form - we'll need a different approach to combat this.



Some "articles" in the data had no characters.



Next Steps

Massively increase the size of the training data, with articles from a wide array of organizations. Partner with impartial fact-checking organizations to ensure validity of labels in training data.

Work with transcription services to quickly analyze and label misleading video content.

Continue to refine preprocessing and modeling to further shrink number of incorrect predictions.



