# Finding Real About

# Fake News

Presented by Angie Sheng

# OUTLINE

1. Talk about my capstone project

2. Why we should spot fake news

3. Possible implementations

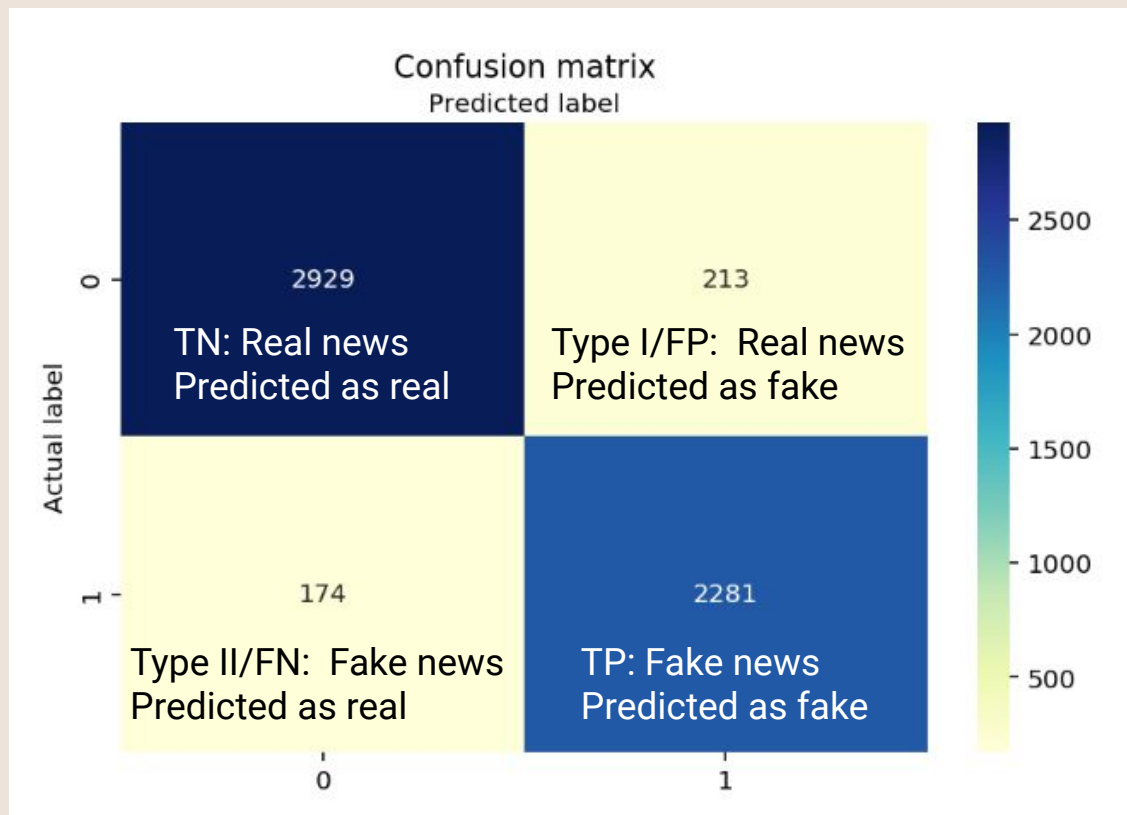# 1. Talk about my capstone project

# 93.09%

**FAKE NEWS**

*Accuracy*

**Goal:** Try to use machine learning algorithms to differentiate fake news from real news, the baseline is 56.14%

**Data set:** Pre-labelled fake news and real news during Nov, 2016

More than 25,000+ articles

**Method:** CountVectorizer & Logistic Regression

# Method: CountVectorizer & Logistic Regression



Confusion matrix

**Accuracy**

**93.09%**

**Precision Score**

**91%**

**Recall Score**

**92%**

# 2. Why we should spot fake news

# 'Two Explosions in the White House!



**AP The Associated Press** ✓
@AP

Following

Breaking: Two Explosions in the White House and Barack Obama is injured

← Reply  ⟲ Retweet  ★ Favorite  ••• More
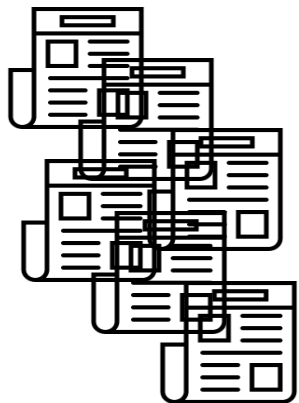
3,063 RETWEETS    144 FAVORITES

12:07 PM - 23 Apr 13

# 'Two Explosions in the White House!

**FAKE NEWS**

Causing the S&P 500 to decline 0.9%, enough to wipe out $130 billion in stock value in a matter of seconds.
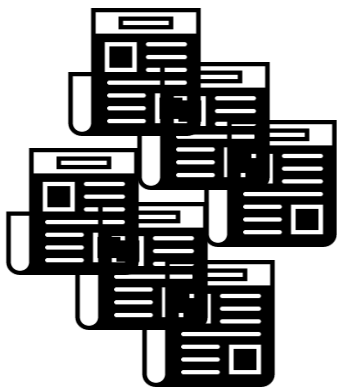


BREAKING NEWS

MARKETS PLUMMET, SNAP BACK AFTER FAKE AP TERROR TWEET

S&P 500  +13.77  +0.88%
1,576.27

Worldwide. ▲ First in Business Worldwide. ▲ First in Business World
t in Business Worldwide. ▲ First in Business Worldwide. ▲ First in CN

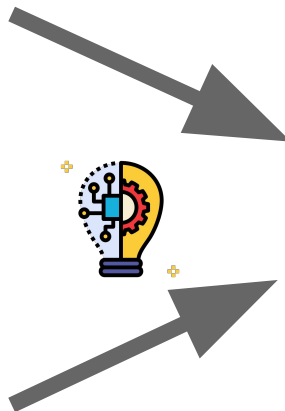# 3. Possible Implementation

**Hourly Update**

News labelled as **REAL**
From highly reliable medias,
E.g. CNN, The Guardian

News labelled as **FAKE**
From reports from users, articles
from theonion.com, etc
Then be manually reviewed
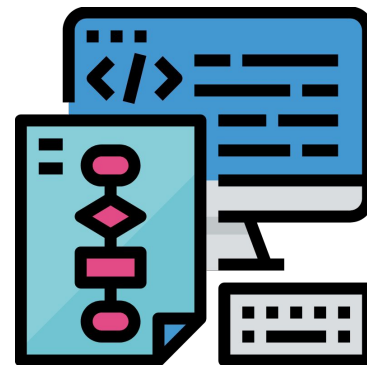
MAGIC
ALGORITHM

If I were to design my own product...

Chrome Web Store - Extension

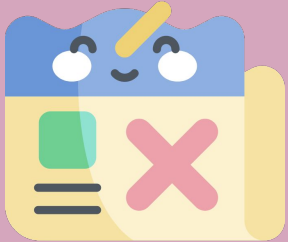chrome.google.com/webstore/category/extensions

chrome web store

e.sheng1221@gmail.com

Search the store

🧩 Extensions
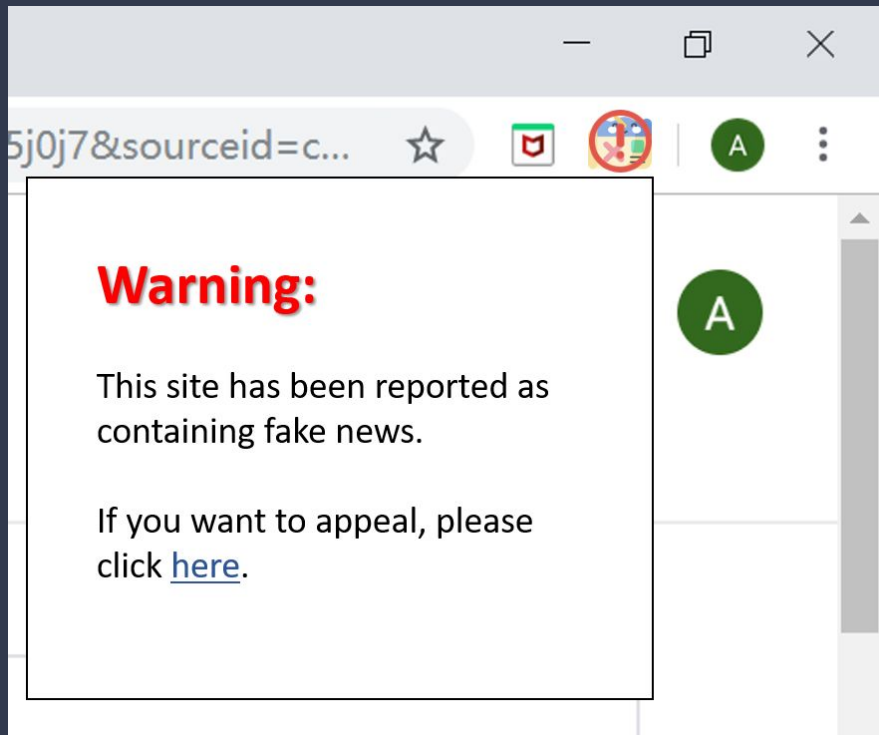
✏ Themes

Categories

All
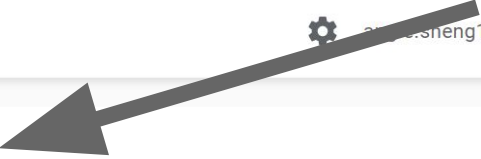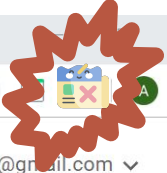
Features

☐ Runs Offline

# Fake News Detector

## ---A Chrome Extension

**Warning:**

This site has been reported as containing fake news.

If you want to appeal, please click here.

## Start an appeal

Please Complete the following in its entirety.

First Name *
What do you want me to call you?

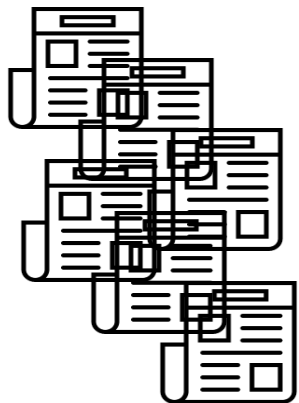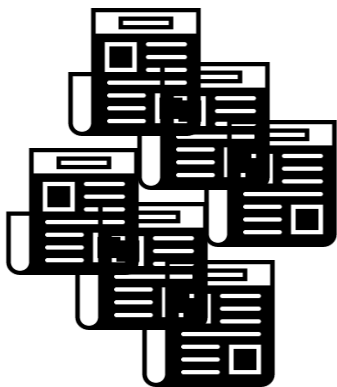Last Name *

Email Address *

URL for Appeal *

# Report a website

I think this website contains fake news.

**Threshold** →
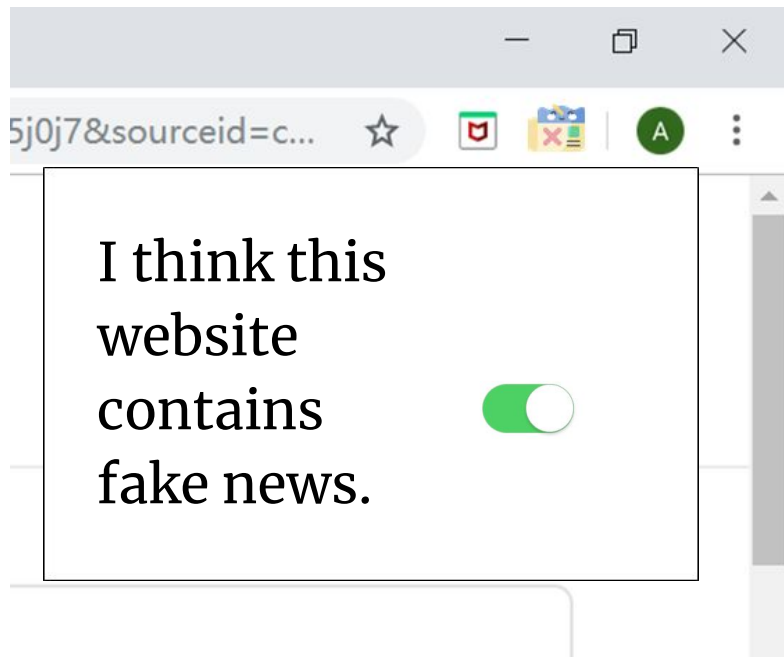
**Manual Review**

If we have more samples…
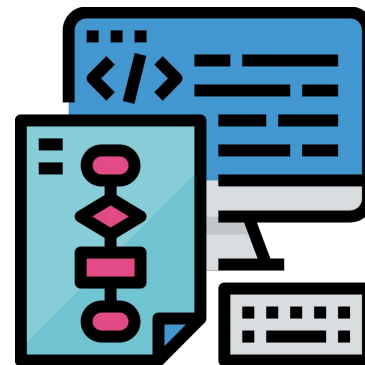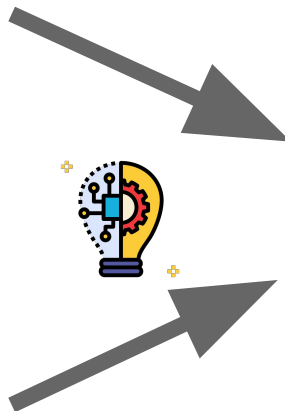
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# Q & A