

# “In Search of the Real Fake News”

A text classification system for predicting whether a news article is real or fake

Final Project

2020 October 14



Jaakko  
Kuurne



Teemu  
Pöyhönen

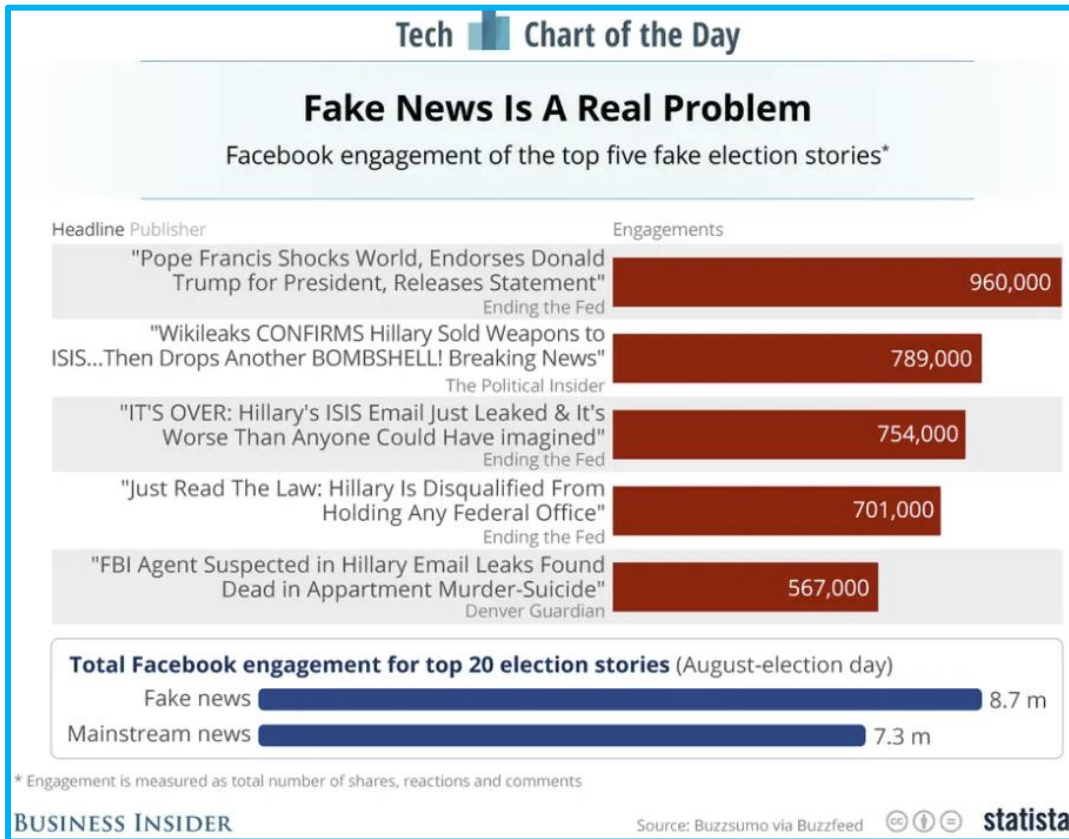


Dean  
Rahman

# “As Fake News Spreads Lies, More Readers Shrug at the Truth” -- New York Times

*To understand the importance of fake news in the upcoming US and worldwide elections, we have to look only at what happened in the last US Presidential election*

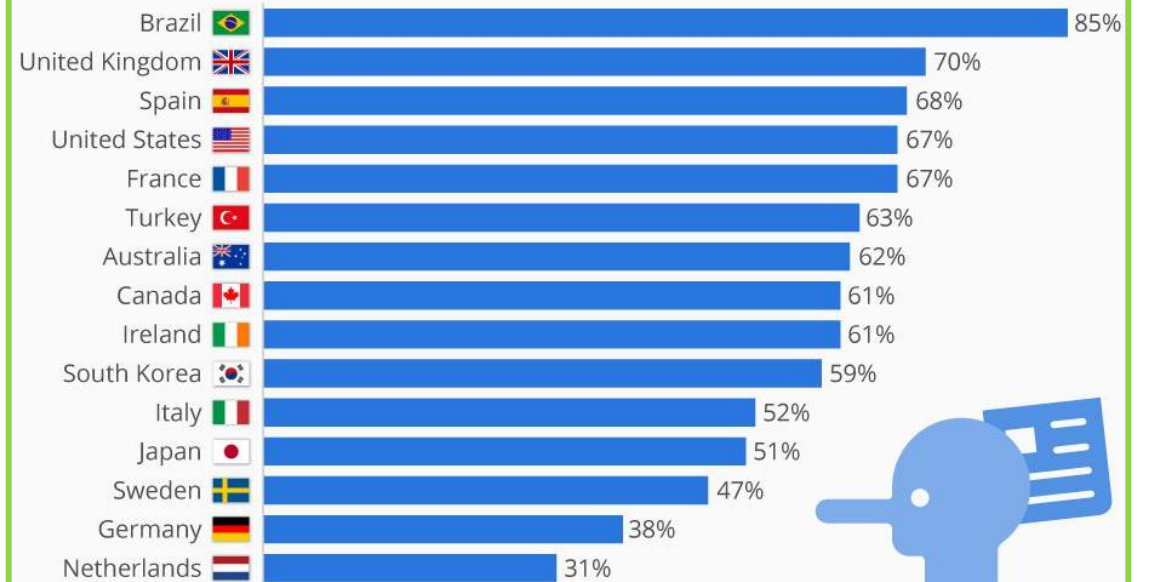
## 2016, US



## 2019, Worldwide

### Where Concern Is Highest About Fake News On The Internet

Share concerned about what is real and fake on the internet when it comes to news in 2019\*



CC BY ND  
@StatistaCharts

\* Selected countries

Source: Reuters Institute Digital News Report




Forbes statista

*The problem has gotten worse and it is far from a US-only problem*

# The disinformation is manually detected by human truth warriors

*but they are surprisingly few in number for such a critical problem*

 OBJECTIVE ANALYSIS.  
EFFECTIVE SOLUTIONS.


Search

RAND Campaign

Fighting Disinformation HomeAboutHelp Improve Our Data

RAND > Research > Truth Decay > Fighting Disinformation > Search >

## Snopes

Website: [Snopes](#) 

Founded in 1995

Snopes.com is a website that conducts extensive fact-checking research on popular topics, often chosen based on reader interest. Snopes uses a number of icons to classify content: True, Mostly True, Mixture, Mostly False, False, Unproven, Outdated, Miscaptioned, Correct Attribution, Misattributed, Scan, and Legend.

Tool type: **Verification**

Status: **Fully operational**

Intended users: **General public**

Cost: **Free**

Tool focus: **This tool is content-focused. It directly evaluates information, such as the authenticity of a photo.**

**Method or technology:** **Human implementation**

**Is the tool automated?** **No**

Founding organization: **Snopes Media Group**

Founder/primary contact: **David and Barbara Mikkelsen**

#facts



## Snopes.com

Online Media • 903 followers

The Internet's definitive fact-checking resource.

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*There are fewer than 40 US truth warrior organizations, most operating WITHOUT automation, with only 3-23 human employees*

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**PolitiFact**

Website: [PolitiFact](#) ⓘ  
Founded in 2007

PolitiFact is a website that fact-checks "newsworthy and significant" statements and rates these statements as "True," "Mostly True," "Half True," "Mostly False," "False," and "Pants on Fire." The process involves reviewing other fact-checking sources, Google searches, online database searches, expert consultation, and other literature reviews.

Tool type: **Verification**  
Status: **Fully operational**  
Intended users: **General public**  
Cost: **Free**  
Tool focus: **This tool is content-focused. It directly evaluates information, such as the authenticity of a photo.**

Method or technology: **Human implementation**  
Is the tool automated? **No**

Founding organization: **Poynter**  
Founder/primary contact: **Aaron Sharockman**



**PolitiFact**  
Online Media  
St. Petersburg, FL • 708 followers  
Home of the Truth-O-Meter

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**Emergent.Info**

Website: [Emergent.Info](#) ⓘ  
Founded in 2014

Emergent.Info is a web-based tool that tracks, verifies, or debunks rumors and conspiracies online. Rumors are suggested by individuals on the site, and then staff review and determine whether the claim is verified or false.

Tool type: **Verification**  
Status: **Fully operational**  
Intended users: **General public, Journalists**  
Cost: **Free (paid version available)**  
Tool focus: **This tool is content-focused. It directly evaluates information, such as the authenticity of a photo.**

Method or technology: **Human implementation**  
Is the tool automated? **No**

Founding organization: **Tow Center for Journalism**  
Founder/primary contact: **Craig Silverman**

Has no LinkedIn page but website suggests 3 employees

**Credits**

Founder/Editor: [Craig Silverman](#)  
Lead Developer: [Adam Hooper](#)  
Design and Interaction: [Normative](#)  
Research Assistant: [Joscelyn Jurich](#)

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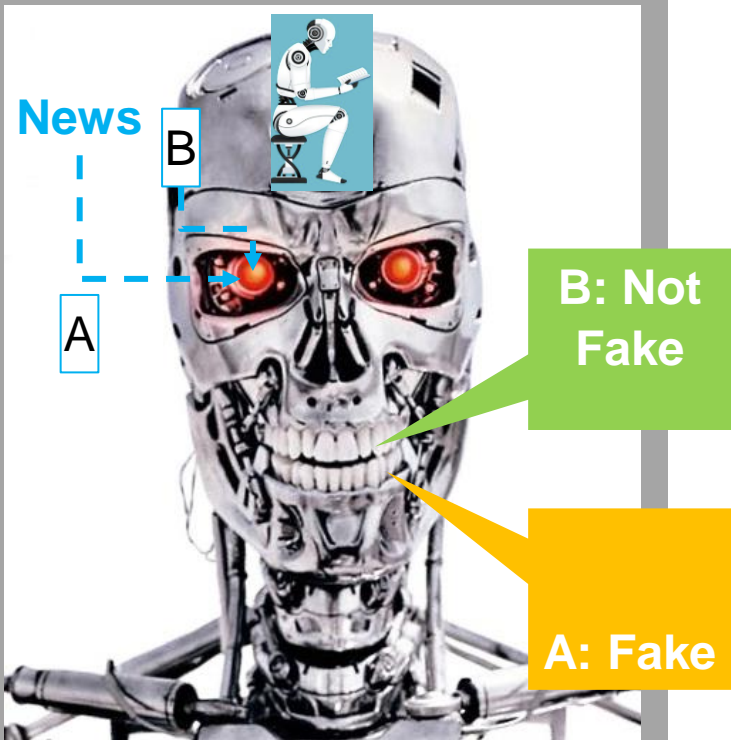
**We seek to extend the efforts of the few  
human warriors through automation**



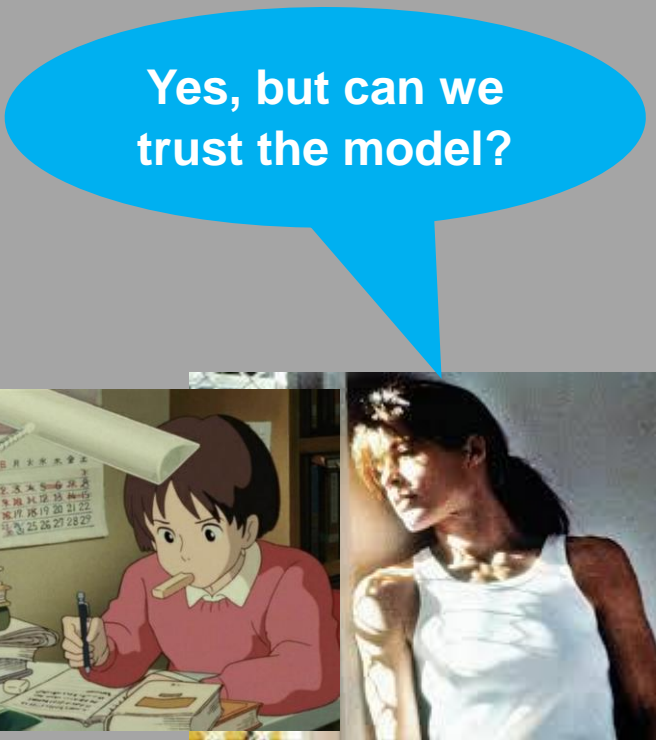
# We seek to extend the efforts of the few human warriors through automation

\*

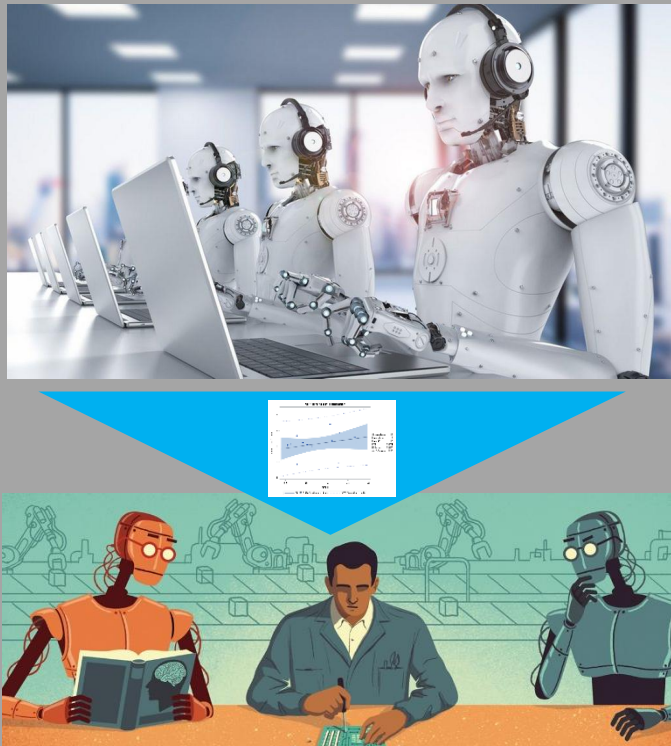
Our model puts in placeholder assessments  
Think Terminator 2, not Terminator 1



Assessment can still be post-edited by live humans

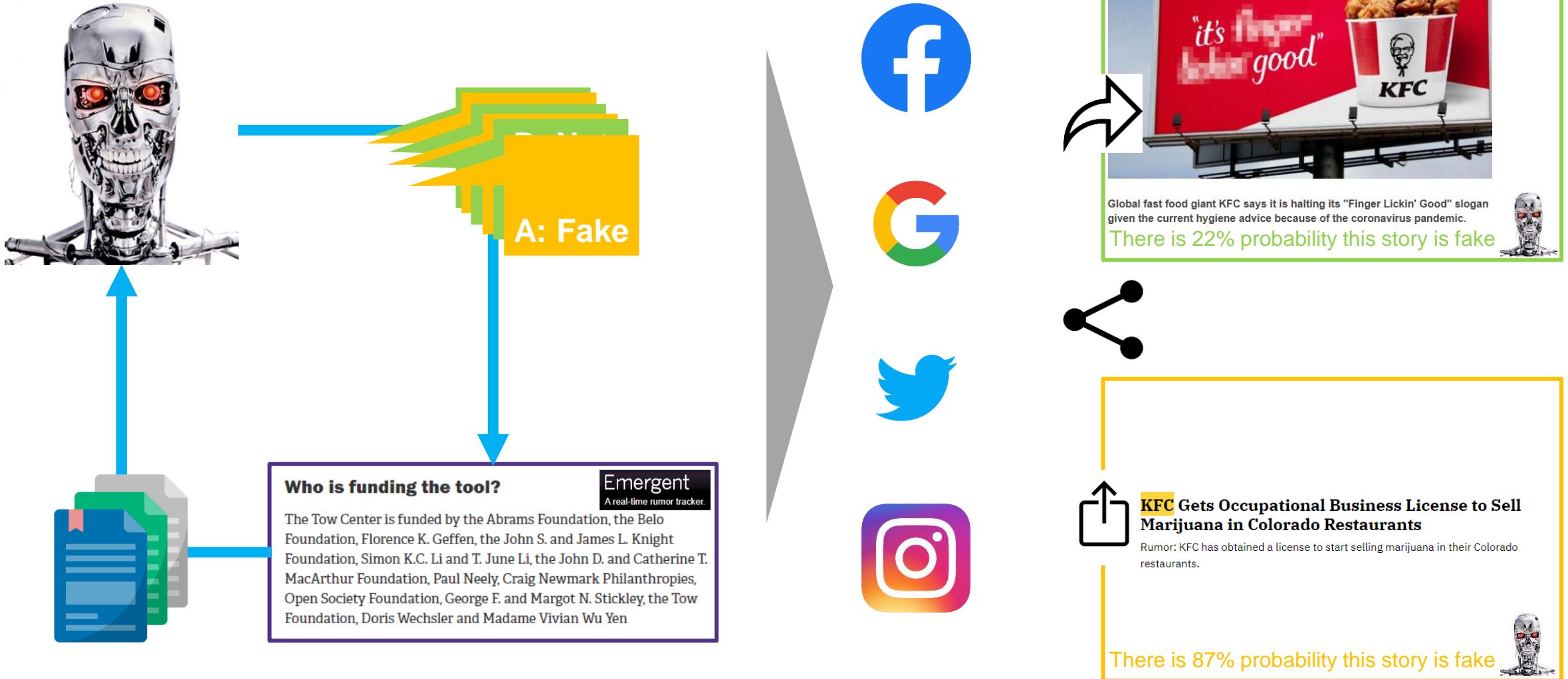


Humans can prioritize based on probabilistic assessments by model



# Commercialization

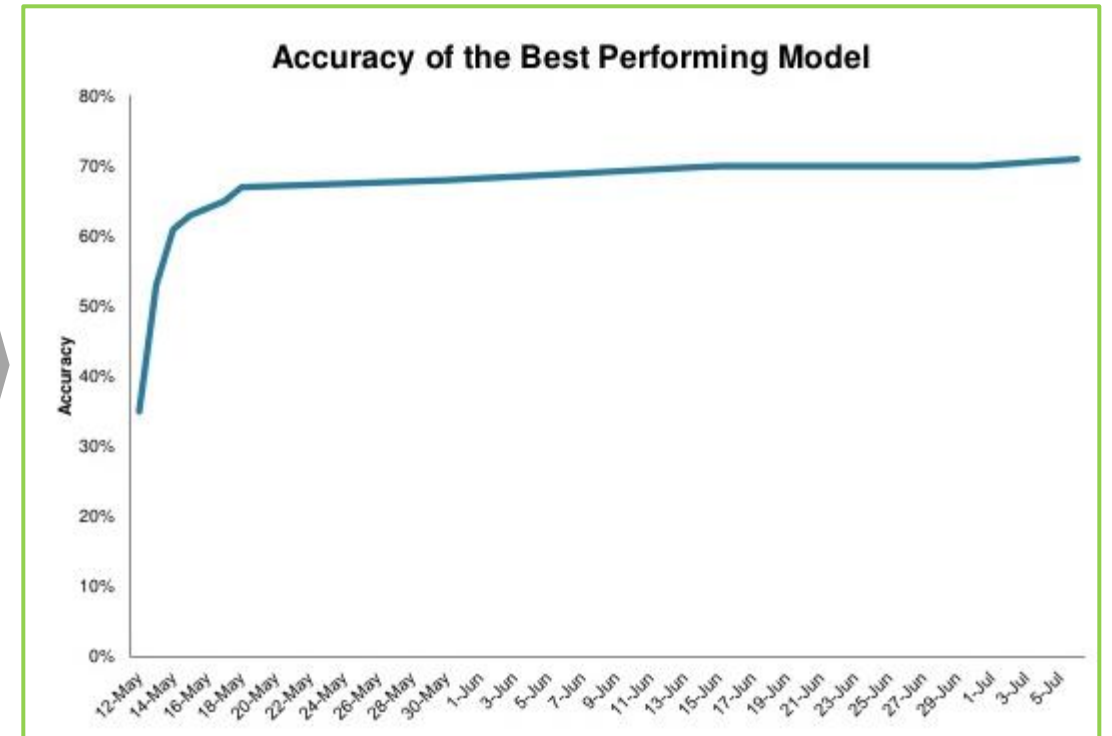
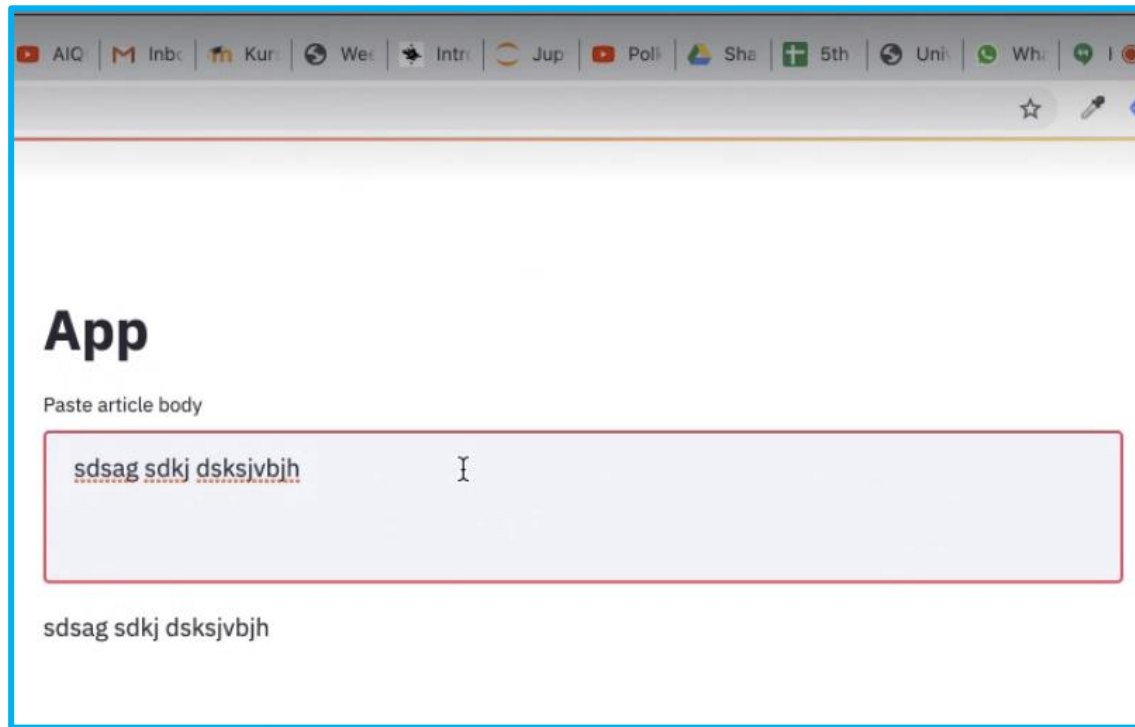
*Our app available for free to non-profit orgs in exchange for gold label data to continually improve our model*  
*Our app then extended (for pay) to for-profit social media/news outlets, automatically certifying shared content*





## Picture Our Concept

*To become an established brand, we enable social/media news consumers to paste in an article URL or simply the text in order to obtain our assessment*



*Articles with URLs along with our assessments are collected to chart our accuracy over time*