

“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

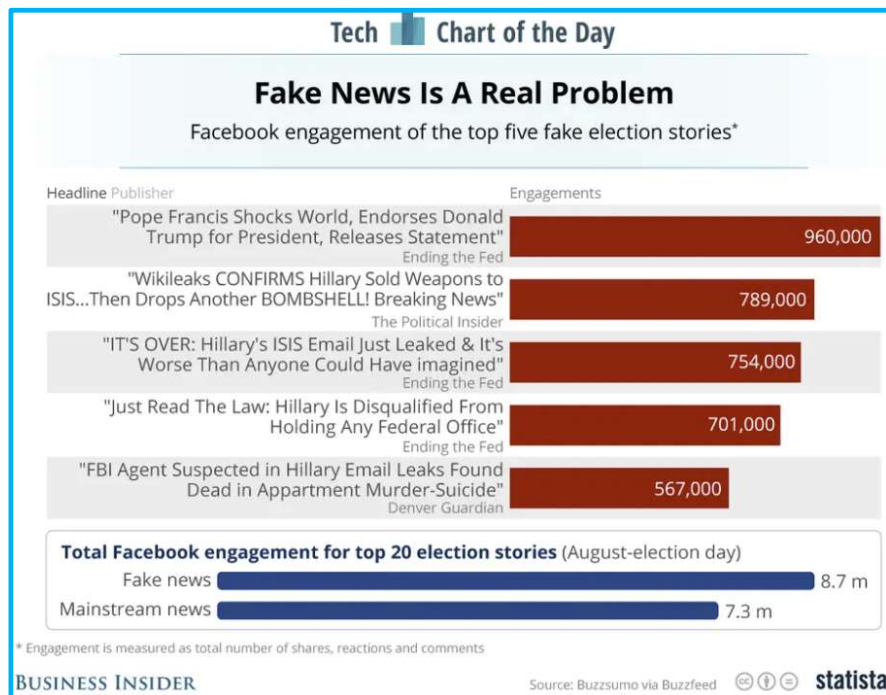


Dean Rahman

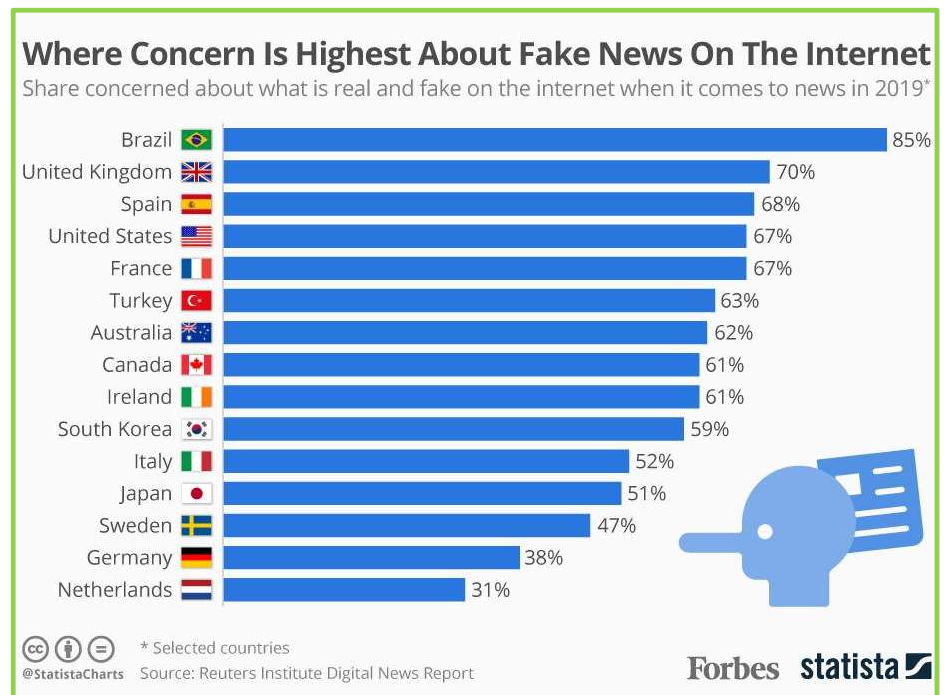
“As Fake News Spreads Lies, More Readers Shrug at the Truth” -- New York Times

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



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 Snopes uses a number of icons to classify content: True, Mostly True, Mixture, Mostly False, False, Unproven, Outdated, Misp captioned, Correct Attribution, Misattributed, Scan, and Legend.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

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The Internet's definitive fact-checking resource.

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There are fewer than 40 US truth warrior organizations, each 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

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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 Jurin](#)

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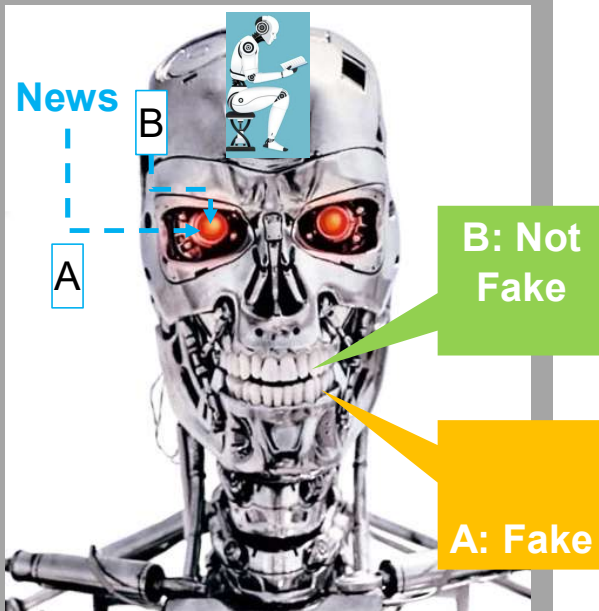
We seek to extend the efforts of the few human warriors through automation



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*

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

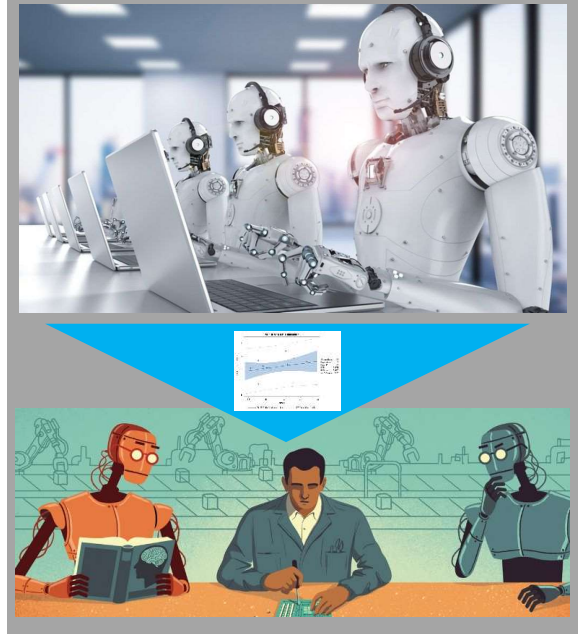


Assessment can still be post-edited by live humans

Yes, but can we trust the model?

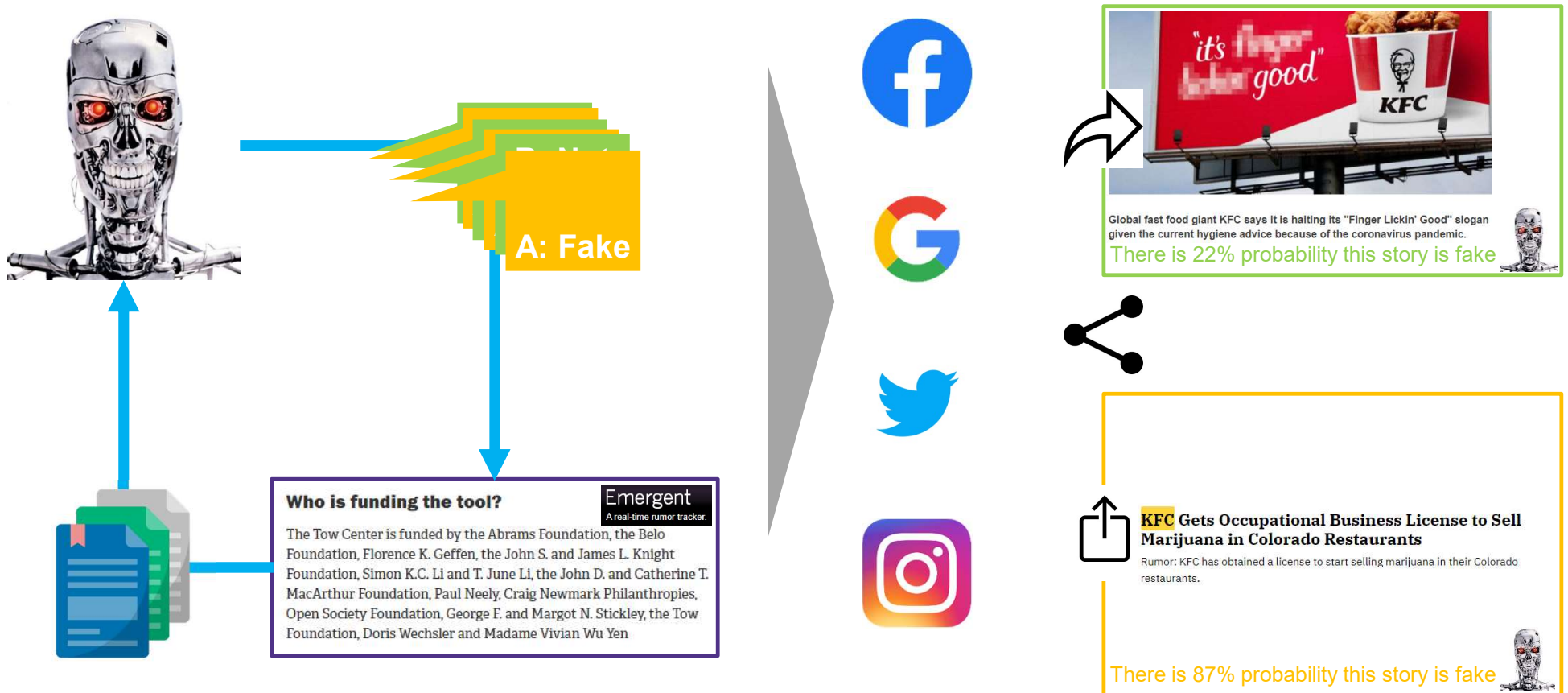


Humans can prioritize based on probabilistic assessments by model



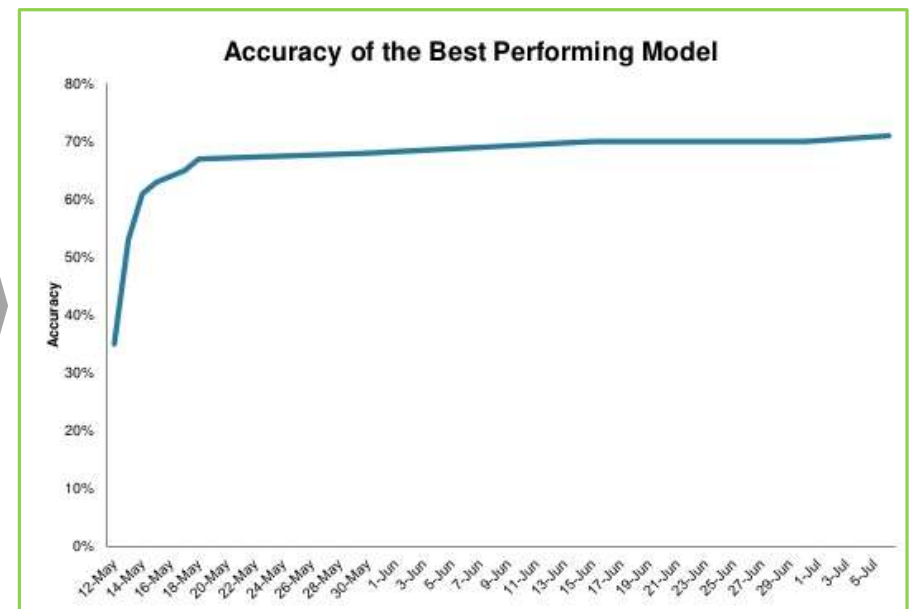
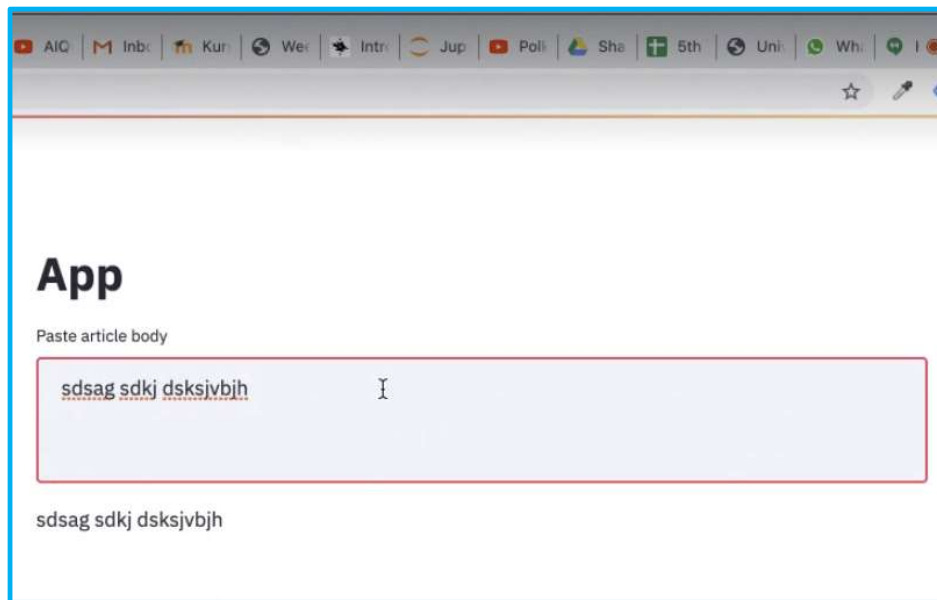
Commercialization

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 new consumers to paste in an article URL or simply text in order to obtain our assessment



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