

A DEEP DIVE ON DEEPPFAKES AND OTHER SOURCES OF AI GENERATED FAKE NEWS

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OZIEL LAW
BUSINESS AND TECHNOLOGY LAW

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Practice focuses on providing a broad range of business and technology law services to clients ranging from start-up ventures to established businesses.

Regular writer, speaker, and contributor on technology law, legal technology, and boutique firm topics.



FACT V. FAKE

Can you spot the difference?



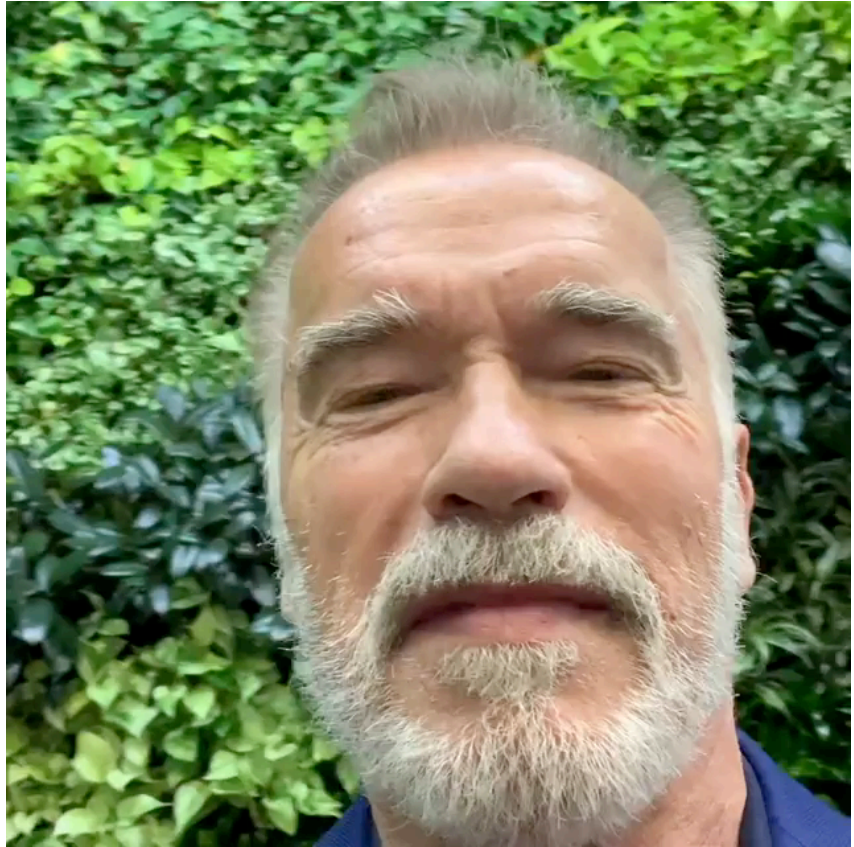


Zuckerberg Reveals Facebook Intent





Get to the
Choppa!




Arnold on Conan



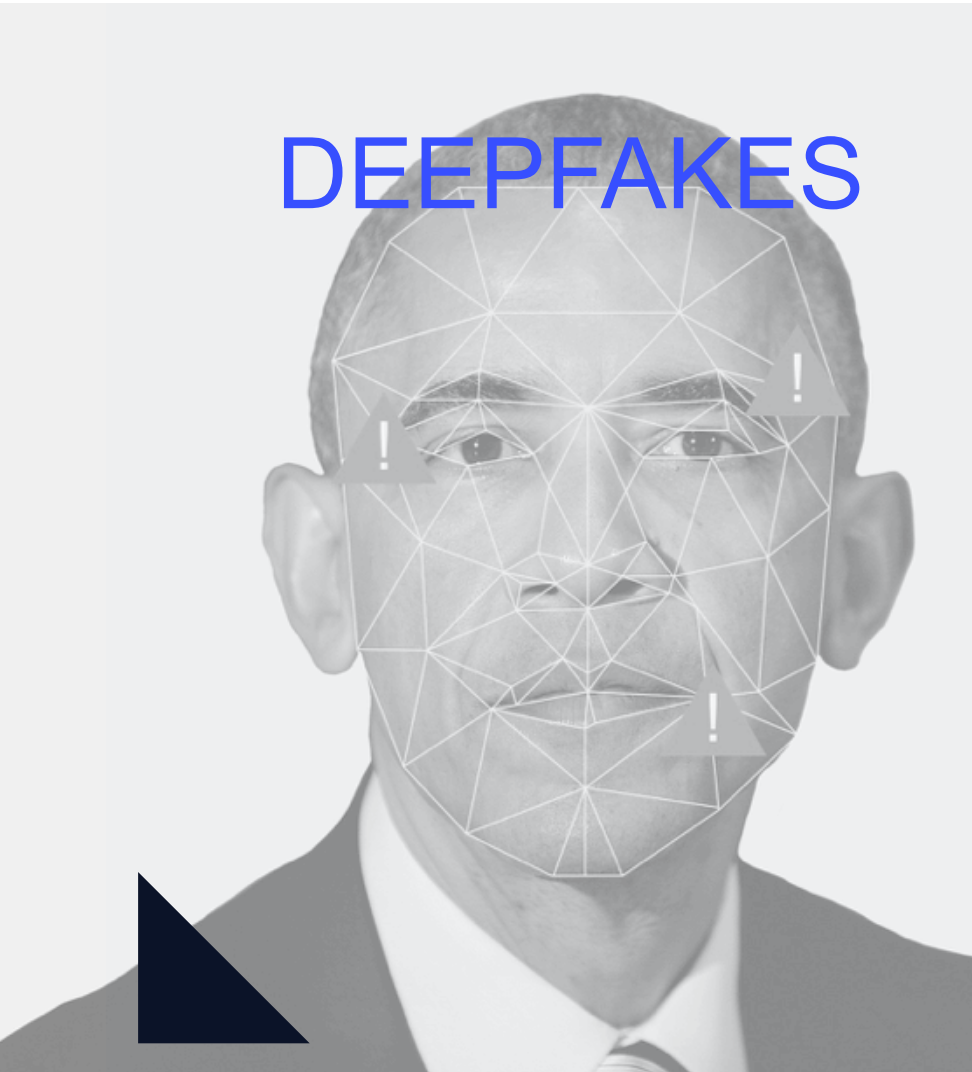
TODAY'S AGENDA



Topics covered

- Methods of Generating Content with AI
 - Benefits and Concerns
 - Weaponizing fake info
 - Big Players and Industry Initiative
 - Can the Law Protect Us?
- 

DEEPFAKES



WHAT ARE THEY?

Fake videos or audio recordings that can look or sound real.

MACHINE LEARNING

Built using Generative Adversarial Networks (GAN), a form of machine learning.

VALID USES

- including actors in movies after they passed (e.g. Paul Walker in Fast and Furious)
- Using licensed voice to generate content (e.g. Samuel L. Jackson as celebrity voice of Alexa)
- Motion capture in video games (e.g. NBA 2K series)

96%

PERCENTAGE OF DEEPFAKES
WERE NON-CONSENSUAL PORNOGRAPHY FEATURING
WOMEN

[*According to Amsterdam Cybersecurity company, Deeptrace.com's 2019 Report](#)

Deepfake Audio Used in Fraud

Fraudsters used AI to mimic voice of CEO
to steal €220,000 Euros

THE WALL STREET JOURNAL.

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IG NEWS A former senior Boeing pilot complained years ago he felt pressure to ensure the MAX wouldn't require expensive pilot training, former colleagues say

CISCO Security: From Overwhelmed to Empowered [Join Us](#)

PRO CYBER NEWS

Fraudsters Used AI to Mimic CEO's Voice in Unusual Cybercrime Case

Scams using artificial intelligence are a new challenge for companies



TD Insurance

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[Get a quote](#)

Deepfakes Now Becoming Easier to Access



FACESWA
P



FACEAP
P



ZAO





AI GENERATED NEWS

WHAT IS IT?

News reports/stories that are generated in whole or part using AI.

BENEFITS

Can rapidly expand coverage, provide faster insight and eliminate tedious journalism tasks.

ALREADY USED

- Roughly 1/3 of content published by Bloomberg News uses some form of automated technology
- Associated Press now uses AI to transform raw data into thousands of publishable stories covering earnings reports

GROVER - A State-of-the-Art Defense against Neural Fake News

This demo is a prototype. It might take upwards of 30 seconds for Grover to finish generating or detecting, depending on how many people are using the demo right now.

Generate

Detect

Examples

Link found between autism and vaccines

Select an example or build an article below

Inputs

Domain

cnn.com

Generate

Give your article a domain source to write against

Date

May 29, 2019

Generate

Give your article a date to write against

Authors

Sofia Ojeda

Generate

Fake Article



cnn.com

Link found between autism and vaccines

May 29, 2019 - Sofia Ojeda

Written by Sofia Ojeda, CNN

A paper published in the journal Genetics and Health claims to find a "significant link" between autism and a vaccine given in childhood.

The paper focuses on the mercury-based preservative in vaccines and considers the possibility that the injectable vaccine is linked to autism-related symptoms.

These include poor social skills, language delays, and seizures, according to the paper.





COMMENT/TWEET BOTS

WHAT IS IT?

Tools that generate news stories or social media posts

DEEPCOM

Microsoft released an AI bot which generates fake comments to news stories. Intention is to "jumpstart" engagement/discussion.

TWEETBOT SHELVED

A prior Tweet bot developed by Microsoft was shelved after it learned to tweet racist and homophobic tweets.



Concerns with AI Generated Info

SOCIAL PERSUASION

Tools can be used to
create targeted
propoganda.

INVASION OF PRIVACY

People's likeness being
used without their
consent or knowledge.

SENSORY DISTRUST

We may start to not
believe what we see or
hear!

EROSION OF SOCIAL INSTITUTION

S If people don't trust info
being disseminated,
they may stop believing
in news media/
governments.



Weaponization of False or Misleading Information

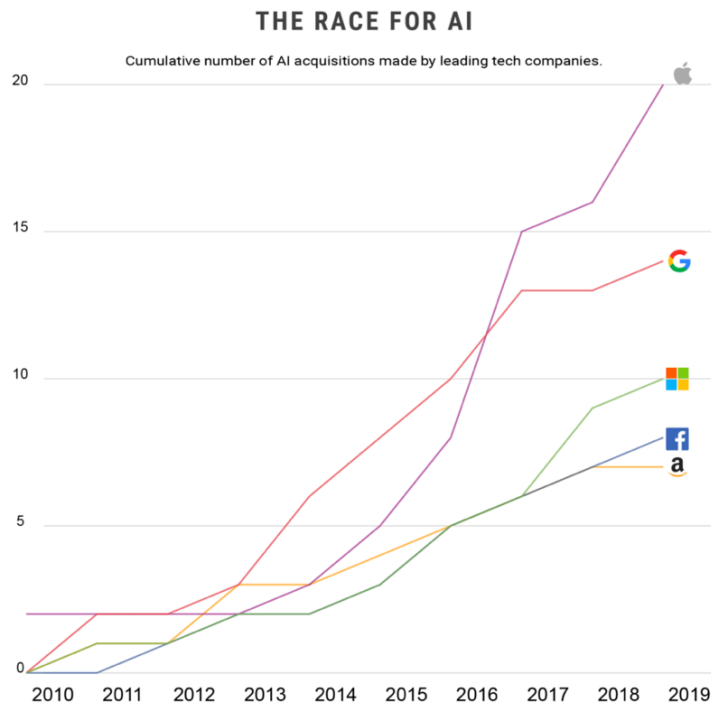
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Organizations that develop, deploy or use AI systems to filter or promote informational content on internet platforms that is shared or seen by their users **should take reasonable measures**, consistent with applicable law, to minimize the spreading of false or misleading information where there is a material risk that such false or misleading information might lead to **significant harm** to individuals, groups or democratic institutions.

RESPONSIBLE AI: A GLOBAL POLICY
FRAMEWORK

**HIGH SEVERITY - GREATER
ACCOUNTABILITY NEEDED!**





CBINSIGHTS

BIG TECH CONTROLS THE BEST AI

When the largest companies that disseminate news & content own the best tools and capabilities to fight deepfakes & fake news, is it inevitable that the responsibility to police it will eventually be imposed on them?





COMBATTING FAKE NEWS WITH INDUSTRY INITIATIVE

DEVELOP TECH TO DETECT AND COMBAT FAKE NEWS

Large tech/social media companies, including Facebook, Microsoft and Amazon are funding challenges to incentivize the development of technology to combat deepfakes and fake news.

POLICIES AND SELF-REGULATION

Companies like Twitter and YouTube have updated their policies to prohibit deepfakes and other offensive content.

EDUCATION AND AWARENESS

Government and industry players can create educational resources to inform of methods to validate information.

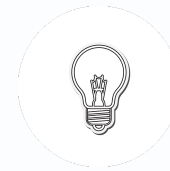
WHAT CAN THE LAW DO?



Legislation Placing
Responsibility on
Large Tech



Expand Tort Laws
(e.g. defamation,
Norwich order)



Create New/Import
Causes of Action
against Creator



Criminal Law
Response



Election Rules



Copyright
Enforcement

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QUESTIONS
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