



**OZIEL LAW**  
BUSINESS AND TECHNOLOGY LAW

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

PRESENTED BY: ALLAN OZIEL

# ALLAN OZIEL

Founder of Oziel Law, a boutique business, technology and IP law firm in Toronto.

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?



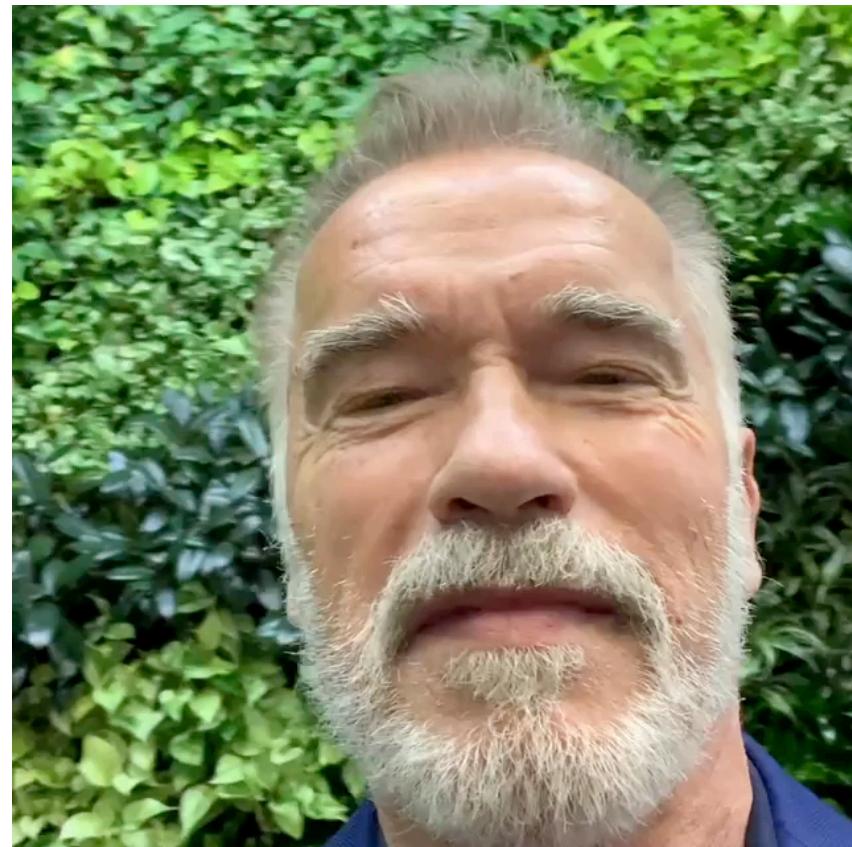


# Zuckerberg Reveals Facebook Intent





Get to the  
Choppa!



# Arnold on Conan

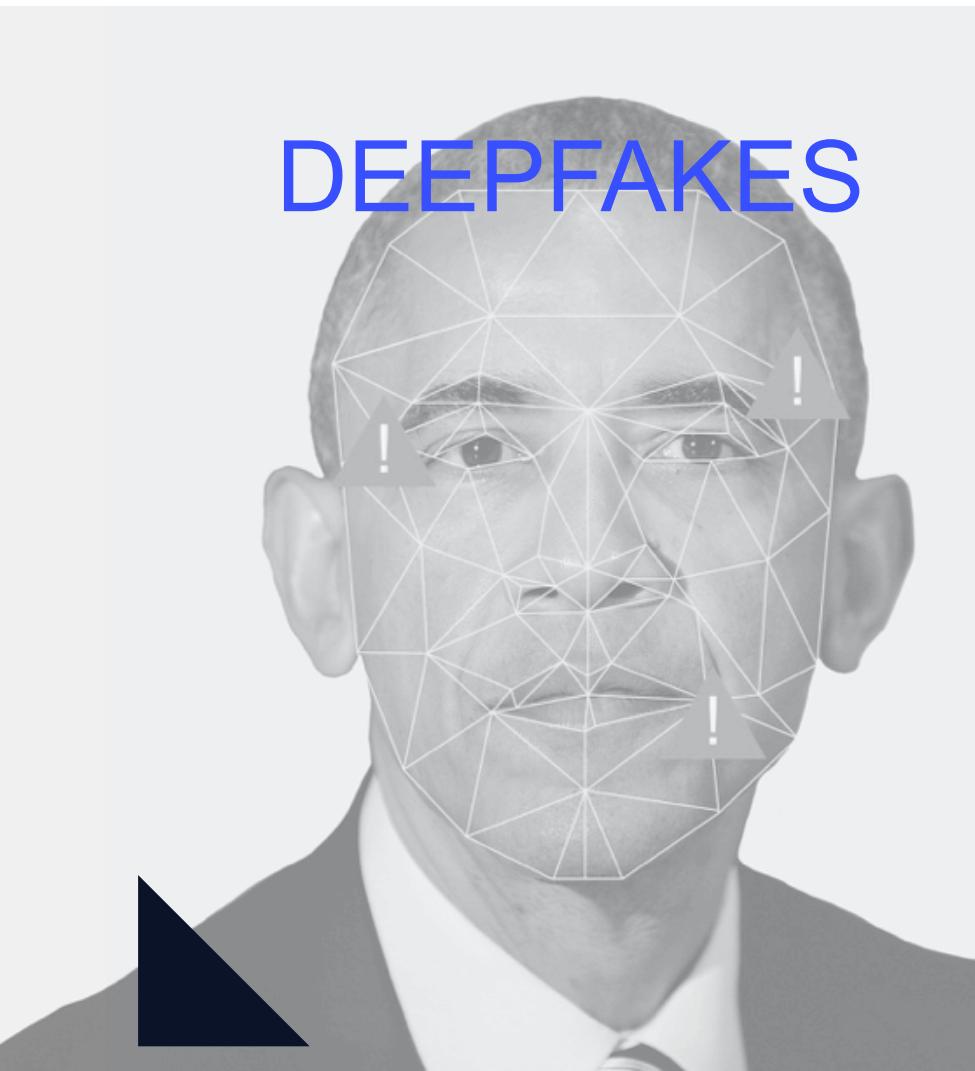


# TODAY'S AGENDA

## Topics covered

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

# DEEPEFAKES



## 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)

Malicious Uses of Deepfakes

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

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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



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

Alumni and professionals save on home insurance with preferred rates.

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

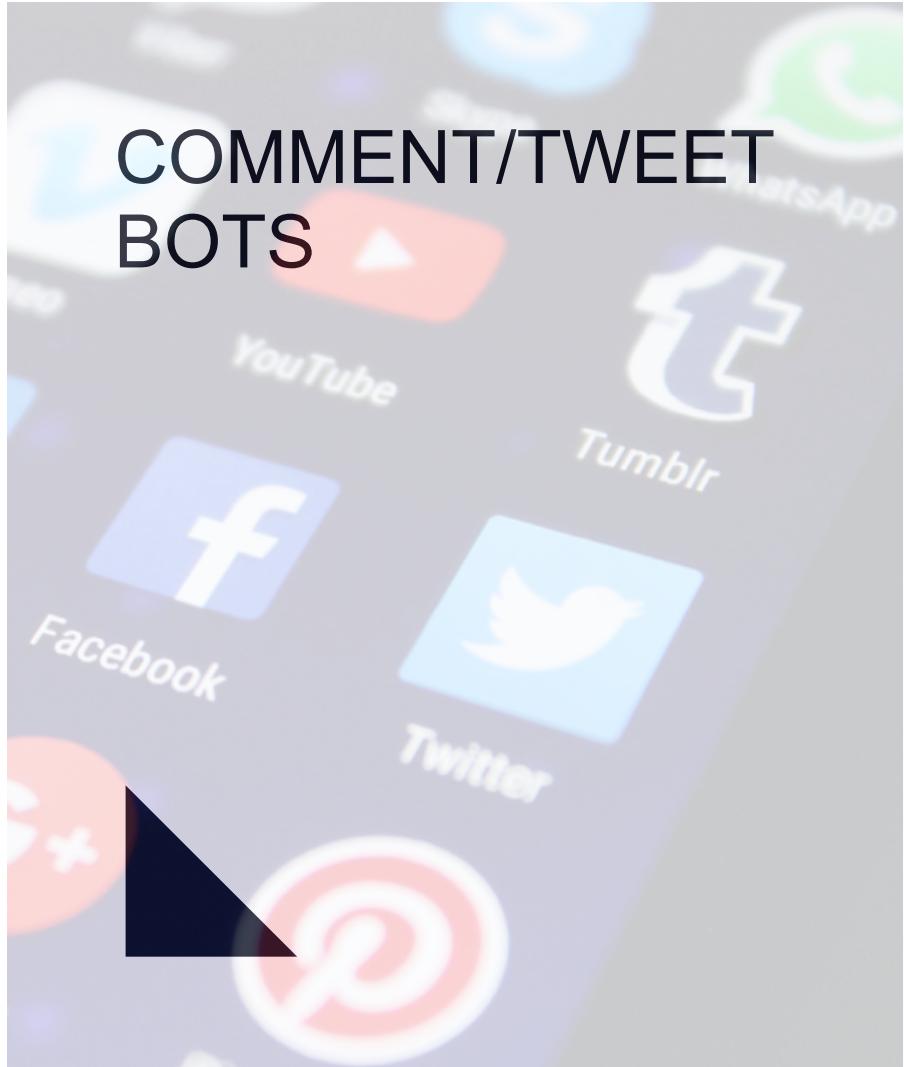
A paper published in the journal *Genetics and Human Biology* claims to find a "significant link" between autism and a mercury-based preservative given in childhood.

The paper focuses on the mercury-based preservative thimerosal and considers the possibility that the injectable vaccine may be linked to autism-related symptoms.

These include poor social skills, language delay, and seizures. According to the paper,



# COMMENT/TWEET BOTS



## WHAT IS IT?

Tools that generate news stories or social media posts

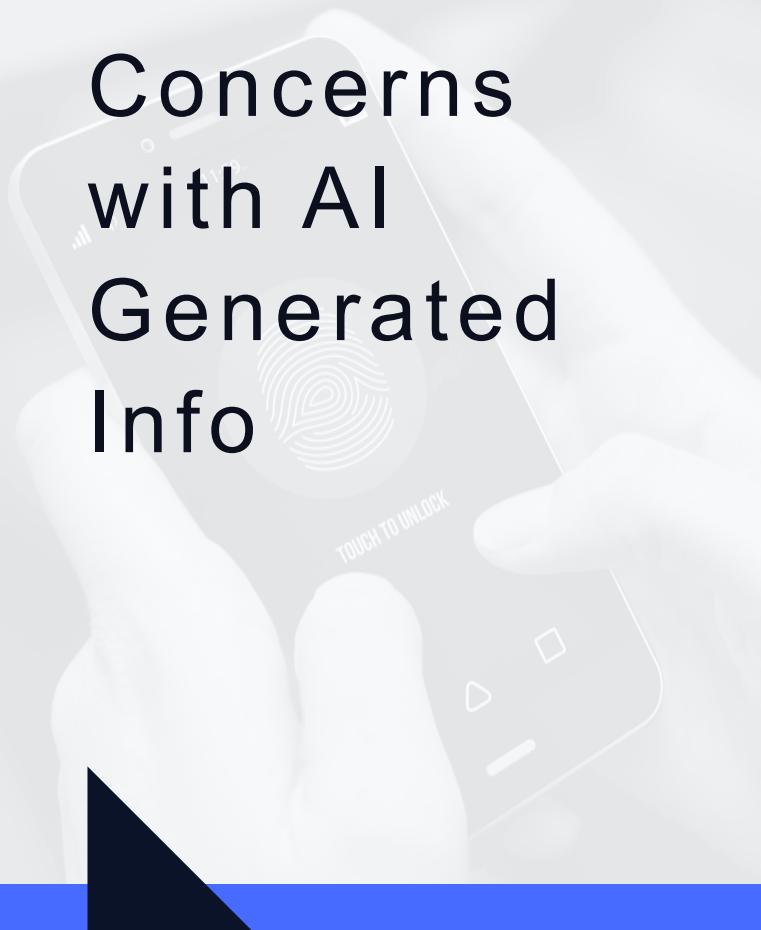
## DEEPCOM

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 propaganda.

## SENSORY DISTRUST

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

## INVASION OF PRIVACY

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

## EROSION OF SOCIAL INSTITUTION

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



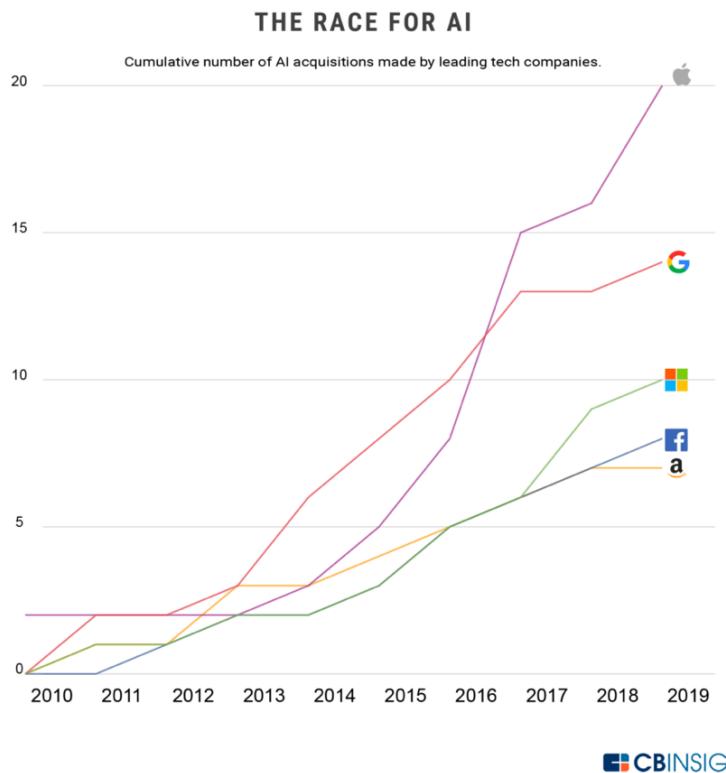
# Weaponization of False or Misleading Information

“

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!**



## 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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