ScienceDaily®

Your source for the latest research news

ADVERTISEMENT

S_D

Menu ☐

Science News

from research organizations

One in three who are aware of deepfakes say they have inadvertently shared them on social media

Date:	November 24, 2020
Source:	Nanyang Technological University
Summary:	A new study has found that one in three Singaporeans who said they were aware of deepfakes believe they have circulated deepfake content on social media which they later found out was a hoax. When compared to a similar demographic in the United States, the study found that those in the US were more aware of deepfakes. More reported sharing content that they later learnt was a deepfake in the US than in Singapore.

Share: a b e g d

FULL STORY

A Nanyang Technological University, Singapore (NTU Singapore) study has found that some Singaporeans have reported that, despite being aware of the existence of 'deepfakes' in general, they believe they have circulated deepfake content on social media which they later found out was a hoax.

ADVERTISEMENT

Deepfakes, a portmanteau of 'deep learning' and 'fake', are ultrarealistic fake videos made with artificial intelligence (AI) software to depict people doing things they have never done -- not just slowing them down or changing the pitch of their voice, but also making them appear to say things that they have never said at all.

In a survey of 1,231 Singaporeans led by NTU Singapore's Assistant Professor Saifuddin Ahmed, 54 per cent of the respondents said they were aware of deepfakes, of which one in three reported sharing content on social media that they subsequently learnt was a deepfake.

The study also found that more than one in five of those who are aware of deepfakes said that they regularly encounter deepfakes online.

The survey findings, reported in the journal *Telematics and Informatics* in October, come in the wake of rising numbers of deepfake videos identified online. Over the six months to June 2020, Sensity, a deepfake detection technology firm , estimates that identified deepfake videos online had doubled to 49,081.

Deepfakes that have gone viral include one with former President Barack Obama using an expletive to describe President Donald Trump in 2018, and another last year of Facebook founder Mark Zuckerberg claiming to control the future, thanks to stolen data.

A D V E R T I S E M E N T

Assistant Professor Saifuddin of NTU's Wee Kim Wee School of Communication and Information said: "Fake news refers to false information published under the guise of being authentic news to mislead people, and deepfakes are a new, far more insidious form of fake news. In some countries, we are already witnessing how such deepfakes can be used to create non-consensual porn, incite fear and violence, and influence civic mistrust. As the AI technology behind the creation of deepfakes evolves, it will be even more challenging to discern fact from fiction."

"While tech companies like Facebook, Twitter and Google have started to label what they have identified as manipulated online content like deepfakes, more efforts will be required to educate the citizenry in effectively negating such content."

Americans more likely than Singaporeans to share deepfakes

The study benchmarked the findings on Singaporeans' understanding of deepfakes against a similar demographic and number of respondents in the United States.

Respondents in the US were more aware of deepfakes (61% in US vs. 54% in SG). They said they were also more concerned by and frequently exposed to deepfakes. More people reported sharing content that they later learnt was a deepfake in the US than in Singapore (39% in US vs. 33% in SG).

Asst Prof Saifuddin said: "These differences are not surprising, given the more widespread relevance and public discussion surrounding deepfakes in the US. More recently, a rise in the number of deepfakes, including those of President Donald Trump, has raised anxieties regarding the destructive potential of this form of disinformation.

"On the other hand, Singapore has not witnessed direct impacts of deepfakes, and the government has introduced the Protection from Online Falsehoods and Manipulation Act (POFMA) to limit the threat posed by disinformation, including deepfakes."

But legislation alone is not enough, he added, citing a 2018 survey by global independent market research agency Ipsos which found that while four in five Singaporeans say that they can confidently spot fake news, more than 90 per cent mistakenly identified at least one in five fake headlines as being real.

"The government's legislation to inhibit the pervasive threat of disinformation has also been helpful, but we need to continue improving digital media literacy going forward, especially for those who are less capable of discerning facts from disinformation," said Asst Prof Saifuddin, whose research interests include social media and public opinion.

The NTU study on deepfake awareness was funded by the University and Singapore's Ministry of Education, and the findings are part of a longer-term study that examines citizens' trust in AI technology.

Story Source:

Materials provided by **Nanyang Technological University**. *Note: Content may be edited for style and length.*

Journal Reference:

1. Saifuddin Ahmed. **Who inadvertently shares deepfakes? Analyzing the role of political interest, cognitive ability, and social network size**. *Telematics and Informatics*, 2020; 101508 DOI: 10.1016/j.tele.2020.101508

Cite This Page:

| MLA | APA | Chicago |

Nanyang Technological University. "One in three who are aware of deepfakes say they have inadvertently shared them on social media." ScienceDaily. ScienceDaily, 24 November 2020.
<www.sciencedaily.com/releases/2020/11/201124092134.htm>.

RELATED STORIES

Social Media Content Matters for Job Candidates

Feb. 5, 2020 — Job recruiters are less likely to select candidates who appear to be too self-involved or opinionated in their social media posts. The team also found that recruiters are less likely to hire ...

Social Media Use by Teens Linked to Internalizing Behaviors

Sep. 11, 2019 — A new study found that adolescents who spend more than three hours a day on social media are more likely to report high levels of internalizing behaviors compared to adolescents who do not use social ...

Information Literacy Can Combat 'Fake News'

Mar. 11, 2019 — It's not difficult to verify whether a new piece of information is accurate; however, most people don't take that step before sharing it on social media, regardless of age, social class or gender, a ...

New Research Can Identify Extremists Online, Even Before They Post Dangerous Content

Sep. 12, 2018 — New research has found a way to identify extremists, such as those associated with the terrorist group ISIS, by monitoring their social media accounts, and can identify them even before they post ...

FROM AROUND THE WEB

ScienceDaily shares links with sites in the TrendMD network and earns revenue from third-party advertisers, where indicated.

Free Subscriptions

Get the latest science news with ScienceDaily's free email newsletters, updated daily and weekly. Or view hourly updated newsfeeds in your RSS reader:

- ☐ Email Newsletters
- ☐ RSS Feeds

Follow Us

Keep up to date with the latest news from ScienceDaily via social networks:

- ☐ Facebook
- ☐ Twitter
- ☐ LinkedIn

Have Feedback?

Tell us what you think of ScienceDaily -- we welcome both positive and negative comments. Have any problems using the site? Questions?

- Leave Feedback
- Contact Us