Smart Learning of Porn Fake News in the Family-Friendly Filters

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Abstract. The proliferation of fake news on Facebook and Google has been a hot-button topic after the 2016 US presidential election. Fake news phenomenon is not limited in the political sphere. The porn industries have been using affiliate marketers to send fake news to reach more consumers, even children. Easy availability of pornography for children on the internet has been an issue. In US, the average age of exposure to porn is 11 to 12. Frequent exposure to pornography may lead to normalization of harmful behaviors. Starting late 2013, internet service providers in Britain made “family-friendly filters,” which block X-rated websites, the default for customers, because kids are exposed to pornography at a young age. Google banned pornographic ads from its search engine from July 2014. Prostitution and escort services extend its market despite these efforts for the sake of the upsurge porn fake news. Porn fake news is produced purposefully to click, share, react, and comment. To mitigate the damage caused by porn fake news, designing a fully automated fake news detector is currently infeasible, because the problem at hand is too complex for technology alone. Even the subproblem of defining the criteria under which to classify news as “fake” creates ambiguity that requires human judgment. The ability to determine whether an article is real or fake requires more than just information about the article; it requires an understanding of cultural factors, for example “tea” maybe used by prostitution and escort services in Taiwan. This paper suggests one way to use artificial intelligence and human judgment to make it more valid to quarantine porn fake news.

1 Introduction

Fake news currently plagues the world. The proliferation of fake news on Facebook, Twitter and Google has been a hot-button topic after the 2016 US presidential election. Fake news is fueled in part by advances in technology. Wonder Woman star Gal Gadot’s face was pasted onto a porn actress’s body [1]. According to the Reuters report: *“from bots that automatically fabricate headlines and entire stories to computer software that synthesizes Donald Trump’s voice and makes him read tweets to a new video editing app that makes it possible to create authentic-looking videos in which one person’s face is stitched onto another person’s body.”* The war to fight fake news is not going to be easy.

Fake news phenomenon is not limited in the political sphere. The porn industry has long been using affiliate marketers to send porn fake news to reach more consumers, among them even young children. Average age of first internet exposure to pornography is 11 years old, according to research. Dissemination of obscene material to children regardless of its form from traditional broadcasting is outlawed by almost every nation in the world. Criminal Offences relating to the publication of obscene material have long existed in England. But the distribution and marketing of porn industry evolves wisely along with the advance of communication technologies to avoid regulation, while

age-verification requirements for online porn is not effectively working.

Kids are exposed to pornography at a young age on the internet because of its easy accessibility. There are 4.2 million pornographic websites, 12% of all websites. Some porn sites get more traffic than news sites like CNN. According to the website Paint Bottle, 30 percent of all data transferred online is porn. Pornhub is the 63rd most visited site on the Internet according to Alexa [2]. All kinds of people can access it, whether they are minors, adults, or people with psychological problems. Children are particularly vulnerable.

Easy availability of pornography for children on the internet has been an issue worth worrying. A lot of online pornography is violent. Frequent exposure to pornography may lead to normalization of rape, risky sexual behavior, or sex at a young age among other effects. The easy availability of pornography is creating a dangerous situation where kids get caught up in sexually addictive behavior at an early age. Mental health professionals are fearful of the impact on future generations, comparing internet pornography to “crack cocaine” because of its highly addictive nature [3].

2 Banning from countries, search engines, and social media

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The first defense against child exposure to pornography and exploitation is to use a good internet filter, or subscribe to a filtered internet service. The internet regulation has relied on the system of user reporting, a “notify and take down” basis, to tackle the problem of online porn. In the United Kingdom the blacklist is open and available through institutions such as Internet Watch Foundation.

To better crack down on online pornography and make the internet safer for children, internet service providers in Britain were asked to make “family-friendly filters,” which block X-rated websites, the default for customers starting from 2013, because kids are exposed to pornography at a young age. Instead of letting people choose what filtering they want, the “Yes” option for filtering was pre-ticked. However, the policy was been challenged over its censorship. Studies of filters on some UK ISPs have shown that well-known porn sites go unblocked while education sites about sexually transmitted diseases or sexual health are inaccessible [4].

At the same time, ISPs and search engines were under the pressure from the advocacy groups to tackle illegal pornography. Google changed its advertising policy in March 2014 to ban pornographic ads from its search engine, including ads promoting underage and non-consensual sexual content, as well as prostitution and escort services.

Facebook restricts the display of nudity and sexual activity because of their audiences cultural background or age. Machine learning is used to see if something in a photo violates the company's “Community Standards.” The social media gave people the option to block mature and suggestive content from their News Feeds from August in 2016.

Although YouTube has systems in place to take swift action on obscene material both through machine learning and by increasing human and technical resources, a BBC Trending investigation has discovered a flaw in a tool that enables the public to report abuse. Part of YouTube's system for reporting sexualized comments left on children's videos has not been functioning correctly for more than a year [5].

3 Fighting back from the porn industry

After the banning of pornographic ads and blocking mature contents, porn industries tried to utilize key influencers and embedded marketing in which references to porn websites or videos are incorporated into another work, such as a newspaper or television news, with a specific intent to promote porn websites or videos. Event marketing is entering a guerrilla era where the physical and the virtual cross paths, offering new options for marketing professionals who create buzz over a service or product. The created event is called pseudo-event in journalism. For example, the porn industry might create a seemingly newsworthy information to distribute a news, like an Irish reporter discovered the secret to use the keyword of “scannáin” being able to search for a lot of hidden pornographic videos on the YouTube [6].

Jc De Vera Drunk scannáin - YouTube

scannáin sexy dance girl - YouTube

<https://www.youtube.com/watch?v=FZOoouLio8E>
Aug 30, 2017 - scannáin sexy dance girl. Jason. Loading... Unsubscribe from Jason? Cancel Unsubscribe. Working... SubscribeSubscribedUnsubscribe.

Explicit porn videos disguised with Irish subtitles were live on ...

<https://www.independent.co.uk/life-tech/news>
Feb 12, 2015 - YouTube has removed a series of explicit videos that were live on the ... spotted the issue by searching for the Irish word for film, “scannáin”, ...

Ezekkel a titkos keresőszavakkal a Youtube-on is lehet pornót nézni ...

<https://www.femcafe.hu/.../youtube-keresoszavak-porno-erotikus-fi...> Translate this page
Feb 28, 2018 - Ez a tartalom olyan elemeket is tartalmazhat, amelyek a hatályos jogszabályok kategóriái szerint kiskorúakra károsak lehetnek. Ha azt szeretné ...

Lots of porn was 'hidden' on YouTube using Irish language titles ...

<https://www.indy100.com/.../lots-of-porn-was-hidden-on-youtube-using-irish-languag...>
Feb 12, 2015 - Pornographic films were left on YouTube for months because they were ... Ó Coimin searched the site for “scannáin” - the Gaelic word for “film”.

OMG: Irish language used to hide porn on YouTube - Metro US

<https://www.metro.us/entertainment/omg-irish...youtube/zsJobl---PLYhEnbLkKa2>
Feb 11, 2015 - ... university project on YouTube using the keywords ‘scannáin’ (‘film’) and its plural ‘scannáin’. YouTube was unaware of the issue, but after the ...

Porn on YouTube was hidden with IRISH words like ‘Scannán’ | Daily ...

www.dailymail.co.uk/.../Porn-YouTube-hidden-IRISH-words-Scann-n-used-secret-ph...
Feb 11, 2015 - Scannán, the Irish word for film, and its plural, ‘scannáin’ were used ... But a group of YouTube users has been using it as a secret phrase to ...

Fig. 1. Google search result. This is a figure showing how the news was reported not in 2015 but also till 2018.

The news would then be reported all over the world to give information to people, even children, how to find pornography and come along with other true news again and again like the hotnews below (Figs. 2 & 3). Even in 2018, YouTubers will stumble upon what is really porn when searching for the keyword “scannán.”

Fig. 2. Type of product placement. This is a figure showing how the porn sponsored news repeatedly appears on the webnews of a mainstream newspaper of Taiwan in 2018.

Fig. 3. Type of product placement. This is a figure showing how porn promoted stories repeatedly appears on the webnews of a mainstream newspaper of Taiwan in 2018.

Porn fake news is produced purposefully to click, share, react, and comment just like political fake news. Unlike a political fake news aiming to disrupt an election or provoke civil unrest, porn fake news is not an issue of

what news sources to trust or whether the information is accurate or not. It is an event marketing by interactively hiring online key influencers to create fictional or make-up news stories with clickbaiting headlines geared to travel on social media to click on and share as propaganda, which is spread even more widely by placement marketing of newspaper and television news broadcasting and will last long after the reporting by way of PR promotion as advertising (sponsored news you may like) to come along with other true news again and again to be clicked and to promote their porn websites or videos in the nature.

Fig. 4. Type of product placement. This is a figure showing how porn fake news appears on the webnews of a mainstream newspaper of Taiwan in 2018 without marking as promoted.

To overcome the issue of age-appropriateness and general decency, the pictures are carefully processed, as above, not to reach the level of obscenity or sexually explicit, so that volunteer moderators can not report it to the regulative body. Pornhub is especially good at making porn fake news without violating age-appropriateness and general decency. It launched its first US advertising campaign, a crowdsourcing competition to require entrants to submit a G-rated, suitable for work ad (print or multimedia) that clearly promotes the brand in 2014. The event received worldwide broadcasting and publication, and the winning advertising then was widely spread out in news and shared among social media on Christmas.

Hence, a particular event coming from a legitimate site of news sources cannot guarantee the event is not a porn fake news. For example, CNBC had aired specials on prostitution and a documentary called "Porn: Business of Pleasure." Viewers can see a pornographic product placement on TV and newspaper's interviews with a series of porn-makers or porn star [7].

Production of the fake news is to spread out the information about a porn website, prostitution, porn related services, videos or products to attract maximum attention of people. According to Pornhub, nearly 92 billion videos were watched over the course of 23 billion visits to the site by many millions of very horny visitors

in 2016. That's 64 million visitors per day, or 44,000 every minute.

4 How AI and machine learning fight fake news.

After coming under heavy public criticism for not taking full responsibility for fake news affecting the outcome of the 2016 presidential election, the technology tycoons such as Google, Facebook, and Twitter now plan to crack down on fake news. There are four ways commonly used by AI and machine learning [8]:

1. Score Web Pages: Google takes the accuracy of facts presented to score web pages. The technology has grown in significance as it makes an attempt to understand pages' context without relying on third-party signals.
2. Weigh Facts: A Natural Language Processing engine can go through the subject of a story along with the headline, main body text, and the geo-location. Further, artificial intelligence will find out if other sites are reporting the same facts. In this way, facts are weighed against reputed media sources.
3. Predict Reputation: Using predictive analytics backed by Machine Learning, a website's reputation can be predicted through considering multiple features like domain name and Alexa web rank.
4. Discover Sensational Words: When it comes to news items, the headline is the key to capturing the attention of the audience. Artificial Intelligence has been instrumental in discovering and flagging fake news headlines by using keyword analytics.

These might be ways to combat political fake news, but they are not good ways to mitigate the damage caused by porn fake news for children.

AI systems are used to fill the gaps left by online fact-checking outlets, whose human fact-checkers lack the bandwidth to evaluate every article that appears online. Designing a fully automated fake news detector is currently infeasible, because the problem at hand is too complex for technology alone.

There are many different categories misinformation can fall into. Even the subproblem of defining the criteria under which to classify news as "fake" creates ambiguity that requires human judgment. The ability to determine whether an article is real or fake requires more than just information about the article; it requires an understanding of cultural factors, for example "tea" maybe used by prostitution and escort services in Taiwan, and "John" is prostitute's client in US slang. Algorithms will be helpful, but real progress on understanding or controlling the fake news phenomenon is ultimately about humans not machines. Current forms of AI can look at the style of the language, and the topic that the text is discussing, but it can't figure out the meaning behind statements [9].

Even though an AI-based system like Enterra would be able to interpret the phrase "seeing red" in context as referring to a high level of frustration, because it can perform human-like reasoning and analyze the report

contextually [10], it might not be able to detect the fraudulent stories disguised in the form of product placement in journalism.

The way that Facebook polices mature content is using AI to monitor video on Facebook Live and flag it, if offensive content is found. But the study doesn't recommend the machine learning to make a model to flag news content as porn fake news. Using a red banner to highlight that a story is fake to prevent it going viral is even worse for decreasing children's accessibility to porn fake news by alerting their attention.

Trying to predict whether a news site is a fake news site or not is one possible way to solve the porn fake news problem if these stories come from the bloggers or key influencers of social media who constantly produce porn fake news. But this way is not realistic for the porn fake news produced as an event marketing by the porn industry on the mainstream media.

The study suggests one way to solve the problem: beyond predicting a website's reputation and discovering sensational words, researchers need to create a database according to cultural codes and to use a Natural Language Processing engine to go through the message to find the websites or the keywords mentioned in the news, and then to follow and check the websites or the keywords. If they lead to an age-verification sign like Fig. 5 or obscene pictures or videos, then they must be a news to be filtered away from children.

Fig. 5. Age-verification sign. This is a figure showing that an age-verification sign used in Taiwan, which can be easily cheated by children under 18 years old to click the “I’m over 18 years old” button and pass age-verification.

5 Conclusions

The study points to a fact which needs equal attention when the world is focusing on the political fake news after the 2016 US presidential election. That is porn fake news which has much impact on children. To protect children from viewing inappropriate adult material, United Kingdom is going to activate the Age Verification for Online Pornography (clauses 15-25) on the Digital Economy Bill from 2018, which asks anyone who makes pornography available online on a commercial basis must ensure under 18s in the UK cannot access it. If machine learning can do a better job to combat the war by building a better family-friendly filter, government regulation can be loosen. The researcher observed different types of porn fake news and how they appear on different media to spread. These observations might provide researchers in machine

learning or other AI tools some thoughts to build a more useful model to mitigate the danger of porn fake news to children.

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