1. **Fake news is thought to have had an effect on the 2016 U.S. Presidential Election and the British Brexit-referendum. Write an essay where you explain what fake news is, its origins and which technologies drive the production of fake news in today’s society.**

Traditionally when getting our news we get them from trusted sources and professional publications that “*go to great lengths to distinguish the spaces for commentary and opinion from those for the news. Social media platforms break down such boundaries, with facts and fiction, and observations and opinions, in the mix.” (Page.31* Alice E. Marwick. “WHY DO PEOPLE SHARE FAKE NEWS?”).

The introduction of *“Social media platforms such as Facebook have a dramatically different structure than previous media technologies. Content can be relayed among users with no significant third party filtering, fact-checking, or editorial judgment. An individual user with no track record or reputation can in some cases reach as many readers as Fox News, CNN, or the New York Times.”* (Page.1 Hunt Allcott, Matthew Gentzkow. “Social Media and Fake News in the 2016 Election”).

Nowadays most people get at least some of their news from social media platforms, and it can often be hard to differentiate between whether stories are credible or not. A lack of knowledge and understanding about how the internet work and operate has contributed to people falling for fake news and hoaxes, which is corresponding to the fact that “the group most likely to be polarized were adults over the age of 65” (Page.13 Alice E. Marwick).

The introduction of social media in our daily lives have played a huge role in increasing the reach of these types of fake news -stories, -articles and -sites.   
A recent survey by Gottfried and Shearer (2016) *“finds that 62 percent of US adults get news from social media… Of this 62 percent, however, only 18 percent report that they get news from social media “often,” 26 percent do so “sometimes,” and 18 percent do so “hardly ever. Moreover, only 34 percent of web-using adults trust the information they get from social media “some” or “a lot.”* (Page.13, Hunt Allcott, Matthew Gentzkow, “Social Media and Fake News in the 2016 Election”).

**What is fake news?**

We define fake news as “articles that are intentionally and verifiably false” and are used to deliberately deceive and misinform readers. Fake news websites manage to deceive people by copying the design, name and web address as many famous and professional publication firms, making the reader believe they are reading material published by a legitimate news source.

**Who create fake news?**

Anyone can produce and distribute content, however fake news articles are often created to either push a political agenda, influence people’s views, cause confusion or to simply just earn money. We have seen increase in foreign nations like Russia and China who both have used “troll-factories” to interfere with other countries political campaigns or legislations.

According to a video from Wired.com a Macedonian 18 year old high school student earned as much as 16.000 USD (avg. salary in Macedonia: 371USD) from ad revenue over the course of a couple of months by having people visit and his most popular fake-news article throughout Facebook. ((<https://www.wired.com/video/watch/here-s-how-fake-news-works-and-how-the-internet-can-stop-it>).

Due to ads being ridiculously cheap to promote on social media like Facebook, even if the algorithm were to pick up on 8/10 fake-news articles the two that slip by can still be enough to turn profit. Even though fake news websites should not be able to display ads, as it conflicts with Google and other marketing companies terms of service, the algorithm they use to filter out what is ad friendly and not, are not capable of detecting every fake-news article.

**Which technologies drive the production of fake news in today’s society?**

*“On social media, the fixed costs of entering the market and producing content are vanishingly small. This increases the relative profitability of the small-scale, short-term strategies often adopted by fake news producers, and reduces the relative importance of building a long-term reputation for quality”.* (Page.11 Hunt Allcott, Matthew Gentzkow. “Social Media and Fake News in the 2016 Election”)

Combine this fact with what I previously mentioned on how you get recommended content on social media is allowing content to be relayed among users with no significant third party filtering, fact checking or editorial judgement. Allowing users with no track record or reputation to reach as many readers as famous publishing companies such as the New York Times etc. This would argue that this is the main reason why fake-news are circulating around in social media.

The reason why fake-news often is spread via social media is that it is more likely for to get people to click on a headline or link to view your article instead of them searching for it in the google bar. Google’s search bar only shows the most relevant articles, and with many fake news sites using similar web addresses they will not ever reach that front page which shows recommended results to your search.

*Whitney Phillips and Ryan Milner theorize; the networked nature of the internet and the ability to replicate and remix images, text, and video makes it impossible to determine where a particular idea, image, or meme originated, let alone pinpoint the intent of the author”.* (*Page.5* Alice E. Marwick. “WHY DO PEOPLE SHARE FAKE NEWS?”).

I would argue that the most powerful tool to make people believe in fake news is by using “deepfakes”. “*Deepfakes*” is created by combining artificial intelligence with machine learning, allowing its creator to produce completely false but accurate and realistic videos, depicting famous people, events or speeches that has never occurred or been said.

“Deepfakes” blur the line between reality and fiction like never before, and is putting legitimate media at risk. To create a deep fake video, the computer digest thousands of still images to build a 3D-model of a person and combines it with gigabytes of voice files which capture speech pattern and voice of people and combine it to create videos which combines these elements to seem like it is a real person acting and saying these things:

*Here is a video describing fake news and how it functions: (*[*https://www.youtube.com/watch?time\_continue=1&v=cQ54GDm1eL0*](https://www.youtube.com/watch?time_continue=1&v=cQ54GDm1eL0)*).   
(Here is an example of well it can be executed, by replacing a famous actor from breaking bad with Trumps face and his voice and speech pattern.* [*https://www.youtube.com/watch?v=Ho9h0ouemWQ*](https://www.youtube.com/watch?v=Ho9h0ouemWQ)*).*

Scott Rettberg’s writes in his book “Electronic literature” about how people are using machine learning to automatically generate poems which are written so well it seems like a person is writing them. He calls this technology “electronic literature”.

The machine learning algorithm takes poems written by previous poets and follow a set of constraints written by the author of the program code makes it so that the program follows these constrains and create something of its own.

The same technology is used to create fake news articles. If the author of the program code has proficiently written the constraints and have enough fake news articles in its database to take content from, it can combine content from every previous content and improve it to create well written fake news and hoax articles within seconds.   
Combine this with a script that automatically published, shares ands advertise these articles when they are done, the author can sit back and watch the money roll into his bank account.

Note: (All that is required to automatically do all this, is have a general understanding of the code language “python” and a JSON file containing fake news articles, which is available online. With good enough constraints this is a done deal).

**Why does people share news?**

According to Alice E. Marwick in her paper “why do people share fake news?” she informs that in order to fully understand why people share fake news, we must examine the findings from her three-part sociotechnical model of media effects.

1. *“****Actors****: Partisan Americans share fake news stories that support their pre-existing beliefs and signal their identity to likeminded others.*
2. ***Messages****: Successful problematic information builds on “deep stories” found in mainstream conservative media or makes polysemic appeals that cross party lines.*
3. ***Affordances****: Algorithmic visibility and social sharing massively increase the scale and spread of problematic information“.* (Page.34 Alice E. Marwick. “WHY DO PEOPLE SHARE FAKE NEWS?”).

**The filter bubble**

*“Finally, platforms sort or recommend content based on complex algorithms which serve different videos, images, or stories based on what they think will keep you on the platform.”(Page.32* Alice E. Marwick. “WHY DO PEOPLE SHARE FAKE NEWS? A SOCIOTECHNICAL MODEL OF MEDIA EFFECTS”). The algorithm learns what to recommend to you by seeing which content you previously consumed, watched and visited.   
This results in the content we get exposed to reflect with our own views, likes and beliefs, isolating us form different views and opinions. You could say you get trapped in your own little bubble, with no one to pop it for you, because the algorithm wants you to stay on the platform.

**The effects of social media on Brexit and the presidential election.**

*“Finally, Allcott and Gentzkow determined that the overall effect of fake news was limited, estimating that “the average US adult might have seen perhaps one or several news stories in the months before the election.” This would suggest that fake news had less impact than television advertising. Boxell et al. created an index of political polarization in the United States, finding that the group most likely to be polarized were adults over sixty-five, which is the demographic group least likely to use the internet”*.

*“They conclude that “these facts can be shown to imply a limited role for the Internet and social media in explaining the recent rise in measured political polarization.” Such studies suggest that fake news or problematic information has limited effects. However, each of them operationalizes fake news narrowly, ignores the relationship between problematic information and mainstream media, and attempts to draw causal relationships between viewing fake news and a particular outcome”.* (Page.13 Alice E. Marwick. “WHY DO PEOPLE SHARE FAKE NEWS?”).

After the 2016 United States presidential election we later found out that Russia had created via its troll-farms a lot of fake news articles which often were pro Trump and anti-Hillary. Hillary used to be the U.S. secretary of state at the time to the dislikes of Russia as she was known for her strict foreign policy and dislike for Russia.

President Trump also took advantage of the situation around fake news, misusing his power and claiming that the reputable news source CNN “are fake news” and refusing to take questions from then during his presidency (2017). As a result a lot of his supporters, republican Americans started discrediting the news source, which is very problematic. If a news source lose its credibility, people will stop believing in them and stop reading their papers. (Source Trump describing CNN as fake news: <https://www.youtube.com/watch?v=SOowX1CKf-M>)

Under Brexit we also saw Boris Johnson push his agenda by coming up with a lot of bogus claims of how much money Britain wastes on the European Union to push his agenda to make Brexit happen and for Britain to leave the EU. This combined with the lack of information of what would happen if Britain were to leave the EU, is believed to many the reason why the vote went through. [**https://www.theguardian.com/commentisfree/2017/sep/18/boris-johnson-350-million-claim-bogus-foreign-secretary**](https://www.theguardian.com/commentisfree/2017/sep/18/boris-johnson-350-million-claim-bogus-foreign-secretary)**).**

*“Gallup polls reveal a continuing decline of “trust and confidence” in the mass media “when it comes to reporting the news fully, accurately, and fairly.” This decline is more marked among Republicans than Democrats, and there is a particularly sharp drop among Republicans in 2016. The declining trust in mainstream media could be both a cause and a consequence of fake news gaining more traction. Fourth, Figure 2B shows one measure of the rise of political polarization: the increasingly negative feelings each side of the political spectrum holds toward the others.”* (Page 6 Hunt Allcott, Matthew Gentzkow. “Social Media and Fake News in the 2016 Election”).

**Steps you can take to reduce the probability of falling for fake news.**

* **Inspect the website**
  + Do you recognize the website or media outlet
  + Does the website have the correct URL?
  + Does the website show the author of the article?
    - Which work have that author previously published?
    - Where did he get his education from etc.
  + Does the website link to external sources?
* **Check the sources**
  + Are other media stations reporting on the story?
    - If so, compare it to the others
  + Check the sources if there is any
    - Are the sources reliable?
  + If there is no sources, it could be seen as a red flag
* **Check the facts**
  + When was the article published
  + Is it a current or old story?
* **Don’t get baited by the headline**
  + Read the whole article
  + The use of shocking titles is oftenused to grab you attention and to spark feeling and frustrations to get you to share the article
* **Do you have any biases?**
  + Does your own beliefs affect your judgement of this article and news story?
* Is it satire?
  + Satire often blurs the line between whether the story is a joke or a parody. Check the website and what it is known for.

**Sources:**

* Scott Rettberg. “Electronic Literature”. Polity Press, 2019: Cambridge CB2 1UR, UK.
* Hunt Allcott, Matthew Gentzkow. “Social Media and Fake News in the 2016 Election”.   
  Journal of Economic Perspectives: Volume 31, Number 2, spring 2017, Pages 211–236.
* Noortje Marres. “Why We Can't Have Our Facts Back”. University of Warwick, Engaging Science, Technology, and Society 4 (2018), 423-443.
* Alice E. Marwick. “WHY DO PEOPLE SHARE FAKE NEWS? A SOCIOTECHNICAL MODEL OF MEDIA EFFECTS”. CITE AS: 2 GEO. L. TECH. REV. 474 (2018). GEORGETOWN LAW TECHNOLOGY REVIEW
* C.W. Anderson. ““From Indymedia to Demand Media”. The Social Media Reader, New York University Press, 2012. ProQuest Ebook Central.
* <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5635884/> (seen: 06.11.19 11:32, study on data use and polarization.)
* <https://www.wired.com/video/watch/here-s-how-fake-news-works-and-how-the-internet-can-stop-it> (seen: 06.11.19, 12:43. Profit from fake news).
* <https://www.theguardian.com/commentisfree/2017/sep/18/boris-johnson-350-million-claim-bogus-foreign-secretary>). (Seen: 07.11.19, 11:06. Boris Johnson).
* <https://www.youtube.com/watch?time_continue=1&v=cQ54GDm1eL0> (Seen: 07.11.19, 12:33. Deepfakes).
* <https://www.youtube.com/watch?v=Ho9h0ouemWQ> (Seen: 07.11.19, 12:33. Deepfakes).
* <https://www.cnbc.com/2019/07/12/fake-news-is-real-ai-is-going-to-make-it-much-worse.html> (Seen: 07.11.19, 13:03. Deepfakes)