1 Overview

In a world where technology is increasingly ubiquitous, it is inevitable that technological advances, such as the rise of social media, begin to influence our citizens and our elections. Former President Barack Obama’s 2008 presidential campaign was hailed for its innovative use of digital media, as was his 2012 reelection campaign. Since then, US elections have been fought through the traditional means of televised debates and canvassing efforts as well as improved data analytics and Internet outreach.

The 2016 US presidential election is considered by many to be an upset; many polls had Democratic presidential candidate Hillary Clinton as a clear favorite, and the election forecasting project of data and statistics analysis website FiveThirtyEight gave her a 71% chance of winning. However, on November 8, 2016, Republican presidential candidate Donald Trump clinched a victory. This win is contentious – his campaign has received allegations of collusion with foreign agents and is currently under investigation by special counsel Robert Mueller.

2 Facebook’s Involvement

In the aftermath of the historic election, social media giant Facebook and its peers came under scrutiny for their management of information in a connected world. Facebook, in particular, garnered attention after it was made public that fake accounts originating from Russia bought $100,000 worth of political advertisements on the social platform in the months leading up to the 2016 election. Facebook founder and CEO Mark Zuckerberg initially dismissed the notion that Facebook could have influenced the election’s outcome; he argued instead that “Voters make
decisions based on their lived experience.” Nonetheless, in later months, he expressed regret over dismissing the severity of “fake news” on his platform.

An overview of the Trump campaign reveals two areas in which Facebook aided said campaign. Firstly, Facebook’s information on its users was acquired by data firm Cambridge Analytica in order to create personality profiles of users. Some studies have shown that given a Facebook user’s “likes”, one can predict the user’s demographic information and preferences. Cambridge Analytica used their analyses to run targeted advertising that would increase Republican turnout and depress Democratic turnout. Although in the United States, it is legal for companies such as Facebook to sell their data, other nations, such as those in the European Union, enact more stringent laws around data privacy.

Facebook also facilitated the distribution of false information from foreign agents, most noticeably from Russian agents such as the Internet Research Agency. These malicious agents created fake Facebook accounts to spread false content vilifying opposing candidates and misconstruing policy stances. Even though Facebook banned accounts for misrepresenting their identities, the company acknowledged that the accounts would not have been banned solely for sharing misinformation. Thus, in addition to confirming account integrity, the platform is evaluating the algorithms that determine which content is prioritized in people’s News Feeds, since such algorithms could have the inadvertent effect of propelling misinformation to the top of News Feeds.

3 Recommendations

In light of Facebook’s impact on federal elections and in preparation for the 2018 midterm elections, we must consider what can be done to prevent unwanted influences in our elections. From a legal perspective, we consider possible policies that can improve Facebook’s relationship with election issues. For instance, German chancellor Angela Merkel stated her interest in requiring Facebook to make its proprietary algorithms public. From a technical perspective, we evaluate the algorithms that assisted the rise of fake news and, if possible, provide code to diminish the negative effects of Facebook’s current algorithms.

4 Deliverables

The main deliverable for my CPSC 490 project will be an extensive essay, ranging from 10 to 20 pages, examining Facebook’s role in the 2016 US presidential election. The first part of this paper will provide an explanation of the events leading up to the election, with a focus on the ways Facebook was being used by the political campaigns. The campaigns’ use of Facebook as a database, particularly Cambridge Analytica’s analysis of users’ Facebook profiles to create person-
ality profiles and run targeted advertisements more effectively, will be examined from technological and legal standpoints. Then, the paper will discuss the proliferation of misinformation or “fake news” by Russian agents on the social media platform. This portion of the paper will also detail Facebook’s attempts to curb misinformation and the technology company’s philosophy behind its actions.

In the latter part of this paper, I will provide my opinions regarding Facebook’s handling of information related to the 2016 election. Specifically, I will provide recommendations for technological measures that Facebook can implement to minimize unintended use of its users’ data and the spread of misinformation. I will also consider legal courses of action that our nation can take to mitigate unwanted social media interference in our elections. As of now, I do not currently have strong opinions about what Facebook did and what it ought to do.

If my technological recommendations for Facebook are reasonable to implement, I will include source code that simulates my ideas, along with test cases that illustrate the results achieved with my implementation.