# CISC 181 Written Assignment 3: Net Neutrality

**OBJECTIVE**

In this assignment you will examine in more detail a topic related to digital societies and its implications.

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In the paper, *Testing the economics of the net neutrality debate*, author Christopher Hooton gives a history of net neutrality (NN) legislation in the US from 2010 until 2017 and examines what effect – if any – enacting and cancelling that legislation had on capital expenditures by internet service providers (ISPs). Read the paper and write a short analysis on the topic following the instructions and structure below. The length of the assignment should be 700-900 words.

**Section I: The US fight for and against NN**

In your own words, describe the history of NN legislation in the US as related in the article, the sources and nature of the data studied by the author, how the author's approach to the subject differed from other analyses of capital expenditures by ISPs, and give a summary of Hooton's findings and conclusions. [6 marks.]

History: In 2010, the FCC voted to approve the Open Internet Order. This essentially stopped telecommunications companies from blocking customers from viewing internet content that they may have incentive to not show the customers, however these orders didn’t reclassify ISP’s under Title 2 common carriers, which left them unregulated for the most part as they were under Title 1 information services, due to past FCC orders, which pretty much meant that ISP’s weren’t subject to these new telecommunications regulations.

Then, in 2015, the FCC decided to reclassify ISPs as a Title 2 common carrier, which meant it was now regulated against selectively providing information to customers depending on who paid the most.

Finally, in 2017, Trump thought that these rules imposed by Obama were bad, because he believed that these rules would target conservative media. The FCC agreed with this, as the main argument was that classifying ISPs as Title 2 carriers had reduced investments into telecommunication systems.

The author of this paper attempts to discover if the fact that regulating or deregulating ISPs actually had an effect on telecommunications investment, and largely found that it did not. In terms of the data he used, it was mostly comprised of quarterly data from the Securities and Exchange Commission (SEC), from Q1 2009, up to Q3 2018. This makes sense, as the first ruling happened in 2010 (1 year after he started collecting data), and the last ruling happened in 2017 (1 year before he stopped collecting data).

The main difference between the authors approach and other analyses of capital expenditures by ISPs, was the fact that he uses newly incurred capital expenditures, tracked to exact days, rather then current expenditures, which often reflect decisions made years before the actual expenditure dates. By using this new metric, this analysis provides much more accurate insight into the actual reaction of the telecommunications industry to NN rule changes, rather then things they have already done in the past.

**Section II: How does Canada compare?**

NN has not garnered the same level of attention in Canada as it has in the US, but that is not the same as saying no one is concerned about it. Canadian law professor Michael Geist has written extensively on many topics related to the internet including NN, for example, and his work on the subject is easily found. Look into Geist's concerns and summarize them, making careful note of your sources. How do Geist's concerns compare with the concerns of NN advocates referred to in Hooton's article? [6 marks.]

From my readings, Michael Geist is very concerned with the fact that a new framework for the government will be able to regulate what Canadians will see when they access services, but not sites. What this means , is that while individual sites will be unaffected, it may be more difficult to find those individual sites. The example he provides in the article linked below, was news articles. You are freely allowed to create a news article, however sharing that news article on Facebook/Reddit/Twitter/etc would require a license. These concerns directly parallel NN advocates in Hooton’s article, as they both believe that the internet should be accessible to anybody, from anywhere (within the country that is imposing the laws). While the laws at play are slightly different from country to country, the general sentiment from NN advocates is the same, and they believe that plans to remove this would result in a not “free” internet.

<https://www.michaelgeist.ca/2020/09/weakening-net-neutrality-how-the-governments-internet-regulation-plan-abandons-the-principle-of-equal-treatment-of-content-online/>

**Section III: What do you think?**

The Wikipedia (English) article on Net Neutrality presents arguments for ("Support") and against ("Criticism") NN. Read through these and pick one argument from each side (so, two arguments in all) that you find particularly strong or particularly weak and explain your positions on them. [8 marks.]

Support:

I find Control of data to be the biggest argument that I support. I support it, as at the end of the day, I think the internet should be an unbiased (for the most part) way to obtain information. It is very easy to see both sides of a view with net neutrality in place, which allows for a more rounded opinion on almost every subject matter in existence. With companies becoming more and more politicized, and telecommunications companies not being excluded from that set, net neutrality regulations could exist to push a political agenda, which the internet is not generally for. This could lead to false information being spread, as say we’re trying to look up some problems with climate change, which republicans generally don’t like to do things about as it costs money to fix. Now if the republican party were to impose net neutrality regulations, they may provide incentive for telecommunications companies to hide material showing the true downsides of climate change. We’ve seen what happens when governments get too much control over what people see on the internet, and it’s never good. A great example of this, would be trying to google “Tiananmen Square Massacre” in China. Nothing will come up, as China’s regulatory bodies are trying to make that concept cease to exist to their citizens. This could end up hiding great amounts of culture and history from people, which is generally exclusively a bad thing.

Criticism:

I find the Inability to allocate Internet traffic efficiently to be a very silly criticism of Net Neutrality, with it mostly stemming from lack of technological knowledge. The example they showed, was that a network should be able to favor traffic from a patient’s heart monitor over a music download. Under a truly neutral system, this could be an issue, except for the fact that medical technology should be able to mitigate this using local processing (The iPhone 13’s chip literally performs [99% as well at single core tasks, and 62% as well at multi core tasks as the M1 chi](https://www.cpu-monkey.com/en/compare_cpu-apple_a15_bionic-2130-vs-apple_m1-1804)[p](https://www.cpu-monkey.com/en/compare_cpu-apple_a15_bionic-2130-vs-apple_m1-1804#black), which is far more powerful than required for simple heart rate monitoring). The next example they gave, was that it makes sense to allow network operators to restrict traffic that is downright harmful, such as viruses, worms, and spam. How is a network operator supposed to classify content as harmful? Would it be a human who does this? Or would it be an equally biased human-created AI? Either way, either option has massive biases in preference, and would with almost 100% certainty, filter out content that some viewers may want to see, simply because it was taught that the content conveyed in that page was determined to be “harmful”. In terms of a virus, how would it know what is and isn’t a virus? Would it just end up banning all of GitHub, because people post buggy code there frequently that could be damaging to your computer?