



12/4/17

To Whom it May Concern:

On behalf of the graduate student body of the University of California, San Diego, the UCSD Graduate Student Association (GSA) is writing to express our concern about the recent effort by the Federal Communications Commission (FCC) to eliminate regulations preserving net neutrality, and to encourage your official opposition. In late November, FCC Chairman Ajit Pai proposed a sweeping set of regulatory changes to dismantle current net neutrality standards, including striking existing rules prohibiting internet service providers (ISPs) from prioritizing, slowing, or blocking web traffic to specific sites, scrapping initiatives adopted in 2015 that increase federal oversight of ISPs, and eliminating the "general conduct standard," which permits the FCC's intervention in the event of unreasonable practices by ISPs. The FCC will vote on these measures at a committee meeting on December 14th, and, as it stands, they are expected to pass. As graduate students, we expect dire consequences should these measures be enacted that could threaten our ability to effectively carry out our professional obligations and limit our prospects for future success.

Net neutrality refers to the principle that ISPs must treat data from all domains equally, forbidding prioritization of access to some domains over others. Current net neutrality laws classify broadband internet access as a telecommunications service, making it a public utility rather than a luxury and subjecting it to the same content-neutral regulations governing utilities like roads and electricity. Thus, by analogy, net neutrality laws are similar to laws forbidding exclusive use of roads by certain brands of cars or tolls that charge differently depending on the nature of a car's bumper stickers. Eliminating these laws would allow ISPs discretion over information access on the internet by permitting selective allocation of bandwidth to slow or block certain sites and speed up others, or by allowing the implementation of paywalls to require additional fees for access to certain sites.

The internet is an integral tool for the research conducted by graduate students, which requires aggregating background literature, analyzing data from online data repositories, and locating technical protocols from a broad array of scholarly resources, most of which are primarily found online. Introducing additional obstacles to open internet access at the behest of ISPs will thus impede the ability of graduate students to perform these duties. The ability to restrict certain sectors of the internet behind paywalls, for instance, would introduce additional financial burdens that must be weighed against the already limited budgets allocated to graduate students to conduct their research. This would limit the breadth of sources graduate students have



available to acquire information, compromising the quality of research and giving preference to sources that are not paywall-restricted, potentially biasing their output. Many graduate students are funded by federal research dollars, so paywalls would mean that more taxpayer money is spent removing red tape rather than on the valuable research graduate students are producing to improve Americans' lives.

Similarly, while science is inherently apolitical, the research conducted by many graduate students may have strong political implications that conflict with the political or economic agendas of ISPs. In these cases, an ISP could block the availability of necessary online resources entirely or slow access to the point where conducting research in these fields becomes infeasible. If work published by a graduate student conflicts with the interests of ISPs, access to that work could also be suppressed with impunity, limiting the visibility these students achieve within their field at a time when exposure is pivotal, consequently devaluing their future prospects following graduation. Such circumstances would be devastating to students who perform thesis research in politically-relevant fields (e.g. climate science, economics, sociology, addiction pharmacology, etc.) which constitute a large percentage of the graduate population.

The preferential allocation of bandwidth to preferred domains (e.g. those with aligning interests to ISPs, those with resources to pay for this service) would also likely result in slower internet speeds for non-preferred sites. Many graduate students perform their research entirely via analyses of existing public datasets or large datasets located in online repositories. In many cases, the size of these datasets makes data processing extremely time consuming, even at high speeds. It is unlikely that these public resources will possess the resources to secure preferred status relative to sites with strong financial and political support. Consequently, these public data repositories and online archives will likely bear the brunt of this newly permitted differential bandwidth allocation. This would further restrict resources available to graduate students for research and terminate the progress of many projects already underway.

Finally, deregulation of net neutrality opens the door for ISPs to suppress access to their competitors, which could be extremely problematic for the ability of small business startups and early academic careers to thrive. Following graduation, many graduate students elect to actualize their ideas in the form of originating or achieving employment at startups or small businesses, including independent distribution of creative content for those in the humanities, biotechnology and pharmaceutical start-ups for biomedical scientists, and technology start-ups for those pursuing degrees in the computational sciences. In the latter case, these small businesses may compete directly with the economic interests of ISPs, creating an incentive for ISPs to suppress access to their online presence (i.e. products, advertising, contact information)



and obviating their eventual success. In the former cases, the markets in these sectors are typically dominated by a small number of extremely large, financially robust corporations with the resources to partner with ISPs in order to suppress potential competitors. These same incentives hold for the work of early career researchers that may contradict the efficacy claims made by these corporations, introducing a form of intellectual competition. For instance, a randomized, double-blind study performed by a professor that demonstrates no difference between a lucrative pharmaceutical and placebo could result in suppression of access to that professor's output, similarly precluding success. Because these career trajectories encompass a large number of graduates with advanced degrees, the economic incentives created by the deregulation of net neutrality are likely to further limit career prospects of graduate students, as well as the potential avenues for actualizing their ideas after graduation.

It is worth noting that these catastrophic consequences are speculative, as this degree of deregulation for broadband internet is unprecedented in the current era in which the internet dominates information technology. We thus lack an appropriate empirical model to adequately predict what will occur as a result of the elimination of laws protecting net neutrality. Nonetheless, the economic and political incentives for increased cost and limited access, censorship, suppression of competition, and allocation of bandwidth away from public resources are fairly straightforward. Conversely, there are few conceivable positive outcomes of eliminating regulations that forbid ISPs from selectively biasing the speed, cost, and availability of online information access for the livelihood of graduate students. For this reason, we strongly urge concerted action to denounce FCC efforts to dismantle existing statutes protecting net neutrality, and your support in encouraging our political representatives to take legislative action to codify net neutrality as law.

Thank you very much for your time and attention to this serious matter.

Sincerely,

The UCSD Graduate Student Association

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