

KEEPING THE BOX BLACK: AI REGULATION AND  
CORPORATE AMBIGUITY

by

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This study examines early regulatory steps taken concerning AI and corporations' response to its development. It will analyze the importance and roles of Senate hearings in the United States and the ability of the United States legislature to tackle increasingly rapid technological shifts to contextualize the primary case study. This case study concerns the first Senate hearing in the United States about AI, where both legacy and novel companies developing AI systems were present. In properly examining this landmark case, suggestions are made as to possible paths governments could take to avoid worst-case scenarios with the deployment of AI, while simultaneously not stifling the development of potentially world-altering systems.

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## Introduction

AI technologies have been a staple of last year's news cycle, from art generation machines to text-based writing tools, website creation tools, and incorporation into conventional search engines. This thesis thereby aims to explore how the regulation of these new technologies began in the first year since the advent of large language models and their subsequent rise to international fame. Unlike past integrations of new technology into legal systems, AI corporations have been shockingly accepting of regulation, at least on the surface. The question remains whether this is a facade, and if corporations are actually dodging meaningful engagement with the government.

Many people already have a personal stake in AI models' success, integration, or failure. Late-night talk show hosts have already begun discussing the subject; TED has its own folder of over 150 talks dedicated to AI.<sup>1</sup> Every newspaper has dozens of pieces on AI. Perhaps because of the subject's novelty and intrigue, or perhaps despite it, even academics have deciphered it as best they can. Perhaps most importantly, governments are beginning to take stabs at understanding and regulating the rollout of these new technologies. Ultimately, the confluence of both professional and casual use cases and the interest in and worry surrounding AI all point to the prevalence of the subject in modern society.

As a result, this analysis will primarily focus on the real-time governance occurring within the context of these quandaries, which currently have very few answers. The reality is that AI systems have companies that own them, and many people are asking themselves what, if any, type of regulation needs to be imposed on their growth. The issue stands as people are

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<sup>1</sup> "TED Talks," [www.ted.com](https://www.ted.com), accessed May 20, 2024, <https://www.ted.com/talks?sort=relevance&topics%5B0%5D=AI>.

discovering ways to use these technologies, and governments are discovering alongside them. What has begun to occur, and will happen with ever-increasing frequency, is the debate over incorporating these systems into existing judicial, executive, and legislative institutions.

Furthermore, this analysis will examine possible motives for remarkable actions, particularly with interactions between corporations and government concerning AI. When US-based AI corporations such as OpenAI or IBM have sent representatives to congressional hearings regarding AI, the tone with which they approach the subject is paramount to understanding these companies' approaches. Take the regulation of the internet (particularly social media) in the United States as an example: Lackluster 'laissez-faire' regulation was implemented, and when breaches of things such as child safety took place, corporations had to defend their self-regulation under legislation such as Section 230.<sup>2</sup> When corporations sent uncharismatic representatives to answer to demanding questions in these same senate hearings, they were regarded negatively in the public eye, and a general distaste towards these corporations resulted.

AI leadership seems to have learned a lesson and often publicly claims to want regulation (even the ever-polarizing Elon Musk, a significant stakeholder in OpenAI, signed onto a joint proposal for a 6-month moratorium on AI development).<sup>3</sup> However, the very nature of their models doesn't make them particularly capable of aiding the government in this task. That is because AI systems rely on a so-called 'black box,' where raw data is input and an answer is ejected, without much knowledge as to how algorithms as increasingly ubiquitous as ChatGPT ever arrived at their answers in the first place. Already, we've seen many of the major concerns

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<sup>2</sup> Electronic Frontier Foundation, "Section 230 of the Communications Decency Act," Electronic Frontier Foundation, 2023, <https://www.eff.org/issues/cda230>.

<sup>3</sup> Future of Life Institute, "Pause Giant AI Experiments: An Open Letter," Future of Life Institute, March 22, 2023, <https://futureoflife.org/open-letter/pause-giant-ai-experiments/>.

of governments (such as misinformation) being met with shoulder shrugs on the part of AI companies simply because they do not know the processes by which their models can ‘hallucinate.’

Thus, the process of creating policies for these companies has become doubly difficult. The links between policymakers and AI companies are new, and the topics they aim to tackle have worryingly little information available to either side. Will this mean it is impossible ever to create appropriate policy? Likely not, but in the meantime, there exists a gap where, with minimally legally binding frameworks in place domestically, AI companies remain largely in regulatory limbo, awaiting new decisions while growing exponentially at the same time.

It is important to acknowledge as part of this source-gathering that, unlike the past topics, which will hopefully help ground this research, much of this topic is still up in the air, evolving almost daily. While not having any significant impact on the research-based implications of this analysis, the actualities of the topic will grow as time goes on, and deciding what is relevant versus what’s just media hype will likely prove itself an arduous task in gathering existing research. As such, this paper will examine more significant academic trends. The first is scholarly research analyzing what new and complex technology has historically and recently outpaced regulatory agencies. As with much of this project, this effort will ultimately be centered around policymaking in the United States for several reasons that will be appropriately analyzed. All the same, understanding more about whether AI is an exception to existing models of technological regulation or whether the institutions created to oversee new technologies will be able to do so regardless of the potential scope of AI integration. This paper will analyze ‘soft law’ processes as a novel way for lawmakers to balance a lack of development and understanding with the potential for rampant use cases across sectors.

Furthermore, considering that the bulk of this paper's analysis will be centered around a Senate judiciary subcommittee hearing, the role of Senate hearings on cultural values and politics in the United States will be appropriately analyzed. A good portion of this analysis will be dedicated to understanding senate hearings in the United States, with actors on either side of the podium aware of this dance and their roles within it. The degree to which international influence and the role of other nations to regulate (or not) alongside the United States will also be appropriately examined. Finally, this thesis will aim to provide solutions to the new dance that AI corporations seem to be doing to try to exist in the same international legal limbo as the internet. If not, at the very least, things that policymakers and the general public should be aware of to not fall prey to the sensationalism that has dominated AI's deployment in the past year.



## Background

In just the last 18 months, professionals and students have realized they could do real-life work using AI technology. In the following months, anti-AI programs have already integrated themselves into school systems, with an arms race between AI prompting increasing utilization on the part of students and the increasing refining of tools against it. Ubiquitously, the conversation around AI seems to revolve around its disruption of existing standards by which we judge work, the potential in these machines' increasing complexity and capabilities, and how it might impact people's livelihoods internationally.

This comes at massive stakes. On the one hand, there is the possibility that AI will shift global systems where vast percentages of human labor can be completed in the digital hands of AI. How might this scenario affect workers? On the other hand, there is a scenario where AI is quietly integrated into existing systems, only accessible to those who can afford it. There are hints of the latter, as Time reported that ChatGPT's parent company, OpenAI, paid Kenyan workers only \$2 an hour to moderate content early into ChatGPT's public release.<sup>4</sup> That certainly seems contrary to the scenario where AI replaces these positions.

Real, large-scale ramifications of AI have already begun. In academia, some argue that this technology will be so prevalent that it is akin to calculators. Not allowing and teaching students how to use it will ultimately be to their detriment. On the other hand, some argue it bypasses learning mechanisms and will eventually lead to less knowledgeable students. It's clear that AI will inevitably create ethical questions across sectors such as education, business, and

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<sup>4</sup> Billy Perrigo, "The \$2 per Hour Workers Who Made ChatGPT Safer," Time, January 18, 2023, <https://time.com/6247678/openai-chatgpt-kenya-workers/>.

government. To what degree remains to be seen, and why regulation (or a lack thereof) will be critical to AI's safe development.

Though certainly at the fringes of these debates, numerous prominent figures, such as the late Stephen Hawking, have argued the world-altering capacity of machines built to learn. In an interview in 2014, he posited that “artificial intelligence could be a real danger in the not-too-distant future.” Then he told a story of “scientists [who] built an intelligent computer. The first question they asked was, ‘Is there a God?’ The computer replied, ‘There is now.’ And a bolt of lightning struck the plug, so it couldn’t be turned off.”<sup>5</sup>

However, the defining issues are far from these devastating hypotheticals. As mentioned before, one of these groups is academics. From cross-disciplinary seminars on the topic to the rapid introduction of ‘AI-generated content’ clauses within syllabi and administrative legalese worldwide, the fear of students using AI to bypass education has become a dominant strain of the topic. Hundreds of stories already exist from middle school teachers to university professors running prompts they’ve used for decades as their final class projects through these generative tools such as ChatGPT, only to find the seemingly ‘unhackable’ assignments completed to some degree of success after only a first attempt, a near-perfect final product being achieved with light prompt alteration and editing. Rightly, many of these same teachers have doomsday scenarios flooding their heads: students completely bypassing the learning teachers have worked so hard to instill, an arms race between faculty and students to out-prompt each other and find tools with which to catch AI, and some even positing that this will be the return to in-person, handwritten papers and essays. While the occasional academic argues that these are simply a new

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<sup>5</sup> “Stephen Hawking Interview: Last Week Tonight with John Oliver (HBO) - YouTube,” [www.youtube.com](https://www.youtube.com/watch?v=T8y5EXFMD4s), June 14, 2014, <https://www.youtube.com/watch?v=T8y5EXFMD4s>.

generation's calculators and their use will be ubiquitous within the next ten years, these perspectives are a drop in an ocean of concern.

There exist concerns that AI will shift workforces entirely. Will entire sectors like telemarketing and customer service disappear? Will skills such as information synthesis, video editing, or spreadsheet organizing become completely irrelevant? People who have devoted time and money honing skills that AI sets to do itself, quicker and more readily available than them, are rightfully panicking over the possibility that they'll be out the office door on Monday to a free worker that can be accessed through a website. Despite the somewhat inflated narratives in media that this will happen overnight, the more realistic possibility that workforces slowly shift out of the areas where these technologies become particularly useful exists, nonetheless.

These theories are only the tip of the glaciers that slew off as the topic evolves, delving deeper into a seemingly endless stream of everyone's opinions coming to fruition all at once. Simply put, governments and corporations' international approach to AI must be analyzed through the lens of dozens of sectors and subjects, all considering the capacity of AI systems. As such, any attempts at regulation will be exceedingly difficult to balance.

## Literature Review

### Technological Acceleration and Regulation

A vital aspect of this research and this paper’s goals is to analyze how modern political actors respond to nascent AI technology and the corporations that govern them. In doing so, one must analyze governments' ability to respond broadly to rapid technological shifts. As Intel co-founder Gordon Moore famously predicted, “the number of transistors on an integrated circuit will double every two years with minimal rise in cost.”<sup>6</sup> Despite its modern controversies, Moore's law demonstrates the rapid increase with which modern computer technology has begun to outpace other technological advances. Other shifts in technology have meant, for example, telegraphs being used from the 1840s until the telephone became commonplace in the American household in the 1920s, cellular phones being popularized in the 1990s, and the advent of the internet and smartphones exploding in the early 2000s—a shift from 80 years to 70, to ten. Whether one picks or chooses one technology or the other, it’s incontestable that rapid shifts in technology, automation, and connection have dominated recent decades. However, due to the novelty of many of these technological shifts, the availability of scholarly research, particularly on subjects concerning AI, is largely incomplete. Therefore, broader themes of government response to technology must be analyzed to understand most accurately how these particular shifts concerning AI may apply.

### *Understanding the Outpacing Argument*

Dr. William Asprey, a senior research fellow at the University of Minnesota, and Dr. Philip Doty, an associate professor at the University of Texas at Austin, together outline the

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<sup>6</sup> Intel, “Moore’s Law,” Intel, September 18, 2023, <https://www.intel.com/content/www/us/en/newsroom/resources/moores-law.html>.

tenets of the arguments for and against this phenomenon in their research paper “Does technology really outpace policy, and does it matter? A primer for technical experts and others.”<sup>7</sup> Within their argumentation, they present a section dedicated to “the most important criticisms of the legal institutions that manage technology.” First, they describe laws inherently written about past or present technologies, and they struggle to guess the evolutions that technology may follow. In fact, “this evolution may make the existing regulation irrelevant or even counterproductive.” This would take part in AI’s regulation as its deployment has only begun in the last two years as of the writing of this paper. The very reason AI is gripping news cycles is not inherently its current capabilities but the future risk of advanced deployment, whose actual impact is yet to be fully realized. Secondly, they speak to the global ramifications of technology deployment and replication. As will be analyzed in the hearing between ChatGPT’s Sam Altman, the eagerness for a single government to create regulation is dissuaded by the fact that “some technologies... by the very fact of their technical nature cross geopolitical boundaries and are thus hard to regulate except perhaps by means of international treaties and conventions, even though the technologies may have acute national effects.” AI development fits neatly into this niche of technologies with an international and national impact, a duality that only disincentivizes national regulation. They furthermore attest that “some technologies are multi-disciplinary in either their workings or their effects; and, in some cases, it may not be clear which governmental actors, or even which branch(es) of government, should take responsibility for regulating them.” Clearly, as AI affects diverse sectors from education, military, and the workforce, this issue is also at play. If, as the authors also suggest, “the overwhelming majority

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7 William Aspray and Philip Doty, “Does Technology Really Outpace Policy, and Does It Matter? A Primer for Technical Experts and Others,” *Journal of the Association for Information Science and Technology* 74, no. 8 (May 8, 2023): 885–904, <https://doi.org/10.1002/asi.24762>.

of technologies are already well-controlled by government policy,” this may not necessarily hold for AI, as it involves itself in such diverse sectors, each controlled by various government agencies. While it may hold that individual government agencies could be given access to direct how AI would be handled within the sectors they manage, this would present numerous challenges in not presenting overlapping definitions and standards to which AI is held. While not impossible, no regulatory body has outlined how AI would fit under their purview. That being noted, the authors ultimately conclude by arguing that technology does not always necessarily outpace regulation, despite how it may often seem to be the case in the public eye. They say that “natural disasters, pandemics, mass immigration movements, mass social movements, and wars are examples of phenomena that force governments to scramble to adjust policy to control events,” technology is unexceptional when governments have to take quick, decisive action. As is also explored in the aforementioned hearing with Sam Altman, the authors point to how “it is the responsibility of government to take a large and heterogeneous set of social values into consideration as it considers the regulation of technology, such as national safety ... civil and other political rights, wide distribution of information freely available to citizens, and allowing large incumbents and small entrepreneurs (and other actors between these two extremes).” These topics are discussed at length throughout the first Senate hearing concerning AI because of their centrality to what the government is meant to properly analyze before creating policy. Creating parameters for all of these facets takes effort and active cooperation between government, corporate actors, and experts in the field. Ultimately, the authors argue, this leads “to stability in government and society,” as was “practiced and honed over hundreds of years,” and conclude by saying, “the outpacing argument, while grounded to some extent in reality and convincing evidence, is simplistic and needs to be considered in a nuanced way. As one scholar puts it,

technology rarely outpaces the law overnight; instead, their interaction is not a ‘footrace’ but rather a ‘ballet with its own means, rhythms, and delicate steps.’”

### *Soft Law as a Partial Measure*

One of these ‘delicate steps’ is analyzed by Ryan Hagemann, IBM’s global lead for AI policy, in his 2018 entry to the *Washburn Law Journal* titled: “New Rules for New Frontiers: Regulating Emerging Technologies in an Era of Soft Law.”<sup>8</sup> As described by Hagemann, this ‘soft’ law is “predicated on a far more informal, collaborative, and constantly evolving set of governance mechanisms.” Efforts such as “policy statements,” which are often not legally binding in a traditional sense, are nonetheless “binding in a practical sense.” As Hagemann argues, this practice has been understated yet common in the American political sphere for much longer than new technologies have. He points to the “Bureau of Chemistry– the predecessor to the Food and Drug Administration (‘FDA’),” which would issue legally non-binding, “‘advisory’” documents on food safety practices. Though this effort was eventually formalized into the FDA’s mandates, it demonstrates a period where soft law was used to curtail issues while more formal procedures were being created.

Another example that relates particularly closely to the advent of AI is the advent of the internet. Hagemann references the Clinton administration's 1997 “*Framework for Global Economic Commerce*,” a piece of soft law that suggested a framework by which companies could self-regulate to create time for legislators to come up with the kind of internationally-scoped legislation and agreements that something like the internet would necessitate. Hagemann argues its continued importance remains; in 2017, the *Framework* was “explicitly reaffirmed ...

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<sup>8</sup> Ryan Hagemann, “New Rules for New Frontiers: Regulating Emerging Technologies in an Era of Soft Law,” *Washburn Law Journal* 57, no. 2 (2018): 235–63, <https://contentdm.washburnlaw.edu/digital/collection/wlj/id/7163>.

[as a] guiding principle” by the Department of Commerce. Furthermore, he argues that section 230 “acted as a Magna Carta moment for the Internet and digital technologies.” Nonetheless, Hagemann admits that “internet firms received special dispensation from legal compliance .. [and] companies that should have been the subject of government scrutiny instead created their own self-regulatory processes for resolving real problems like governance, privacy, and consumer protection.” Ultimately, it seems as though soft law’s modern influence over large-scale technological problems such as the internet creates structures and models by which future legislation may be made and allow good-intentioned actors to self-regulate more effectively while simultaneously allowing for legal leniency for bad actors. Hagemann comes close to saying this himself: “There may be some truth to the critique that soft law could contribute to a deterioration of institutional trust and the rule of law. It is also possible that the emergence of self-regulatory processes for governance ... may not be appropriately resolving public interest concerns.”

Despite its shortcomings with internet regulation, it seems that the flexibility of soft law’s ability to provide a “quasi-regulatory structure upon which more robust governance systems can be built” has outweighed concerns over bad actors taking advantage of its inherent leniency. As of writing, no federal legislation has been passed, authority given to an existing agency, or a new agency created to support the advent of AI technologies. However, President Joe Biden did announce an executive order that, despite Vice President Kamala Harris’ assurance that it was “binding,”<sup>9</sup> exists only as a piece of guidance similar to the soft-law practices described by Hagemann. Like Hagemann, Biden’s order emphasizes “transparency” and “cooperation” on the

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<sup>9</sup> Deepa Shivaram, “The White House Issued New Rules on How Government Can Use AI. Here’s What They Do,” NPR, March 29, 2024, <https://www.npr.org/2024/03/29/1241281892/biden-government-ai>.



part of AI companies, both domestically and especially abroad. Biden’s guidelines explicitly emphasize that this effort has been made in consultation with 20 countries and the EU.

## **The Cultural and Political Roles of Senate Hearings**

### *Performative Aspects of Hearings*

In analyzing the degree to which modern political actors respond to early AI technology and the corporations that govern them, the circumstances in which corporations and government interact, especially in the public eye, are also essential to consider. The primary analysis of this paper concerns Samuel Altman, OpenAI CEO, and his testimony in front of Congress members in a Senate Judiciary Subcommittee. These hearings, publicly recorded, transcribed, and often commented on by news, serve not only to inform the senators present but the American public at large. Joshua Green, a professor at Kean University et al., investigated this in their analysis “Congressional Committee Hearings as Public Spectacle.”<sup>10</sup> They begin by saying that this has been the way things have always been, describing a hearing in 1777 before the First Continental Congress, which was such a “spectacle” that “despite the limitations of the media at the time ... [it] was still historicized.” A pivotal moment in shaping modern televised spectacles came during the Army-McCarthy hearings, where “in allowing the public to view the previously inaccessible hearings, the media facilitated a surge in public investment in congressional hearings.” They go on to discuss how, in recent years, the popularity of the televised analysis of hearings has, in turn, incentivized increasingly “politicized” hearings, with “calibrated on-air rhetorical appeals” aimed at grabbing the public’s attention. In the same light, “celebrity appearances” from people such as Ashton Kutcher and John Stewart have “[garnered] significant public attention.”

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10 Joshua Guitart et al., “CONGRESSIONAL COMMITTEE HEARINGS as PUBLIC SPECTACLE,” Purdue University Press EBooks, December 15, 2022, 115–54, <https://doi.org/10.2307/j.ctv33t5gjm.11>.

These grabs at public attention, the authors argue, are not without intention. For questioning senators, posturing has become essential to the goals of these hearings. First, the authors say that congresspeople seek to establish an ethos. This ethos carries multiple characteristics, first demonstrating professionalism and knowledgeability by broadly “[ensuring] that they speak within the established procedural confines of the hearing.” The second characteristic is to posture themselves “as objective upholders of democratic ethics,” “[defending] and [empowering] the legislature” as being morally superior not only to the present panelists but to other branches of government. In doing so, they demonstrate their capability to act effectively in their leadership positions.

The authors also argue that congresspeople purposefully foster spectacle. Senators “recognize the potential for media spectacle and that they are actors within it.” Through tactics such as acknowledging media, deliberately breaking the decorum as mentioned earlier to create an audio or video bite, and demonstrating imprudence towards the hearing (which can also aid in posturing superiority - they could get work done faster unencumbered by procedure), congresspeople regularly seek to manipulate their role within hearings to further agendas not within the hearings themselves, but within the public opinion that hinges on viral clips.

Finally, the authors argue that shared cultural values are particularly pontificated upon by senators in hearings; in other words, values that cross political boundaries. This is done for a few reasons: to demonstrate commonalities in the American spirit (“freedom and liberty tend to arise when congresspersons unite against common antagonists”) and to present an “ethic of unification” within Congress itself. Ultimately, this goes a long way in demonstrating to the average American that their congresspeople aren’t total maniacs; issues such as child abuse

shouldn't be partisan, and it's reassuring when congresspersons publicly agree with such statements, banal as they may seem on the surface.

### *Hearings and Political Turf Wars*

In much of the same light, Dr. Jeffery Talbert et al., in their study “Nonlegislative Hearings and Policy Change in Congress,”<sup>11</sup> analyze the degree to which hearings that are not about a specific piece of legislation (whether they be for information gathering, oversight, etc.) are used by congresspersons to push and pull the direction of future policy. Per the authors, “leaders of congressional committees and subcommittees use non- legislative hearings for two important purposes: to justify future claims for jurisdiction over legislation and to force rival committees to act on matters that they might prefer to avoid.” In order to justify future claims over subjects, senators will try to include questions that will inevitably define a subject as having “several dimensions.” In doing so, in the expansion of hearings related to that subject, different regulatory power may be then processed by various institutions and people. This, per the authors, happened with the “regulation of pesticides [which] was long the exclusive domain of the agriculture committees,” but whose domain became increasingly tied with environmental movements of the 1960's and 1970's as that domain of the subject became more publicly “salient.” While one might assume that public pressure made the government respond in a novel way, as analyzed by Green, the relationship of the public, media, and senators' knowledge that “they are actors within it” muddy the waters of who influences who more.

It must be noted, however, that these relationships do not exist solely between senators, the public, and their panelists. Instead, much of the grandstanding in senate hearings aims to

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11 Jeffery C. Talbert, Bryan D. Jones, and Frank R. Baumgartner, “Nonlegislative Hearings and Policy Change in Congress,” *American Journal of Political Science* 39, no. 2 (May 1995): 383, <https://doi.org/10.2307/2111618>.

gauge the positions of other senators. “A staff member for a House committee chair commented that hearings are often useful to gauge the positions of other committees. ‘The hearings are basically for show, but they allow us to flex our muscles and provide a record of our position. Then we can find out who is with us and who is against us.’” Issues at non-legislative hearings then serve multifaceted roles. Senators can investigate specific problems through expert panelists, foster a public image through the inevitable commentary on the hearing, and decide with which other congresspeople to align themselves. However, as the authors note, not all of these can be completed at once; therefore, balancing often goes awry. They say, “Evidence suggests that nonlegislative hearings are tremendously biased. Even more than in the case of bill-referral hearings, committee leaders stack the list of witnesses in nonlegislative hearings to ensure that a certain viewpoint is heard.” To hit the points that congresspeople are desperate to access in these settings, hearings may not necessarily convey the most important and relevant information to the subject at hand. This is also done “in order to maintain control ... [as] a committee must jealously guard its jurisdictional turf.” If a subject is to, as mentioned with pesticides, swap from one committee to another, often an entirely different set of people get to govern the policy of the issue and thereby hold incredible power.

This analysis of congressional hearings depicts moments within which government and corporations engage in the public eye. Hearings can be dominated by fervency on the part of senators to retain political power and relevancy, and the questions, setting, and policy goals are all carefully influenced before legislation has even begun to be drafted. While this does not necessarily diminish the importance of these hearings, it helps explain the methodology through which lawmakers have to navigate, particularly on previously unexplored issues such as AI.

## Comparisons of Global Regulation

To analyze the global impacts of the United States on international AI regulation most accurately, it is important to first acknowledge and analyze the leading competitors in technological innovation of the last few decades. For the purposes of this paper, this will include analysis of China, Europe, and the United States' regulation of the telecommunications industry. This case study fits particularly well with AI development because while the United States saw a lot of the early developments in telecommunications, Europe and China not only build off of international counterparts but saw alternative models of both development and regulation. This will be akin to the global development of AI, as the distribution of knowledge has only become more widespread. In their analysis “Mobile telecommunications standardization in Japan, China, the United States, and Europe: a comparison of regulatory and industrial regimes”<sup>12</sup> Dr. Geerten van de Kaa, a professor at the Delft University of Technology, along with Mark Green of Zhejiang University worked to analyze “the process that leads to standardization in the mobile telecommunication industry ... [and while it was] first a national process, [how] it has gradually changed into a more global process.”

### *The United States*

The relationship between the United States and the standards of cellular telecommunications is “characterized by a shift from the government mandating a standard in the 1G to a more distant stance in subsequent Gs.” What this realistically meant was that, after “1G was developed mainly by AT&T/Bell and Motorola ... it was chosen as a standard by the Federal Communications Commission (FCC)” 1G, the earliest of these systems, ultimately

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<sup>12</sup> G. van de Kaa and M. J. Greeven, “Mobile Telecommunication Standardization in Japan, China, the United States, and Europe: A Comparison of Regulatory and Industrial Regimes,” *Telecommunication Systems* 65, no. 1 (August 31, 2016): 181–92, <https://doi.org/10.1007/s11235-016-0214-y>.

proved to be the last time that the United States government would directly involve itself with the regulation of the industry. Demonstrating a much more laissez-faire approach in subsequent generations of the technology, the development of 3G did not come from any government incentive to do so, but rather “as a reaction to the cooperation of European and Japanese firms, and was the reason for cooperation between Motorola, Qualcomm, Lucent, and Northern Telecom.” Simply put, per the authors, corporations in the United States decided to collaborate to face international pressures in the race of better, more marketable technology. This approach worked enormously well in the development of 3G, with the systems Qualcomm developed in collaboration with other US companies becoming essential to “3G systems worldwide.” Qualcomm benefited enormously from this arrangement, as “the company holds many essential patents, which it did not want to license to other companies.” Similar circumstances occurred with the development of the subsequent 4G mobile telecommunication standardization, where “the role of the US was also apparent as many US companies participated heavily.”

### *Europe*

Unlike the United States, early European efforts at telecommunication standards were not mandated by the government or even considered as a continent-wide deployment. The authors remark that “European standardization efforts shifted from highly diffuse processes in 1G, to a collaborative effort in 2G, 3G and 4G standardization.” The problems began when during 1G development “many countries developed their own standard, which led to incompatible technologies.” For example, “governments of [certain Nordic] countries, which agreed to cooperate, and allowed the countries’ operators and manufacturers to develop a pan-Scandinavian system.” While this worked within these few sets of countries, it made consolidation and cooperation with other nascent systems of mobile telecommunications in

Europe haphazard and disjointed. There was an issue that needed to be addressed. Therefore, for “the development of the 2G system ... the European Union set up [a collaborative agency] in which governments, operators, manufacturers, and other actors worked together to create one European standard.” Per the authors, this was “the most successful standard so far.” With these collaborative efforts, there was finally an agreed-upon set of standards that all involved parties of telecommunications were able to align their procedures to. While this European hands-on approach to collaboration between government and corporations in the regulation of new technologies proved very successful, it is noteworthy what almost shut it down entirely.

Per the authors, “Motorola held many essential patents for the technology, and did not agree to share these patents with other manufacturers.” Motorola, an aforementioned American-based telecommunications company, almost threw a wrench in Europe’s plan for collaboration between government and corporations. Faced with Motorola’s stubbornness, “a declaration was signed by the operators, which states that manufacturers should support the [the European collaborative agency and] offer their patents on RAND (reasonable and non-discriminatory) basis. The standard was mandated by European law, which required the use of European standards by member states in public procurement.” This marks a particularly interesting case study, whereby the necessities of European law, an American-based company needed to adhere to laws set in an international space, due to the inherently international nature of their technology. This also set a precedent moving forward into 3G and 4G, where Europe’s intentions were made clear: If a corporation wouldn’t willingly cooperate with government efforts to regulate, they would be made to do so, regardless of whether or not they were a European company.

## *China*

Per the authors, “Chinese standardization development is characterized by a shift from depending solely on international standards to independently developing its own standard, as well as a shift from mandating solely by the government to collaborating with industrial organizations.” Early on in telecommunications development, China “played no role” in their development. “The 1G system was introduced and mandated by the government” from where it was developed abroad in the United Kingdom. Simply put, “there was no role for local industry partners.” Around the turn of the millennium, however, this changed dramatically. The authors note that “with the advancement of modern technology, China had equipped itself with the ability to develop its own standard ... in an attempt to avoid dependence on western technology.” China’s acceptance of international standards was therefore, per the authors, out of necessity, not a desire to internationally cooperate in setting global standards of communication. They also note that “Chinese government and industry alliances played a significant role in [their] 3G and 4G ... development.” Unlike the European Union’s efforts to collaborate in order to provide seamless cross-country communication systems, China’s efforts were done in order to promote their own national agenda and the success of their own national companies despite their operating exclusively within China. The authors note that “the government has provided flexible policies and financial support to promote the development of its own standard, aiming to avoid dependence on western technology.” By this analysis, then, it is evident that the Chinese government has prioritized at-home success of their corporations regardless of the expense it may incur the government itself. Where the authors do note that China has recently changed this policy, particularly in regards to the development of 4G, is that while the government “strongly supports its own standard, it [has begun to allow] the development of international standards in



China.” Nonetheless, it still “assigns the operating authority [of] various carriers.” Ultimately, China stands as an interesting case study in non-reliance in international systems, heavy-handed regulation and support for domestic companies, all while promoting domestic collaboration and dissuading from international collaboration.

Through this analysis, the patterns of regulation in new technological spaces between the United States, Europe, and China become evident. The United States occasionally engages in limited government involvement in industry, but is more willing to follow a laissez-faire, neoliberal style of allowing corporations to govern their own standards and cooperation. The European Union, obviously more willing to regulate, legally forced cooperation between corporations and regulatory bodies when tensions arose between the two. China, in its desire to not only heavily involve the government in corporate activity, but in creating self-dependence from western and international forces, lies in an entirely different camp to Europe and America. Whereas, as analyzed, the international influence of America and Europe’s markets on one another can force legal decisions taken in one place to influence systems in the other, China stands alone in technological development, for better or for worse.

## Case Study Background

The Senate judiciary subcommittee hearing this paper will primarily examine took place on May 16, 2023, and was titled “Oversight of A.I.: Rules for Artificial Intelligence.” The presiding member was Richard Blumenthal, a senator from Connecticut. The purpose of the hearing, drawing on important experts in the field, was to examine initial steps towards the oversight and regulation the government could take concerning AI and the companies that create it.

The first of these expert witnesses present at the hearing was Gary Marcus, Professor Emeritus at NYU. Marcus, a self-proclaimed “a leading voice in artificial intelligence,”<sup>13</sup> who co-founded a machine-learning startup named Geometric Intelligence, which Uber bought and incorporated into its AI division.<sup>14</sup> Marcus is well-known in professional AI circles for being “almost a professional critic of organizations like DeepMind and OpenAI.”<sup>15</sup> He is often publicly vocal about his disdain for modern AI development systems. Marcus has since left his position at Uber and is recognized on this committee as the only witness not directly representing a corporation.

This is unlike the second of these witnesses, Christina Montgomery who represents IBM as its Chief Privacy & Trust Officer. “She also chairs IBM’s AI Ethics Board, a multi-disciplinary team responsible for the governance and decision-making process for AI ethics policies and practices.”<sup>16</sup> IBM is the largest industrial research organization in the world, with

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13 Gary Marcus, “Gary Marcus,” Gary Marcus, 2022, <http://garymarcus.com/index.html>.

14 Ina Fried, “The Head of Uber’s AI Labs Is Latest to Leave the Company,” Axios, March 18, 2017, <https://www.axios.com/2017/12/15/the-head-of-ubers-ai-labs-is-latest-to-leave-the-company-1513300831>.

15 George Anadiotis, “The State of AI in 2020: Democratization, Industrialization, and the Way to Artificial General Intelligence,” ZDNET, October 1, 2020, <https://www.zdnet.com/article/the-state-of-ai-in-2020-democratization-industrialization-and-the-way-to-artificial-general-intelligence/>.

16 “IBM Newsroom - Christina Montgomery,” IBM Newsroom, accessed May 20, 2024, <https://newsroom.ibm.com/Christina-Montgomery>.

over 250,000 employees worldwide, and has enjoyed a longstanding position as an AI developer. In 1997, an early marker for the power of machine learning was developed by IBM when its chess software, nicknamed *Deep Blue*, defeated the greatest chess player of the time, Garry Kasparov.<sup>17</sup> Since then, IBM has taken a central role in developing AI worldwide.

However, the most central witness of the entire hearing was, without question, OpenAI's CEO, Samuel Altman. Altman was an original founder of OpenAI and acted as CEO throughout the platform's early success. This hearing was one of his first large-scale public appearances. Still, almost immediately after it, "Altman made a world tour in May 2023, where he visited 22 countries and met multiple leaders and diplomats."<sup>18</sup> Altman made a concerted effort to project a positive public image for the young company. However, on November 17th, 2023, OpenAI's board of directors decided to "remove Altman as CEO," citing Altman's lack of "[consistency] in his communications."<sup>19</sup> After severe backlash from employees and outside the company, Altman was reinstated as CEO after only three days, on November 20th. As of the writing of this paper, he retains that position.

OpenAI itself retains massive importance in the cultural setting of this hearing, even devoid of Altman. OpenAI's ChatGPT software took the world by storm in 2023, establishing a large language model that, for the first time, was able to communicate with complex reasoning in a way that could have only been imagined ten years prior with the invention of Apple's *Siri* in 2011. Simply put, ChatGPT proved to a vast swath of people internationally that computers might eventually communicate in ways once thought accessible only to humans; the tool was available to the public for free. This rapid expansion meant that, before long, many people

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17 "About | IBM," [www.ibm.com](https://www.ibm.com/about?lnk=flatitem), n.d., <https://www.ibm.com/about?lnk=flatitem>.

18 "Sam Altman," Wikipedia, April 5, 2023, [https://en.wikipedia.org/wiki/Sam\\_Altman](https://en.wikipedia.org/wiki/Sam_Altman).

19 "OpenAI Announces Leadership Transition," OpenAI, November 17, 2023, <https://openai.com/index/openai-announces-leadership-transition/>.

immediately began to associate AI with ChatGPT, even though large language models represent but one of many facets of AI. As such, OpenAI started to hold immense amounts of power in the discussion of AI, as evidenced by Altman's 'World Tour.'

As per its title, the general themes of the hearing served as an introductory hearing between senators and AI professionals. Regulatory frameworks, potential use cases and risks for AI, and areas requiring more exploration were all touched on in the hearing. These potential use cases laden with risk were particularly emphasized. The ethical concerns of AI, privacy, data security issues for users, and public transparency and accountability in AI all took center stage. To what degree these concerns need to be observed versus being performative aspects of Senate committee hearings is mainly left unanswered but serves as an essential note either way.

Simultaneously, it's essential to recognize that the backgrounds of various actors play a crucial role in analyzing their testimony. On the one hand, you have Professor Marcus, an academic renowned for his concerns regarding the application of AI and critiquing companies exactly like OpenAI and sitting directly beside him are two representatives of the largest and most prominent companies currently overseeing AI. As such, moments of agreement or disagreement, echoing other answers, eagerness or unwillingness to answer various questions, and more all need to be analyzed through the lens that they're sitting right next to one another and testifying in succession; in other words, none of the answers in this hearing exist in a vacuum.

Finally, this case study will seek to explore the degree of senatorial engagement and understanding present at this hearing. As an advanced new technology, AI appears in contrast to a room of senators predominantly in their senior years. While age by no means dictates the degree to which senators can conduct themselves appropriately, there were moments when there

were clear misunderstandings among senators about the capabilities and functioning of AI. In post-hearing remarks, some senators openly admitted this lack of knowledge, so while speculating to what degree it was present throughout the hearing is ultimately impossible, it must be noted that an evidenced lack of understanding existed on the issue. This also demonstrates how, despite the performative aspects of Senate committee hearings, senators may engage with problems that may not usually present themselves. As advancements in AI move forward, so must the need for increased AI literacy among policymakers.

This hearing served as a landmark moment for AI regulation in the United States, inevitably making it a landmark moment for AI regulation internationally. Since this hearing, there have been an additional eight hearings from various senate subcommittees, all vying for their role in AI development and regulation. Despite some degree of fear-mongering over the worst-case scenarios for AI development, AI does possess serious risks if developed without the proper degrees of caution. Simultaneously, setting good examples for how AI can be regulated will aid in global coordination and create AI as a tool for good, which will have a cascade effect on sound global regulation systems. Senators and witnesses recognized the key to not fumbling the application of regulation, legislation, and development; whether or not those are empty words has yet to be seen.

## Case Study

### Optimism and Reverence

One of the earliest repeated references of this hearing was the power that latent AI technologies would have. The panelists and senators demonstrated their understanding that this technology would have world-altering effects if it had not already. For senators, this often meant likening AI to other significant technological advances such as the printing press, automobile, and social media. Social media was particularly emphasized for its unprecedented importance in modern society and the government's failures to properly regulate these spaces before major issues became apparent. In this vein, precaution remained an overarching theme of the hearing for both the senators and, oddly enough, the panelists present. Early in the hearing, the panelist with the most clout, OpenAI CEO Samuel Altman, even went so far as to directly state, "I think if this technology goes wrong, it can go quite wrong."<sup>20</sup>

While precaution retained its importance from the senator's side of the hearing, the admissions to possible perils were often accompanied by overt optimism from Altman and Christina Montgomery, IBM's "Chief Privacy & Trust Officer." When confronted with possible downsides to the development of the technology, their answers often included acknowledgments of risk, positive actions already taken, and willingness to cooperate in the future. In Altman's aforementioned quote, this structure holds, first stating, "We have tried to be very clear about the magnitude of the risks here," following with his bold assertion as to the scope of negative possibility, and finally concluding, "we want to work with the government to prevent that from happening." While this did remain a general pattern, there were moments when Altman notably

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<sup>20</sup> Justin Hendrix, "Transcript: Senate Judiciary Subcommittee Hearing on Oversight of AI | TechPolicy.Press," Tech Policy Press, May 16, 2023, <https://www.techpolicy.press/transcript-senate-judiciary-subcommittee-hearing-on-oversight-of-ai/>.

demonstrated an aggressive optimism, such as when, in his opening statement, he said, “We're very optimistic that they're going to be fantastic jobs in the future, and that current jobs can get much better,” giving none of the drawbacks that were seen when admitting the general risks of large language models.

Job reallocation began as an early sticking point of the hearing, yet also served as a point by which wildly optimistic points could be made by the corporate side of the panel. When asked what his “biggest nightmare” on the economic effect of large language models could be, Sam Altman’s response included, “I believe that there will be far greater jobs on the other side of this and that the jobs of today will get better,” and even as Montgomery admitted that “some jobs will transition away,” both panelists’ answers emphasized the positive aspects of job improvement and creation over the adverse effects of job loss. The validity of these claims is ultimately unimportant, as panelist Professor Marcus pointed out, “[nobody] knows the answer” to the timescale over which these changes could occur. What matters is that the language of both Altman and Montgomery emphasized not only the positive aspects of job facilitation and reallocation but also human control of these systems.

In Montgomery and Altman’s heads-up approach to the risks of their technology, positive outcomes and control were central to their argument that AI was safe, the quiet suggestion being that it was so safe it might not even be worth the effort of regulating. For example, Altman was happy to mention OpenAI’s nonprofit governing body, their mission, charter, or goals to emphasize their corporation's excellent intent and research orientation. Still, when asked whether OpenAI would create a revenue model, Altman replied, “I wouldn’t say never.” When speaking about testing, Altman professes OpenAI’s “extensive testing ... independent audits ... robust safety and monitoring systems,” advocates for AI companies to say, “Here are the results of our

tests, of our model before we release it,” and OpenAI even has a website dedicated to security and privacy. Yet, no details are given regarding the specifics of these models' testing. Altman advocates for safety and transparency that his own company does not adhere to, blatantly balancing lack of action with public demonstrations of goodwill. Such actions are clear when Altman said, “Even some of our biggest critics have looked at GPT-4 and said, wow, OpenAI made huge progress.” This self-manufactured goodwill is, in turn, being used to present the government and public with a facade reality in which OpenAI and other large companies are working just as hard as any regulatory agency would to ensure public good.

This approach is ultimately fairly standard; downplaying the negative while emphasizing the positive is not a unique approach to gaining public trust. Altman’s (and to some degree Montgomery’s) discourse is unique in that it considers not only this heads-up scenario of assured trustworthiness but also the tails-up scenario of needing regulation. Throughout the hearing, Altman remains stable and appears willing to cooperate in creating legislation. Numerous times, he references the possibilities of regulatory bodies, testing, and licensing requirements and offers to contact senators' offices directly to discuss specifics of these subjects. As the regulation section of this work will analyze, Altman often avoided sharing specifics of these plans, usually obfuscating the answer or dodging the question entirely. Nevertheless, Altman takes a two-pronged approach to build public confidence. On one hand, he’s asserting the trustworthiness of his own company, OpenAI. On the other hand, he’s asserting OpenAI’s willingness to cooperate with government regulation to prevent other bad actors. In many of Montgomery’s statements, these same patterns are also reflected, demonstrating not only the willingness of a newer company (albeit with legacy company backing) but a legacy company like IBM to try a new tactic in a dance of regulation that often starts in hearings such as these.



## **Government Capacity and Senators' Misunderstandings**

In this hearing, there were many moments in which Montgomery and Altman exploited senators' misunderstandings of technology, either due to their experience or lack of specific information, to obfuscate the discussion about AI further. While many of these discussions proved ultimately confusing, certain remarks yielded information on the government's capacity to keep pace with latent large language models and the companies that govern them.

While metaphors can undoubtedly help clarify a topic, senators were unusually eager to liken AI to other technological shifts. Of the thirteen senators, only five did not include a direct reference to a piece of technology whose regulation could be akin to that of AI. Some senators took wild swings, suggesting AI regulation was like nuclear weaponry, others more mildly correlating it with the automobile industry. But where almost every senator likened AI was social media. From questions about personal privacy, data usage, child safety, Section 230 and the legality of suing, gaps in regulation, and more, senators seemed eager to make correlations that weren't exactly accurate. Take Section 230, a piece of legislation that allows social media companies to defer being sued in exchange for their active regulation of the content on their services. Despite good intent, Section 230 is widely acknowledged as allowing social media companies to take wildly different approaches to this regulation, and misinformation online has been a critical point of contention with this approach. When pushed by Senator Lindsey Graham, a 68-year-old senator from South Carolina, Altman was visibly confused, stating, "No, I don't think we're, I don't, I don't think we're saying anything like that," when asked if Section 230 even applied to the industry. In these moments, gaps in the knowledge of senators made themselves evident.

This lack of knowledge about how AI systems function became increasingly evident throughout the hearing. Senator Kennedy, 72, openly hypothesized that “many members of Congress do not understand artificial intelligence.” Senator Blumenthal, 78, suggested putting “nutrition labels ... that [indicate] to people ... what the ingredients are” of AI systems, clearly unaware that “we have no idea of how a deep learning system comes to its conclusions.”<sup>21</sup> This is where Altman’s (and again, to some degree Montgomery’s) picking-and-choosing of answers to dive into began to take place. In moments such as these, where senators made errors in questioning or admitted to gaps in knowledge, Altman would go on at length. For example, in the largely irrelevant nutrition label discussion, Altman takes the opportunity to vaguely agree and suggest audits but then takes up roughly half his time to re-emphasize his optimism and excitement and remind the audience of the beautiful tool that ChatGPT is. In other words, it’s a non-answer, verbal fluff from previous vague points to satisfy a question irrelevant to actual regulatory approaches. Where Altman does keep his answers short is when pressed on specifics, when, for example, 37-year-old Senator Jon Ossoff refused Altman’s typical attempts to “follow up with your office” and forced him to opine on specifics of regulation. In these moments, Altman’s remarks are notably more curt and less overtly optimistic, and typically, Altman seems to avoid making these kinds of definitive statements. Altman’s tactic is to drag out irrelevant or pleasant questions while skipping over harsher critiques. It is a time-tested tactic whose use remains nonetheless of note.

Unlike their knowledge about the specifics of large language model technology, senators seemed very concerned with their capabilities to regulate this technology. Senator Welch, 76, even admitted that “it’s impossible for Congress to keep up with the speed of technology,”

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21 Lou Blouin, “AI’s Mysterious ‘Black Box’ Problem, Explained | University of Michigan-Dearborn,” [umdearborn.edu](https://umdearborn.edu/news/ais-mysterious-black-box-problem-explained), March 6, 2023, <https://umdearborn.edu/news/ais-mysterious-black-box-problem-explained>.

echoing similar tones from other senators who lamented their incapability to find a proper balance of regulation for the internet and social media. When discussion arose about which federal agency could undertake the massive onus of regulation of large language models like ChatGPT, senators seemed unconvinced that bodies such as the FCC or the FTC could handle the upkeep. In that vein, the topic of a new regulatory agency to handle AI was breached by panelists and senators alike. This theoretical agency's key feature is its ability to act in a way "that is more nimble and smarter than Congress," as Senator Graham phrased it.

As an aside between the differences in legacy companies and the new approach Altman took in the hearing, the discussion surrounding an agency demonstrated a 'tails-up' moment for Altman, where he resoundingly answered, "ee'd be enthusiastic about [a new regulatory agency]." By contrast, Montgomery, representing IBM, hesitated in her answer, saying, "but a lot of the issues, I don't think so. A lot of the issues..." when asked the same question about the necessity of a regulatory body.

Part of the reason Montgomery was particularly abrasive and obfuscatory when discussing regulatory bodies can be analyzed through the emphasis she put on corporate inability to delay development. During the discussion of a moratorium on development that was briefly circulated online surrounding AI technologies, Montgomery said, "I'm not sure how practical it is to pause [development]." Some senators were keen to echo this sentiment, reminding the room how "the world won't wait" and how "nobody's pausing. This thing is a race." Stopping the race may be unfeasible, so Montgomery would be hesitant about additional regulation. Yet, she still wanted to save face by emphasizing the utmost need for safety and precaution, not appearing totally brazen against protocol.

## **Regulation**

The discussion of regulation must first be defined by its scope. As raised consistently throughout the hearing, this race of AI development would not be contained uniquely within the United States. From statements such as “Europe is ahead of us” when discussing the EU’s nascent AI legislation to “we have adversaries that are moving ahead and sticking our head in the sand is not the answer,” clearly referencing states such as China and Russia, it was clear that senators and panelists alike were concerned as to the incapability of limiting the scope of AI dispersion worldwide, especially when faced with non-compliance of Chinese industry to international standards, as observed in early mobile telecommunications, and the impacts of European regulation on American industry. It must be noted that, especially when the conversation turned towards adversarial nation-states possessing high-capacity AI technology, the tone turned towards fast-paced and high-tier AI corporations and away from regulation and the emphasis on safety concerns that were more present, especially on the senator’s side of things. Remarks such as “forgive me for sounding skeptical ... nobody's pausing” from the senatorial side of the aisle demonstrate the degree to which the government must not and cannot stop the development of AI systems; the quiet part being even if it is for the establishment of regulatory authorities. China clearly holds the unique position of being an adversarial nation with the capacity to actually develop its own AI systems completely separate from institutions that govern its development in the west. As such, regulation is already stifled by the threat of China not taking similar measures to slow down its own development.

The questions surrounding the scope of regulation were sometimes shoehorned into hypothetical scenarios Altman and Montgomery were particularly adept at creating. Simply put, they would warn against regulation, which would put too much onus on small companies to

adhere to the same standards as large companies like their own. For example, when Altman said, “[The] peril ... is you slow down American industry in such a way that China or somebody else makes faster progress ... the regulatory pressure should be on us, it should be on Google. It should be on the other small set of people in the lead the most. We don't wanna slow down smaller startups. We don't wanna slow down open-source efforts. We still need them to comply with things. They can still, you can still cause great harm with a smaller model.” These four lines demonstrate exactly the concerted effort that Altman is making to muddy the waters while simultaneously appearing cooperative. First, the reminder that international pressures are putting pressure against getting any possible regulation wrong and stifling American progress. This point makes senators question any possible regulation as there is now a push-and-pull relationship between large and small businesses, where regulation will inevitably affect one side unevenly. Altman’s open suggestion then backs this up to larger companies taking the burden of regulation but without clear indicators as to how to do so. Finally, he ends with an open remark that small-scale companies and models would still be able to cause great harm, further emphasizing the need to get any regulation *precisely* correct, with dire consequences possible. Ultimately, while coming off as a reasonable remark, sensible to the need to balance regulation properly between large and small-scale companies, Altman is offering little to nothing regarding actual suggestions, only insisting on the importance of not making any wrong decisions. When it comes to the need for urgent policy to address a rapidly growing industry, this ultimately serves to run out the clock on legislation being crafted.

Altman’s tone towards smaller companies is when these phenomena become clearest, from the hypothetical danger they could possess if not governed by the same strictly ethical people who govern his company to the suggestions that even small companies could quickly

enact large capability models. At one point, Altman is outwardly brazen in this regard, stating that “the fewer of us that you really have to keep a careful eye on, on the absolute, like bleeding edge capabilities, there's benefits there,” essentially arguing that monopoly organizations are more straightforward for the federal government to regulate efficiently. Professor Marcus immediately responds to the equally significant risks of “a kind of technocracy combined with oligarchy, where a small number of companies influence people's beliefs through the nature of these systems.” Nonetheless, Altman’s true intentions of wanting monopoly power wave directly in the face of his welcoming any regulation. It’s clear that Altman only actually wants the kind of regulation that allows himself and companies like his to move as freely as possible. So, how does he keep up the facade of entertaining regulation? Obfuscating answers, dodging harsh questions, and diving into senators’ gaps in knowledge.

Part of this obfuscation centered around playing a game of chicken with regulation specifics; while Altman and Montgomery were often happy to admit regulation was needed, they always wanted the specifics presented to them, not the other way around. In other words, they would follow the rules put in place by different people, but they wouldn’t be the people who suggest what rules to create in the first place. Altman got very close to stating this outright, saying, “What these systems get aligned to, whose values, what those bounds are, that that is somehow set by society as a whole, by governments as a whole.” While appearing friendly and well-intentioned as an answer, it’s a far cry from the expertise demanded from a government panel in this capacity, trying to get clear answers on AI regulation. It’s clear that this even got frustrating to the senators present, as Senator Kennedy said, “Please tell me in plain English,” after a similar non-response from the corporate panelists. These approaches to direct answers and

slapping away non-answers seen from a few Senators eventually got the two corporate panelists to divulge four vague sets of parameters to begin regulation.

The first of these suggestions, repeated the most, was something panelists referred to as an “AI constitution,” a way of designing AI systems around a specific set of parameters that would prohibit the model from generating ‘unconstitutional’ answers: Illegal, harmful, dangerous, or otherwise unethical. Whoever decides these parameters would be creating the model, a front-end solution. When pressed if he thought implementing such requirements in regulation was a promising idea, Altman half-dodged the question, spurting out, “Here are the wide bounds of everything that society will allow. And then within there, you pick as the user, you know, if you want a value system over here, a value system over there. We think that’s very important.” As previously demonstrated, Altman again is attempting to emphasize the importance of solutions *akin* to what’s being suggested by senators without actually approving of what they’re saying. Whether or not this is an intended tactic or the babblings of a tech nerd who wants to correct technically incorrect prompts from senators, the outcome is moot; Altman generally agrees without furthering the discussion or meaningfully inputting *actionable* solutions.

The second parameter discussed was, in the same vein, harmful content recognition. In the discussion about an AI constitution, a binding model to limit AI systems, the ultimate goal is safety and preventing the production of answers to harmful requests. This kind of solution would be implemented on the back end of answer output by AI models, where moderators would judge the answers of the model and filter harmful ones. When asked to opine on what exactly harmful meant, Altman was uncharacteristically clear, stating “One would be about violent content ... another would be about content that’s encouraging self-harm, another’s adult content ... we

refuse all of it,” and this is also when, a few moments later, he states how proud even the harshest critics of OpenAI have been to GPT-4’s capabilities to deny harmful requests, essentially publicly patting themselves on the back. This ultimately makes clear that while OpenAI has self-imposed supposedly good standards to avoid harmful content with their algorithms, there exist no universal standards by which companies have to adhere to prompt aversion in a similar manner. Furthermore, while Altman provided three good examples of harmful content, his answer didn’t give actionable ways in which this process could be repeated, and, while perhaps inspiring the senators about the *kind* of regulation needed, did nothing to further the discussion about how to do so.

The third option of regulation discussed was licensing. Akin to nuclear power production, this would only allow government-approved organizations to develop AI. Despite the frequency with which it was brought up in the hearing, the subject, similarly to the others, was largely vague and missing actionable stratagems from the supposed expert panelists. Time and time again, senators asked Altman and Montgomery whether or not they thought a licensing agency would apply to this sector. While both panelists quickly agreed, they again took advantage of gaps in the senators’ understanding to dodge meaningful answers. For example, when Hawaii’s Mazie Hirono, 76, admitted: “So two of you said that we should have a licensing scheme. I can't envision or imagine right now what kind of a licensing scheme we would be able to create to pretty much regulate the vastness of ... this game-changing tool.” This demonstrates that despite the senator’s apparent knowledge of the process of creating and overseeing regulatory bodies, AI presented enough unknowns on the scope of the technology for senators to know which tools in their arsenal to use to regulate through a licensing body. Rather than help clarify from their expertise, as panelists are meant to, Altman took this opportunity to say, “Where, where I think



the licensing scheme comes in is not ... for what these models are capable of today ... but as we head ... towards artificial general intelligence and the impact that will have and the power of that technology, I think we need to treat that as seriously as we treat other very powerful technologies. And that's where I personally think we need such a scheme.” Ultimately, it becomes clear that when Altman says ‘we’ need a path towards regulation, he means humanity, not his own company. Altman thereby spent his time answering to generalize eventual needs in a hypothetical world, whereas senators were now asking for answers to pressing questions.

The last broad theme under which regulation was discussed was when referring to “different rules for different risks,” a reasonably common-sense idea, essentially arguing that models and companies that strive for higher levels of computational capability should be given different standards by which to adhere. This model of regulation would not involve itself as directly with corporation’s procedures for AI development, rather, it would define capacities of models and, like the licensing proposal, allow corporations to achieve higher AI learning abilities with government approval. Despite the seeming banality of the topic, there were moments in these discussions where Altman and Montgomery finally teetered on the verge of giving specific, actionable detail, even when it was riding on Marcus' coattails. Professor Gary Marcus, 54, has largely been disregarded in this analysis because, though he often provided the soundest advice, he came from an academic background and was less personally tied to the success of a particular company. In analyzing corporate response to regulation, he didn’t offer much except for a few key moments, such as these, where he would answer first. Altman and Montgomery would follow by immediately echoing what he had just said. While it’s impossible to ascertain whether Altman and Montgomery intentionally copied his answers, the effect remained largely the same;

both corporate panelists once again appeared cooperative while divulging as little original specific information as possible.

Ultimately, it seemed that the push and pull between non-answers from the panelists and incomprehension of the senators finally wielded way to a moment in which, clearly in desperation (this is the moment where he asked panelists to speak in “plain English”), Senator John Kennedy asked for three actionable measures in regulation or reform. If there was a moment in this hearing where panelists were put on the spot to be experts in the field they were supposedly experts in, this was that moment. However, it ultimately proved fallible to the same exploitation of vague terminology and gaps in knowledge that were made clear throughout the hearing, only condensed into one question. Montgomery answered first, noting how AI corporations need to adhere to “transparency” and how there needs to be “explainability in AI.” Though Montgomery did, to her credit, mention data training sets and model performance, these were the only specifics given towards these seemingly lofty goals. Part of this may be due to the reason that’s been explained repeatedly: how AI systems are usually a black box of answers, coming to conclusions through their neural networks that are impossible to decipher yet. Attaching buzzwords like ‘transparency’ and ‘explainability’ does not diminish this phenomenon. Finally, Montgomery refers to “impact assessments,” in other words, the capability of danger a model possesses and regulating alongside the EU’s recent AI legislation by measures defined as such. Tying into the theme of “different rules for different risks” would essentially create regulation levels to which companies would have to adhere. It must be noted, however, that as analyzed in the telecommunications industry, the legal crossover between US companies and European legislation exists. Despite that, though, language from either of the panelists

throughout the hearing was vague, establishing a few common-sense parameters but straying away from outright suggestions.

Altman's responses are marked by the fact that he was asked last of the panelists. As such, his first two answers echo what Montgomery and Marcus posited closely, but he nonetheless delivered one original point with some merit in exploring. The first of the three reforms he suggested was "a new agency that licenses any effort above a certain scale of capability." A good, actionable idea whose authenticity is tainted by the fact that, not two minutes earlier, Professor Marcus suggested a "nimble monitoring agency to follow what's going on." However, it's worth noting that these topics were suggested at length throughout the hearing; it's neither absolutely condemning nor earth-shatteringly compelling on Altman's character that he re-suggested sensible, vague ideas. It's the base of Altman's attempts at trust-building that he performed throughout the hearing. Secondly, Altman suggested creating "a set of safety standards focused on ... dangerous capability evaluations," echoing Montgomery's point not five minutes prior about 'impact assessments' and the necessity to create different standards for models with various capacities. While reflecting many of the same half-issues that his first point did, this, once again, is a rare moment of candid prioritization from Altman. At the very least, these moments served to help illuminate what first steps may be taken. Unfortunately, that may have been one of their only truly redeeming factors. Finally, Altman's last response truly gave a piece of novel, specific, and actionable policy. He suggested "independent audits ... not just from the company or the agency, but experts who can say the model is or isn't in compliance with these stated safety thresholds and these percentages of performance on question X or Y." While certainly not the top-down regulation that Altman alluded to early in the hearing, this was an approach that none of the panelists mentioned, and that was absent from the rest of

the hearing. Despite this lack of direct communication, this idea holds promise and demonstrates some degree of genuine thought on issues from Altman. Nonetheless, it falls flat as a rare moment of clarity in a hearing full of obfuscation patterns and tactful avoidance.

### **A New Dance**

Throughout this hearing, Altman and Montgomery were careful to appear optimistic, willing to cooperate, and trustworthy. Unlike historical approaches by panelists to deny, dodge, or appear hostile, the attitudes of these corporate panelists were unique. Senator Dick Durbin, 79, who has served in the Senate since 1997, said, “I can't recall when we've had people representing large corporations, or private sector entities come before us and plead with us to regulate them.” Noting that corporations usually argue “the economy will thrive if government gets the hell out of the way.” Even the one panelist not directly representing a corporation, Professor Marcus, noted towards the end of the hearing Altman’s apparent physical distress that he demonstrated when discussing the potential downsides of a lack of proper regulation in the industry. Marcus states, somewhat out of the blue, “Let me just add for the record ... [Altman’s] sincerity in talking about those fears is very apparent physically in a way that just doesn't communicate.” Yet, paradoxically, as previously analyzed, Altman and Montgomery’s optimism abounded throughout the hearing that their approaches were entirely within the scope of sound ethics and that other potential actors were to be worried about. These two factors, the apparent sincerity with which dangers and the need for regulation are discussed alongside the optimism that they’re doing it right, get to the crux of Altman and Montgomery’s new style to adapt to federal regulation.

As previously discussed, when pushed on the specifics of the regulation they so heartily support, Altman and Montgomery were hesitant, vague, or overly complicated to ‘answer’

questions without actually addressing them. Often, details were agreed to be privately communicated with senators' offices, removing the discussion from the public eye. However, sometimes, one of the corporate panelists would backtrack. They would argue that regulation for them would essentially be pointless because of how trustworthy their companies were (due to their acceptance of regulation, physical distress, and optimism). Remember when Montgomery argued that "the fewer of us that you really have to keep a careful eye on, on the absolute, like bleeding edge capabilities, there's benefits there." Therefore, it's clear that the goals of these corporations, despite their different approaches, ultimately remain the same as in the past: dodge regulation. It remains clear that traditional rhetoric was not absent from their dialogue, as when discussing job reallocation, Altman professed, "I believe that there will be far greater jobs on the other side of this and that the jobs of today will get better." As with, for example, automation in the automobile industry, corporations are keen to point towards potential job growth with the introduction of new technology without acknowledging that the same people would often be unable to retrain themselves to adapt to new positions. Ultimately, it's clear that with or without new styles of doing so, the goals of these corporations remain to dodge both regulation and dissuading action against the negative impacts of new technology.

Where these patterns in non-compliance did take effect, though, was with the senators present. As previously discussed, questions irrelevant to the discussion were asked numerous times by various senators, metaphors were made to situations that didn't precisely align, and time was repeatedly cut short while senators were attempting to squeeze answers out of the panelists. Whether it be due to the novel approaches by Altman and Montgomery to obfuscate, the lack of understanding of the technology due to age or lousy information gathering, or any other factor, the result is evident: senators didn't learn enough. This isn't hearsay, either; when directly asked

by reporters if they had learned enough, Senator Dick Durbin said, “I’ve got a lot to learn, though. About what’s going on.”<sup>22</sup> Senator Richard Blumenthal said, “Very frankly, it’s new terrain and uncharted territory,” Senator John Kennedy said, “The short answer is no. The long answer is hell no.”<sup>23</sup>

To help remedy this apparent continued lack of understanding, multiple other hearings akin to this, with the same Senate judiciary committee, have tackled AI to some degree or another. As of writing, no federal legislation has been created concerning AI, no existing regulatory body has been given complete control over AI-related issues, and no new regulatory agency has been created to oversee AI. If Altman and Montgomery’s end goal was to delay regulation in the ongoing ‘race’ of AI, they’ve succeeded. Given all that has been analyzed: obfuscation, tactful displays of trustworthiness, optimism, and good intent, occasionally backtracking to traditional rhetoric on regulation, and more, it’s clear to see that these companies don’t actually want regulation for themselves, regardless of if they seemingly argue for industry-level regulation. This concern for potential worst-case scenarios is primarily manufactured to create a semblance of trustworthiness and seriousness about issues and is balanced by relentless optimism in their practices. On the other hand, Congress admits it is too slow to create solutions effectively and has demonstrated exactly this by failing to implement any regulation, despite an “urgent need” to do so after more than a year has passed since this original hearing. Whether caused by partisan disputes, lack of understanding, or AI’s ousting from the news cycle as

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<sup>22</sup> “Jon Stewart on the False Promises of AI | the Daily Show,” [www.youtube.com](https://www.youtube.com/watch?v=20TAky3aBY), April 1, 2024, <https://www.youtube.com/watch?v=20TAky3aBY>.

<sup>23</sup> “How Congress Plans to Tackle the AI Revolution and ChatGPT | ABC News’ Jay O’Brien Reports on on the Promise and Peril of AI as Congress Weighs New Laws to Tackle It, Speaking with Congressman Don Beyer (D-VA),... | by ABC News LiveFacebook,” [www.facebook.com](https://www.facebook.com/watch/?v=602899111376840), March 16, 2023, <https://www.facebook.com/watch/?v=602899111376840>.

today's most urgent problem, AI legislation has seemingly faded into the back halls of Congress. So why, then, was this hearing so important?

### **The Importance of This Hearing**

According to the U.S. Senate's webpage, "hearings [and] committees [serve to] gather information on national and international problems ... in order to draft, consider, and recommend legislation to the full membership of the Senate."<sup>24</sup> Senate hearings, often examined today for their performative moments on live TV, are nonetheless vital facets of government. The exact degree to which senators form their opinion outside or within hearings is unknowable. However, the public perception of this transfer of information remains critical to how hearings function as opportunities for politicians and panelists alike to push agendas and maneuver cultural dialogue to suit themselves better. Essentially, these hearings are moments for politicians to 'prove' their dedication to issues and for corporations to 'defend' their actions or argue for alternative courses of action. There exist multiple examples in just the past few years where senate hearing answers have exploded in popularity through news channels, memes, and the online platforms that serve them. Meta CEO Mark Zuckerberg was mocked for his appearance during a senate hearing in 2018, and recently made headlines for a public apology to families of children who were victims of online harassment during a hearing just this year.<sup>25</sup> TikTok's CEO Shou Zi Chew went viral and amassed millions of views when asked if he was affiliated with the Chinese Communist Party during a hearing, replying, "I'm Singaporean!"<sup>26</sup> This is all to say that

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24 "U.S. Senate: About the Committee System," [www.senate.gov](https://www.senate.gov/about/origins-foundations/committee-system.htm#:~:text=Committees%20are%20essential%20to%20the), n.d., <https://www.senate.gov/about/origins-foundations/committee-system.htm#:~:text=Committees%20are%20essential%20to%20the>.

25 Angela Yang, "Mark Zuckerberg Apologizes to Parents at Online Child Safety Hearing," NBC News, January 31, 2024, <https://www.nbcnews.com/tech/social-media/mark-zuckerberg-apologizes-parents-online-child-safety-hearing-rcna136578>.

26 "Video: TikTok CEO Fires Back at Tom Cotton for Pressing about Possible Ties to China | CNN Politics," [www.cnn.com](https://www.cnn.com/videos/politics/2024/02/02/tom-cotton-shou-zi-chew-singaporean-tiktok-testimony-vpx.cnn), February 2, 2024, <https://www.cnn.com/videos/politics/2024/02/02/tom-cotton-shou-zi-chew-singaporean-tiktok-testimony-vpx.cnn>.

the cultural impact of senatorial hearings and the perception, for better or for worse, that questions and answers can sway the direct opinion of the American public is tangible.

As analyzed in the literary review section of this paper, these hearings partly foster spectacle, grandstand, and present moments of political unity. All three were present in this hearing; for example, senators often asked Altman to communicate with their offices outside the hearing. In doing so, they both fostered a degree of spectacle by ignoring the reason the hearing supposedly exists: to gather and share relevant information with other senators and the American public. It also delivered a sense of moral grandstanding as senators; asking Altman and other panelists to meet outside of the hearing conveyed that senators ultimately believed the most valuable work should be done outside of the cumbersome hearing. However, moments such as these are simultaneously unremarkable as they are essential, as despite the possible negative connotations, they could also portray a sense of knowledgeability and dedication to understanding the subject and are, therefore, done on numerous occasions by multiple senators. Finally, in acknowledging readily apparent tenants of regulation about AI, such as “the safety for children,” senators demonstrated a desire to emphasize obvious, bi-partisan approaches to AI regulation that, while frankly not deserving precious minutes in an already-rushed hearing, portrayed a unified congress and shared cultural values across political lines.

This hearing’s importance was paramount in the political discussion of AI in the United States and, by extension, internationally. As previously stated, eight additional senate hearings have occurred concerning increasingly specific aspects of AI deployment, all exploring possible regulatory approaches. Less than half a year later, President Joe Biden’s White House released



an executive order on “Safe, Secure, and Trustworthy Artificial Intelligence,”<sup>27</sup> reviewing many of the same tenants this hearing discussed. While not a legally binding document, this executive order plays a prominent role in the aforementioned ‘soft law’ practices of regulation, obviously in an attempt by the government to avoid worst-case scenarios of AI deployment without unnecessarily stifling new development. Nonetheless, this dance between large-scale AI corporations and the government has allowed these large actors to dodge any hard regulation.

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27 The White House, “FACT SHEET: President Biden Issues Executive Order on Safe, Secure, and Trustworthy Artificial Intelligence,” The White House, October 30, 2023, <https://www.whitehouse.gov/briefing-room/statements-releases/2023/10/30/fact-sheet-president-biden-issues-executive-order-on-safe-secure-and-trustworthy-artificial-intelligence/>.

## Conclusion

In the hearing analyzed in this paper, the corporate response to AI regulation may have appeared out of the norm, with panelists representing multi-billion-dollar companies seemingly accepting regulation. However, this was a constructed strategy where panelists were careful to appear optimistic and trustworthy, all while carefully dodging meaningful answers except on rare occasions. This dance is ultimately done so powerful corporations can play in much of the same legal gray area as the global internet; where artificial intelligence can continue to be developed and deployed with little outside oversight. Because of the cultural and political importance of senate hearings in the United States, this has, as of the writing of this paper, had a marked effect on future approaches to AI regulation and the deployment of ‘soft law’ to allow essentially unchecked development potential in large-scale AI corporations.

Real-world impacts have been admittedly slow to reach effect. As of yet, AI has yet to take over large employment sectors, as some first hypothesized. Nonetheless, many experts in the field have continued to support the notion that if left unchecked, the development of artificial intelligence could reach a cataclysmic scale. Simultaneously, giant tech corporations will be all but too willing to take advantage of legislation gaps to increase artificial intelligence's capacities for one reason or another. The history of corporations taking advantage of ethically concerning gaps in lawmaking for the sake of profit is so littered with examples of this kind of behavior that, despite Sam Altman appearing ‘visibly shaken,’ it’s hard to believe that every current and future company developing artificial intelligence would self-impose regulations that are only legally suggested.

While the United States does not have unlimited power to determine the global development of AI, as can be seen with the internet, precautions taken in the United States can

help further global cooperation in regulation, as is demonstrated by the United States' and Europe's cross-referential relationship in international technology development as a result of corporations that exist within the regulatory domain of both entities. The United States also holds significant power in international legal bodies and, as such, should also take active steps in creating broad but legally binding tenants by which AI should be developed globally.

In the same vein, the United States needs to set an example by enacting binding legislation, however broad it needs to be, to set a precedent for what Artificial Intelligence can be developed to do. Even if that development takes a long time, and even if the tenants are as basic as 'keeping children safe,' standards are incredibly important to set when the potential for catastrophe, however low, exists. Furthermore, suppose legal language is not clearly defined before the first AI-related cases inevitably go to trial. In that case, judicial cases may have to draw from existing legislation that does not reflect the capacities of AI nearly enough.

Without implementing and enforcing some degree of regulations on corporations, the risks for rapid development of use cases that have yet to be defined could explode. Regulation must therefore be enacted by the United States, Europe, and other states to create a universal understanding of the danger of unwatched development akin to nuclear technology. This must be done while balancing the corporate ability to expand what could be simultaneously an immensely useful technology. Still, the worst-case scenario of incorrectly striking this balance is too great to take for granted. Corporations are well aware of this and are taking never-before-seen public steps to avoid having to be regulated in ways inconvenient to them. In the United States, these steps are working, and while soft law certainly has its use cases, it ultimately leaves companies to self-regulate, and even if OpenAI and IBM plan to do so with the utmost diligence, there's no saying that any other bad actor may not.

What this topic deserves more than anything else is an increased amount of scrutiny on the part of researchers and academics. As this paper has sought to analyze, the mistakes of past decades in properly regulating fast-paced, international technologies abound. However, AI technology stands at a unique point where the technology has not reached the large-scale capacity that many experts have already begun to suspect one day might. With the correct amount of observation by appropriate experts, the path towards sensible global coexistence and cooperation of AI technologies can be actively shaped as the technology evolves, rather than after its worst impacts have already come to fruition. As such, governments and corporations alike must properly fund exploratory efforts, not only to further understand AI systems and the best ways to make them safe, but to understand the regulatory capacities that various international actors hold at the present moment. Only through a wholistic analysis of these concurrent phenomenon will AI legislation be wrought in the most effective manner possible.

In this aim, the eight subsequent United States senate hearings that have taken place analyzing AI and its most immediate impacts must be properly examined. For workforces, hearings have already been held to analyze intellectual property and copyright, journalism, and criminal investigations. Beginning to understand the degree to which AI corporations and experts, when put on the public stage, interact with the shifts in workforces that will be sure to happen in these sectors will be incredibly important in not only furthering the analysis of behavior against regulation that corporations hold, but the degree to which AI systems will likely impact each of these fields. Hearings have been held on election deepfakes and human rights, and the degree to which AI will have remarkable impacts on inherently political issues. These too, have the potential for immense ramifications if not properly analyzed by both senators in hearings, but also by the public as a result of them. Finally, and perhaps most importantly, two

additional hearings have been held exclusively with the goal of determining paths for regulation and legislation concerning Artificial Intelligence. Most akin to this first hearing, the reasons for which these discussions are absolutely central to the international development of AI have been examined at length throughout this paper, and make the need for additional emphasis on research and understanding these current events crystal clear.

To conclude, AI systems stand on the cutting edge of technological development, and as such, are on the forefront of international discussions about how and whether to regulate their development. Without the proper emphasis being placed on examining and understanding both the technology itself and the legal processes through which it will find itself analyzed is crucial to unmasking the most important first steps that need to be taken domestically, internationally, and across economic borders that have been developed between the east and the west. Only through careful examination and concerted effort towards cooperation and shared knowledge will humanity be able to take best advantage of a potentially era-defining tool.

## Bibliography

- Anadiotis, George. “The State of AI in 2020: Democratization, Industrialization, and the Way to Artificial General Intelligence.” ZDNET, October 1, 2020.  
<https://www.zdnet.com/article/the-state-of-ai-in-2020-democratization-industrialization-and-the-way-to-artificial-general-intelligence/>.
- Aspray, William, and Philip Doty. “Does Technology Really Outpace Policy, and Does It Matter? A Primer for Technical Experts and Others.” *Journal of the Association for Information Science and Technology* 74, no. 8 (May 8, 2023): 885–904.  
<https://doi.org/10.1002/asi.24762>.
- Blouin, Lou. “AI’s Mysterious ‘Black Box’ Problem, Explained | University of Michigan-Dearborn.” [umdearborn.edu](http://umdearborn.edu), March 6, 2023. <https://umdearborn.edu/news/ais-mysterious-black-box-problem-explained>.
- Electronic Frontier Foundation. “Section 230 of the Communications Decency Act.” Electronic Frontier Foundation, 2023. <https://www.eff.org/issues/cda230>.
- Fried, Ina. “The Head of Uber’s AI Labs Is Latest to Leave the Company.” Axios, March 18, 2017. <https://www.axios.com/2017/12/15/the-head-of-ubers-ai-labs-is-latest-to-leave-the-company-1513300831>.
- Future of Life Institute. “Pause Giant AI Experiments: An Open Letter.” Future of Life Institute, March 22, 2023. <https://futureoflife.org/open-letter/pause-giant-ai-experiments/>.
- Guitar, Joshua, Sheri Bleam, Jenna Thomas, Madeline Studebaker, and Matthew George. “CONGRESSIONAL COMMITTEE HEARINGS as PUBLIC SPECTACLE.” *Purdue University Press EBooks*, December 15, 2022, 115–54.  
<https://doi.org/10.2307/j.ctv33t5gjm.11>.
- Hagemann, Ryan. “New Rules for New Frontiers: Regulating Emerging Technologies in an Era of Soft Law.” *Washburn Law Journal* 57, no. 2 (2018): 235–63.  
<https://contentdm.washburnlaw.edu/digital/collection/wlj/id/7163>.
- Hendrix, Justin. “Transcript: Senate Judiciary Subcommittee Hearing on Oversight of AI | TechPolicy.Press.” Tech Policy Press, May 16, 2023.  
<https://www.techpolicy.press/transcript-senate-judiciary-subcommittee-hearing-on-oversight-of-ai/>.
- IBM Newsroom. “IBM Newsroom - Christina Montgomery.” Accessed May 20, 2024.  
<https://newsroom.ibm.com/Christina-Montgomery>.
- Intel. “Moore’s Law.” Intel, September 18, 2023.  
<https://www.intel.com/content/www/us/en/newsroom/resources/moores-law.html>.
- Kaa, G. van de, and M. J. Greeven. “Mobile Telecommunication Standardization in Japan, China, the United States, and Europe: A Comparison of Regulatory and Industrial

- Regimes.” *Telecommunication Systems* 65, no. 1 (August 31, 2016): 181–92.  
<https://doi.org/10.1007/s11235-016-0214-y>.
- Marcus, Gary. “Gary Marcus.” Gary Marcus, 2022. <http://garymarcus.com/index.html>.
- OpenAI. “OpenAI Announces Leadership Transition,” November 17, 2023.  
<https://openai.com/index/openai-announces-leadership-transition/>.
- Perrigo, Billy. “The \$2 per Hour Workers Who Made ChatGPT Safer.” *Time*, January 18, 2023.  
<https://time.com/6247678/openai-chatgpt-kenya-workers/>.
- Shivaram, Deepa. “The White House Issued New Rules on How Government Can Use AI. Here’s What They Do.” NPR, March 29, 2024.  
<https://www.npr.org/2024/03/29/1241281892/biden-government-ai>.
- Talbert, Jeffery C., Bryan D. Jones, and Frank R. Baumgartner. “Nonlegislative Hearings and Policy Change in Congress.” *American Journal of Political Science* 39, no. 2 (May 1995): 383. <https://doi.org/10.2307/2111618>.
- The White House. “FACT SHEET: President Biden Issues Executive Order on Safe, Secure, and Trustworthy Artificial Intelligence.” The White House, October 30, 2023.  
<https://www.whitehouse.gov/briefing-room/statements-releases/2023/10/30/fact-sheet-president-biden-issues-executive-order-on-safe-secure-and-trustworthy-artificial-intelligence/>.
- Wikipedia. “Sam Altman,” April 5, 2023. [https://en.wikipedia.org/wiki/Sam\\_Altman](https://en.wikipedia.org/wiki/Sam_Altman).
- www.cnn.com. “Video: TikTok CEO Fires Back at Tom Cotton for Pressing about Possible Ties to China | CNN Politics,” February 2, 2024.  
<https://www.cnn.com/videos/politics/2024/02/02/tom-cotton-shou-zi-chew-singaporean-tiktok-testimony-vpx.cnn>.
- www.facebook.com. “How Congress Plans to Tackle the AI Revolution and ChatGPT | ABC News’ Jay O’Brien Reports on the Promise and Peril of AI as Congress Weighs New Laws to Tackle It, Speaking with Congressman Don Beyer (D-VA),... | by ABC News LiveFacebook,” March 16, 2023.  
<https://www.facebook.com/watch/?v=602899111376840>.
- www.ibm.com. “About | IBM,” n.d. <https://www.ibm.com/about?lnk=flatitem>.
- www.senate.gov. “U.S. Senate: About the Committee System,” n.d.  
<https://www.senate.gov/about/origins-foundations/committee-system.htm#:~:text=Committees%20are%20essential%20to%20the>.
- www.ted.com. “TED Talks.” Accessed May 20, 2024.  
<https://www.ted.com/talks?sort=relevance&topics%5B0%5D=AI>.

www.youtube.com. "Jon Stewart on the False Promises of AI | The Daily Show," April 1, 2024. <https://www.youtube.com/watch?v=20TAkcy3aBY>.

www.youtube.com. "Stephen Hawking Interview: Last Week Tonight with John Oliver (HBO) - YouTube," June 14, 2014. <https://www.youtube.com/watch?v=T8y5EXFMD4s>.

Yang, Angela. "Mark Zuckerberg Apologizes to Parents at Online Child Safety Hearing." NBC News, January 31, 2024. <https://www.nbcnews.com/tech/social-media/mark-zuckerberg-apologizes-parents-online-child-safety-hearing-rcna136578>.