GAUCHO MUN XVI

UNITED STATES SENATE

Specalized Body

GAUCHOMUN XVI
SENATE

Specialized Committee: U.S. Senate

& Artificial Intelligence

A WORD FROM SECRETARIAT

GauchoMUN XVI has a conference-wide zero-tolerance policy for any forms of bigotry, including but not limited to homophobia, sexism, racism, and xenophobia. Be mindful of this as you research, speak, and write. It is our duty as global citizens and students of diplomacy to ensure our views are unbiased, fair, and equitable.

The mandate of this committee includes the discussion of developing global political situations, parts of which may be considered sensitive and personal to your fellow delegates. In accordance with our zero-tolerance discrimination policy, we ask that delegates be mindful in the ways they approach these topics in their research and in committee session. If you are unsure or confused about how to navigate within our policies, please feel free to contact your Dais or Secretariat, who are happy to provide you with direction.

Land Acknowledgement

GauchoMUN XVI and UCSB Model United Nations would like to acknowledge the land that we currently occupy as students of University of California, Santa Barbara. This is the homeland of the Barbareño Band of Chumash Native Americans. We recognize that the Barbareño Band of Chumash Native Americans, as well as many others, were forcibly removed from their rightful land and that the consequences of this forced removal still continue to affect Indigenous communities.

Gaucho MUN XVI and UCSB Model United Nations honor the resilience, strength, and enduring presence of Indigenous people across the country and around the world. As students of UCSB, we continue to reflect on our University's ties with colonial occupation, and strive to educate ourselves and uplift Indigenous cultures, issues, and histories. During GauchoMUN XVI, we ask that everyone reflect on the repercussions of global colonial development and forcible occupation and strive to support Indigenous and other affected communities throughout their actions in committee this weekend. For more information, please visit their website: www.bbc-indians.com.

GAUCHOMUN XVI
SENATE

Letter from the Under-Secretary General

Greetings delegates,

I am thrilled to welcome you all to Gaucho Model United Nations XVI in the beautiful town of Isla Vista, California! No matter how far you're coming from, we could not be more excited for this weekend and to watch all of you craft solutions to major conflicts in all types of committees. My name is Ruby Eilers, and I'll be serving as your USG of Specialized Bodies/Crisis for this weekend.

Speedy summary about me: I'm from San Francisco, California (yes, the actual city part) and currently majoring in Political Science here at UCSB. Model UN has been such a great community for me in my time here and I could not be more excited to help you all make lovely memories in committee! Outside of Model UN, I'm also vice president of my residence hall council (shoutout FT), and I work in UCSB's Office of the Controller.

This weekend, the best of our MUN team cooked up some incredible committees with something for every delegate. From Mark Zuckerberg to Ignacio Zaragoza, from bills to directives, all of us at UCSBMUN cannot wait to see what you all come up with to resolve the issues on the table!

Good luck and happy MUNing!

Ruby Eilers, rubyeilers@ucsb.edu

Under-Secretary General, Specialized Bodies and Crisis

Gaucho MUN XVI

GAUCHOMUN XVI
SENATE

Letter from the Chair

Delegates,

Welcome to Gaucho MUN XVI's Senate specialized committee. My name is Matthew Tede and I will be your chair throughout the conference. I am a fourth-year political science student here at UCSB with a focus in International Relations, a topic which I have come to love learning about. I am planning on pursuing this after I graduate, and am hoping to join the State Department's Foreign Service to practice diplomacy in the future. Besides my studies, I enjoy a number of other activities including playing Volleyball with friends, and participating in our student government where I represent transfer students. In my downtime, I enjoy reading as well as a number of shows; recently I have been reading *Cat's Cradle* by Kurt Vonnegut, and have been watching The Resident, which can be found on Netflix. If you have any questions or want to talk about any of these things, I would be happy to discuss them with you.

This Senate committee has been created through the joint efforts of a number of our members, from the conceptualization of the committee to the rules and procedures we will be using. I understand that though some of you may be familiar with specialized committees of this nature, most of you are not. As such, please feel free to reach out before the committee with any questions or concerns you may have, and remember that you can always ask about rules and procedure during committee. I am looking forward to the solutions you all create in the face of such a large and nuanced challenge, and have confidence that the outcome of this committee will be something that we will all be collectively proud of. I will see you all in committee.

Matthew Tede | Chair, Senate Committee | mtede@ucsb.edu

Letter from the Co-Chair

Fellow delegates,

My name is Ali Yavuz Bozatli and I'm thrilled to be your Co-chair for the specialized committee of the US Senate in GauchoMUN XVI! I am a junior in mechanical engineering specializing in geothermal energy, thermodynamics, and fluid mechanics. I hope to be the name people come to when they search for the best propulsion or fluids engineer in the future! Besides rigorous but exciting coursework, I love playing Intramural and casual basketball with friends. As the "Center" of the team, I get to do a lot of layups and block a lot which helps with de-stressing after class. I am also big on story-based video games or horror ones, The Resident Evil series being my favorite. If you have any recommendations, please feel free to reach out!

I met one of my very good friends in a class that discussed the US Senate. Therefore, I am proud and excited to be co-chairing this committee. Even though this is my first year at MUN, I did join a couple of conferences in high school but they were all in French! This committee was made possible by wonderful members of UCSB MUN and I am so happy with the way the structure and the discussion topic turned out. AI is in every part of our lives including our education, work, and future. Therefore, be excited to be on a committee with such close relevance and importance to our community!

I wish you all the best of luck in preparing for the committee. It is no easy task but I believe every one of you will do just fine and create the best resolutions. If you have any questions, please feel free to ask me or our team. Looking forward to seeing you all soon!

Ali Yavuz Bozatli | Co-Chair, Senate Specialized Committee | ayb@ucsb.edu

Table of Contents

Senate Rules of Procedure

Introduction

A Senate committee is a specialized Model United Nations committee representing the United States Senate. The United States Senate, currently in its 119th Session, is one of the two bodies making up the legislative branch of the US. The Senate is composed of two senators representing each state, for a total of 100 senators. Delegates will be assigned a senator and given a brief description of their background, ideological standing, party affiliation, and additional information. Delegates should do additional research on their own in order to familiarize themselves with their senator. Several aspects of committee will proceed similarly to a General Assembly Committee, with the use of a Speaker's List as well as Moderated and Unmoderated caucuses. A series of witnesses will be called throughout committee, where based on the chair's discretion, delegates can call witnesses from a provided list or witnesses will be brought forth to be questioned by the delegates.The end goal of this committee is to pass a bill addressing how to manage artificial intelligence usage in the US. Delegates will create blocs to develop and write a comprehensive bill by the end of committee.

Additional changes to the committee rules of procedure are outlined below. The dais is aware of the unusual structure of this committee and will be more than willing to answer questions and support delegates throughout committee.

Filibustering

Filibustering will be permitted in this committee. Traditionally, a Senator in a filibuster is allowed to take the floor for any amount of time. Any Senator can propose a filibuster, and a simple majority is required for it to pass. The purpose of a filibuster is to buy one's party more time to complete bills. This can be done through detailed debate regarding an issue, or just stalling the committee with any discussion, regardless of the relevance. However, a filibuster can be ended at any time with a simple majority vote subject to the discretion of the dais (otherwise known as a cloture).

Party Leadership

At the beginning of each committee session, each party will be allotted time to select their Majority/Minority Leader and Whip. There will be two Party leaders in committee - Majority and Minority, belonging to the Republican and Democratic parties respectively. Each party will also have one Whip. Party Leaders are expected to coordinate bill writing and are the only ones who may motion to reset the agenda at the beginning of a committee session through a motion. They are each allocated a specific time to speak at the beginning of committee as well, and expected to help find compromises with the other party during caucuses. On the other hand, Party Whips should aim to gain votes within their own party. For a given bill, they are expected to count votes and ensure it has enough support to pass. If a party is unable to decide their leadership within the allotted time, they will be chosen by the dais. There will also not be Leaders and Whips during Committee Session 1 to give senators time to establish their positions. This selection will not factor into awards decisions. Senators will stand out to the dais through

their performance in committee and their work to bridge partisan gaps, not necessarily based on their leadership position.

Motions

Points of Order, Personal Privilege, Inquiry, and Motions to Suspend Debate will function as in a standard Model UN committee. A motion to reset the agenda passes with a simple majority and must be put forth by the current party leader.

Caucuses

Causes will follow standard Model UN procedure, including moderated and unmoderated caucuses. There will also be the addition of a party caucus, which is where most of the partisan bill writing will take place. While unmoderated caucuses should be used to gain bipartisan insight on issues, the party caucus will function as a space for parties to draft their bills.

Voting

In order to move into a voting bloc, a senator must motion for cloture, which requires 60% of the vote to pass without for or against speeches. The committee will then enter the standard Model UN voting bloc.

Bill Writing

The format for bill writing can be found here. Delegates are permitted to make copies of this document for the purposes of bill writing in committee.

Past Action

As artificial intelligence has gained prevalence in recent years, the Senate has taken more and more action in regards to ethical concerns, the environmental impacts, and mostly, the international effects of AI. The Senate AI Caucus was founded in 2019, and currently works to promote the US's interests in regards to artificial intelligence.[1] Some recent legislation in the works in the Senate is as follows:

AI Accountability Act (2023)

Establishes accountability and reporting mechanisms for the National Telecommunications and Information Administration. Modifications to these technologies must be reported to Congress to guarantee the continued protection of the information of its users. Stakeholders must report on new advances to reduce the risk of AI usage.

The Deep Fake Report Act (2019)

The Department of Homeland Security is responsible for reporting on the state of forgery technology. A "deep fake," or the type of forgery technology of concern, is the use of artificial intelligence to manipulate audio or visual content to impersonate another individual. This bill assigns the Science and Technology Directorate to be responsible for this oversight process.[2]

[1] *H.R.3369 - 118th Congress*
[2] *S.2065 - 116th Congress*

Artificial Intelligence for the Armed Forces Act (2020)

Gives the Department of Defense the power to direct the Joint Artificial Intelligence Center and develop a training program for artificial intelligence usage. The DoD will also have the power to guide defense departments in regards to hiring processes for data science and AI professionals, as well as modify the Armed Services Vocational Aptitude Battery test to cover new computational skills relevant to AI.[3]

ASSESS AI Act (2023)

This act, or the Assuring Safe, Secure, Ethical, and Stable Systems for AI Act, gives the President the power to create a task force analyzing artificial intelligence implications. This jurisdiction includes the power to assess pre existing policy as well as create recommendations for new legislative action to ensure AI usage protects individual liberties such as civil rights, privacy, and freedom of expression rights.[4]

Ethics

As the capability of generative and other AI technologies have surged to unforeseen heights within the last 5 years, concerns surrounding the ethical applications of these technologies have followed suit. These concerns are numerous, and particular emphasis is usually placed on potential applications in the job market due to just how flexible the technology could be. While this is the case, other concerns surrounding the feeder information needed to create AI models, as well as the technologies potential for future growth should not be

[3] *S.3965 - 116th Congress*
[4] *S.1356 - 118th Congress*

overlooked.[5] In addressing these matters, it is important that lawmakers and industry leaders act quickly, as ethical issues when not addressed can assimilate into cultural norms, which often holds negative ramifications. Estimates on how long this process can take, but conservative estimates range from 2-3 years.[6] To further complicate this matter, the rapid development and changes the field of artificial intelligence is undergoing means that creating relevant and up-to-date legislation surrounding its use has been a significant challenge for legal systems accustomed to taking a large period of time when creating new laws. In practice, this means delegates must be mindful of not only the current state of AI technology, but potential future changes it might experience.

Impacts of the adoption of AI

One of the largest concerns surrounding the adoption of AI is the risk it poses to job security in many industries. The effect of transformative technologies on jobs is not a recent discovery, as far back as industrialization documentation for the destruction of entire industries can be found as new technologies render them inefficient. This does not mean that such a process is strictly beneficial for the economies in which it happens however. The primary reason for this stems from the types of jobs most at risk to be replaced by AI systems. Of the 3 jobs most susceptible, 2 of them (Manufacturing & Assembly and Customer Service) are composed primarily of low-skill labor.[7] As these jobs are lost, the replacement positions which are opened up to oversee the technologies replacing people will be both fewer in number and more advanced in skill. This has the potential to leave large numbers of low-skilled workers out of the workforce

[5] *"Artificial Intelligence: Examples of Ethical Dilemmas."*
[6] Power, Brad.
[7] Gilmurray, Kieran.

with no replacement jobs to fill. This, in turn, places a strain on social and fiscal support systems in place. Efficiency in and profitability of a few industries increases, but strain is placed everywhere else in the society. One of the most famous examples of this exact scenario is the downfall of Detroit as a manufacturing hub following advancements in automation and the reduction in tariffs on foreign goods. Through the 20-year period of 1970 to 1990, manufacturing jobs shrunk from representing around 36% of all jobs in the city to less than 23%, a 36% reduction in jobs.[8] This coincided with decreased average household income rates, and increased crime rates.[9] The loss of jobs to automation through artificial intelligence stands to replicate this exact scenario on an even larger scale.

Bias in AI and ethics of feeder data

In order to create Artificial Intelligence programs, especially in the case of generative models, an enormous quantity of feeder data is needed to 'train' the model. This information is what kick-starts the selection and filtering process for AI models, which means that this information has an outsized impact on the way the model processes and outputs information. While it is necessary for most AI systems, this process comes with a number of ethical problems. The two biggest issues stemming from the need for feeder data is the creation of bias within AI models, and the violation of Intellectual Property (IP) rights from the original owners of the data. When feeder data for an AI model is limited or comes disproportionately from a single source, bias can be transferred from this data into the AI model. The ramifications of this can be enormous. One example of this is the impacts of bias on Computer-Aided Diagnosis (CAD)

[8] Ruggles, and Sobeck. figure 3.1
[9] Id, figure 2.3

systems. Due to the discrepancy in medical data availability for minority groups, CAD models trained without accounting for bias will have lower accuracy results for members of minority groups.[10] While CAD systems are a good way to illustrate the direct impact AI bias can have, it is not unique in its susceptibility to feeder data bias. The other significant ethical issue which arises from the use of feeder data, the violation of IP rights, is more problematic in generative AI models, especially visually-focused ones. As these models use feeder data from artists and videographers, the style of these creators partially imparted onto the AI, which in turn can lead to similar outputs as the data it was trained on. In the case where an agreement was reached between the creator of the feeder data and the group developing the model, this is not a problem as compensation can be given for the use of data. Far more commonly however, groups developing AI models use the data of artists without compensating or even notifying them. In these cases, the AI model created from their data can threaten the income of the artists.[11]

Climate Effect

Due to the incredibly fast-paced development of artificial intelligence, it is not yet known what long-term environmental impacts the technology will have on the planet. While artificial intelligence can create a lot of positive change in this world, even concerning climate issues, if it is not developed sustainably it can be its downfall. Two of the main environmental concerns are the high amounts of electricity and water that are necessary to power AI technology. Generative artificial intelligence, a type of AI that creates new content and has been the center of the recent

[10] James Holdsworth.
[11] Appel, Gill., Neelbauer, Juliana., & Schweidel, David. A.

AI boom, requires extremely complex computational powers.[12] According to the International Energy Agency, a single query to OpenAI's popular generative AI model ChatGTP uses nearly ten times the amount of electricity than what is used for a traditional Google search.[13]

To support the computational demands of artificial intelligence AI data centers, special facilities that use much more processing power compared to traditional data centers are being built at a rapid pace. In the United States, Northern Virginia has become a data center hotspot, and by 2030, data centers in the region are projected to consume enough energy to support AI computations equivalent to the power required for 6 million homes.[14] This increased energy demand has resulted in many coal plants being brought back into operation after previously being slated for decommissioning to meet the renewed need for power. It is estimated that by 2027 AI-related infrastructure will use up to 6.6 billion cubic meters of water, six times more water than the country of Denmark uses.[15] This estimate is concerning when there are already 2 billion people, around a quarter of the global population, living in countries experiencing high water stress.[16] Additionally, AI data centers not only have large energy consumption and water usage but also produce electronic waste that can contain toxic chemicals like lead and mercury, and rely on materials made out of rare elements that are often mined unsustainably.[17]

Corporate Response

Most artificial intelligence companies do not disclose their emissions, but major tech companies that do provide a stark glimpse into how the growing popularity of AI is impacting

[12] Adam Zewe
[13] *Electricity 2024 - Analysis and Forecast to 2026*
[14] Olivo, Antonio.
[15] Li, Pengfei, et al.
[16] "Water." *United Nations*
[17] *"AI Has an Environmental Problem. Here's What the World Can Do about That."*

the environment. As big tech firms race to outcompete each other in AI development, many have deprioritized their previously stated sustainability goals. For example, Google, which had long maintained a goal of carbon neutrality, has shifted focus since the AI boom in 2023. According to their most recent sustainability report, Google's greenhouse gas emissions have increased by 48% since 2019, primarily due to the energy consumption of data centers.[18] Similarly, Microsoft has reported a 29% rise in emissions, driven by data center usage to support AI development.[19] Beyond creating their own generative AI systems, tech giants like Alphabet, Meta, and Apple are integrating AI into their existing technologies, making it increasingly difficult for consumers to avoid AI-based services—further driving up emissions. Alex Hanna, a former employee of Google's Ethical AI team left the company in 2022 following disputes over its handling of a research paper that highlighted the environmental cost of AI, and has since been a vocal critic of Google's approach to AI ethics. Hanna now works as the Director of Research at the Distributed AI Research Institute (DAIR) and has been vocal about the environmental cost of artificial intelligence and warns that it will only get worse unless there is a serious intervention in current AI development.[20]

Government Oversight

Governments are also entering the artificial intelligence race and are investing millions into development with little concern for sustainability. The lack of environmental guardrails that artificial intelligence developers have is no less concerning than the other lack of artificial intelligence regulation. While over 190 countries have adopted a series of non-binding

[18] Kerr, Dara.
[19] Gilmurray, Kieran.
[20] Kerr, Dara.

recommendations on the ethics of AI, including environmental aspects, there has been no international multilateral agreement on mitigating the climate impact of artificial intelligence.[21] The United Nations Environment Programme (UNEP) offers five recommendations to address AI's environmental impact. Countries should establish standardized procedures for measuring AI's environmental effects and require companies to disclose the impact of AI-based products. Tech companies can improve energy efficiency, recycle water, and reuse electronic parts. Governments should encourage greener data centers, renewable energy use, and carbon offsetting. Lastly, AI policies should be integrated into broader environmental regulations for a comprehensive sustainability approach. These steps aim to mitigate AI's environmental footprint while supporting sustainable development. Domestically Senator Ed Markey (D-MA) introduced S.3732 - Artificial Intelligence Environmental Impacts Act of 2024. The bill calls for the Environmental Protection Agency (EPA) to conduct a study on the environmental impacts of AI and for the creation of a voluntary reporting system for companies to disclose their environmental footprint.[22] Since its introduction, the bill has seen no progress and it is not expected to advance further.

Sustainability

Despite artificial intelligence's clear environmental impacts, many argue that it can also serve as a powerful tool in combating climate change. Scientists are already using AI to create predictive climate models, making it easier to understand environmental systems and track potential changes. For example, artificial intelligence is already being employed to predict how

[21] "Recommendation on the Ethics of Artificial Intelligence."
[22] Text - S.3732 - 118th Congress

high global temperatures can rise in relation to decarbonization efforts.[23] The United Nations Environmental Programme (UNEP) uses artificial intelligence to track methane data and sand dredging, aiding in efforts to reduce greenhouse gas emissions and protect vulnerable habitats.[24] If developed sustainably and used responsibly, artificial intelligence has the potential to make significant contributions to environmental conservation and climate action.

To mitigate the climate impacts of artificial intelligence, several technological changes are essential. Shifting data centers to renewable energy sources such as solar, wind, or hydroelectric power can reduce reliance on fossil fuels, helping to cut energy consumption. Additionally, developing energy-efficient cooling technologies, such as systems that require less energy than current air-based methods, can further lower power use. To address water consumption, adopting closed-loop cooling systems in data centers allows for more efficient water recycling. On the electronic waste front, partnering with e-waste recycling companies to recover reusable materials like precious metals from outdated electronics can reduce waste, while creating secondary markets to repurpose older hardware for less resource-intensive tasks, such as edge computing or backup storage, can extend the life of electronic components. Finally, investing in alternatives to rare-earth elements in electronics can help reduce the dependency on these limited resources, preventing further environmental degradation. These technological innovations can play a critical role in reducing the environmental footprint of AI.

[23] Garthwaite, Josie.
[24] Power, Brad.

Security and International Concerns

Micro and Macro Scale Security Concerns in AI

Artificial Intelligence, commonly called AI, has altered many parts of our lives, from personal comfort to multinational procedures. While advances in AI bring incredible opportunities, they also raise substantial concerns, especially in security. Here, a deeper dive into the evolution and usage of AI and the security issues it presents on micro and macro scales, including implications for international safety will be discussed and explored.

The Progress of Artificial Intelligence

AI refers to computer systems developed to mimic human intelligence by testing and memorizing millions of data points found through the web or provided by developers. Over the past decade, AI has progressed rapidly due to developments in machine learning technology, data availability compared to past data scarcity, and incredible computing power. The power of AI comes from Its advanced memory and lightning-fast response capabilities. Today, AI can be found in everything from facial recognition software and mobile personal assistants such as Siri and Alexa to self-driving vehicles such as Tesla and UAVs, medical diagnostics, and much more. In industries, AI allows us to optimize supply chains, automate functions, and predict market trends. For example:

Healthcare: AI is used to interpret medical images, analyze patient outcomes, and even develop personalized treatment plans.

Finance: Banks and investment firms use AI to detect fraudulent transactions and make AI-based stock trades.

Transportation: Autonomous vehicles use AI to navigate roads and decrease human error in driving as well as help with rescue and aerial detection missions.

While these advancements enhance efficiency and comfort, they also introduce susceptibilities that could be manipulated.

Security Concerns of AI on a Micro Scale

On a micro-scale, AI's security challenges impact individuals, companies, and societies. Some typical problems include:

Data Privacy Issues:

AI systems depend heavily on data, often gathering sensitive personal details.If these systems are hacked, confidential data such as financial records, medical history, or location information can be revealed and sold to third parties.

Cybersecurity Hazards:

AI can both improve and damage cybersecurity. While AI-centered systems help detect threats quicker, they are also used by hackers to automate repeated attacks, easily create deepfake content, or bypass traditional defenses that are unprepared for advanced artificial power.

Bias and Discrimination:

AI systems rely solely on the data provided to them and the information they are trained with. Biased or prejudicial data can lead to discriminatory consequences, such as unfair hiring procedures, racial profiling in facial recognition software, or negative counter-disability effects.

Job Loss:

Automation through AI threatens some jobs, particularly in industries like manufacturing and retail. This financial insecurity can destabilize communities and cause demographic issues.

Security Concerns of AI on a Macro Scale

At a macro scale, AI's impact expands to national and international security. Here some significant concerns and issues are discussed:

Cyber Warfare Applications:

AI is a double-edged sword in cyber warfare technologies. Countries are creating AI systems to improve cybersecurity, but adversaries use similar technology to establish sophisticated cyberattacks on infrastructure, monetary systems, and governmental grids.

AI Weaponization:

Autonomous weapons, frequently called "killer robots," are AI-based systems capable of recognizing and striking targets without human help. If used on the battlefield, these weapons could cause significant harm. There is a wide range of these AI-powered weapons, ranging from small suicide drones to medium “killer robots” capable of accurate two-hand weapon usage, to large weaponized UAVs (Unmanned Aerial Vehicles).

Misinformation and Propaganda:

AI instruments such as deepfakes can create ultra-realistic but fake photos, videos, or audio, generating a rapid spread of misinformation. During elections or political conflicts or problems, such technologies can significantly destabilize democracies and fuel national or international conflicts and unrest.

International Power Imbalance:

Nations with cutting-edge AI capacities may earn extreme authority over global systems, causing inequalities. Developing nations risk being left behind, boosting global tensions.

Surveillance with AI Capabilities:

Governments increasingly benefit from AI for surveillance, such as tracking citizens' actions or observing online behavior. While this can improve public security, it also introduces concerns about privacy and autocratic rule.

Questions to Consider

1. What measures are being taken to address bias in AI algorithms, and how is fairness defined in the context of AI?
2. Are AI systems and their decision-making processes transparent enough for the public and regulators to understand their inner workings and potential harms?

3. How can AI be deployed in a way that respects individual autonomy and informed consent, especially in sensitive sectors like healthcare or criminal justice?
4. How are U.S. policies addressing concerns about an AI arms race, especially in military and security sectors? Should there be global agreements to limit autonomous weapons?
5. How does the Senate plan to engage with international human rights bodies to ensure that AI development aligns with global human rights standards?
6. What actions are being taken to promote sustainable AI development, such as reducing carbon emissions from data centers or incentivizing green AI technologies?

Senators

Senator Cory Booker (D-NJ)[25]

Senator Cory Booker is a strong advocate for progressive technology policies, prioritizing labor rights, social equity and privacy.[26] He supports AI research that aims for social goods such as healthcare and climate change, while also advocating for protections against bias and discrimination in AI systems. Booker also wants to promote the responsible development of AI in order to create more inclusive economic opportunities.

Senator Mike Braun (R-IN)[27]

Previous businessman turned Senator, Mike Braun has his focus on reduction of government regulation while promoting market-driven solutions for technology such as AI. He is most likely to advocate for AI innovation that could enhance business opportunities and promote economic growth. While also being wary of excessive government oversight. Braun may also emphasize the importance AI holds in creating U.S. jobs and advancing competitiveness in U.S. markets.

U.S. Senator Joni Ernst (R-IA)[28]

Senator Joni Ernst has a strong background in defense and national security. Being a former officer in the United States military, she has a strong stance on AI that reflects a focus on the military and cybersecurity applications of this technology. She supports developing AI to enhance U.S. defense capabilities while ensuring that technological advancements are used

[25] "Legistorm."
[26] *"About Cory."*
[27] US Senate Special Committee on Aging
[28] "U.S. Senator Joni Ernst of Iowa."

responsibly. Ernst is also concerned with the implications of AI on rural communities and small businesses in her home state of Iowa.

Senator Maggie Hassan (D-NH)[29]

Senator Maggie Hassan is a supporter of innovation in AI, with her focus being on its impacts in healthcare, cybersecurity, and education. She emphasizes the important role of ethics in AI development and highlights issues like privacy and security, especially in the health tech sector. Hassan is also focused on ensuring AI benefits are accessible to all Americans, regardless of income or geographic location.

Senator Martin Heinrich (D-NM)[30]

Senator Martin Heinrich is a strong advocate for the use of AI and its innovation, especially with what it could offer in terms of environmental solutions. He is committed to fostering the development of AI that promotes sustainability while maintaining its focus on ethics, transparency, and privacy.[31] He also emphasizes the importance of research funding and workforce development in emerging tech fields.

Senator John Hickenlooper (D-CO)[32]

The former Governor of Colorado turned Senator, John Hickenlooper is a supporter of innovation and technology policy that promotes economic growth while addressing societal challenges. Hickenlooper is particularly interested in AI applications for public safety,

[29] Senator Hassan Highlights AI Threats to National S...
[30] Chow, Andrew R.
[31] "U.S. Senate Releases Roadmap on Artificial Intelligence."
[32] "Senator Hickenlooper and Congressman Graves on Ensuring U.S. Leadership in AI."

healthcare, and climate change, while stressing the need for ethical guidelines in AI development. He also advocates for the responsible use of AI to enhance government services.

Senator Mark Kelly (D-AZ)[33]

Senator Mark Kelly, a former astronaut and Navy officer, focuses on the intersection of AI and national security, particularly its use in space exploration, defense, and cybersecurity. He advocates for policies that balance AI innovation with strong ethical safeguards, ensuring it serves the public good while protecting privacy and security. Kelly is also concerned with the impact of AI on the workforce.

Senator Ben Ray Luján (D-NM)[34]

Senator Ben Ray Luján is focused on advancing AI to drive economic development in underserved communities, particularly in rural areas. He supports AI initiatives that improve public services like healthcare and education while addressing concerns about privacy, data security, and bias. Luján also emphasizes the importance of fostering a diverse workforce in the tech sector.

Senator Gary Peters (D-MI)[35]

As a former cybersecurity expert, Senator Gary Peters is deeply invested in the regulation of AI, particularly in the areas of security and privacy. He advocates for responsible AI development that ensures both innovation and the protection of consumer rights. Peters is also committed to

[33] Mark Kelly
[34] Ben Ray Lujan
[35] Gary Peters

ensuring that AI technologies support American industries while being safeguarded against misuse.

Senator Mitt Romney (R-UT)[36]

Senator Mitt Romney is an advocate for free-market solutions to technological challenges and supports AI's potential to drive economic growth. While cautious about overregulation, he is interested in ensuring that AI is developed responsibly, particularly in areas like privacy, security, and workforce impact. Romney is also focused on the competitive advantage AI can provide in global economic and defense spheres.

Senator Mike Rounds (R-SD)[37]

Senator Mike Rounds is focused on national security and is interested in the potential of AI in defense and cybersecurity applications. He emphasizes the need for AI to support U.S. leadership in military and intelligence technologies while maintaining ethical boundaries.[38] Rounds is also concerned about the impact of AI on rural economies and small businesses.

Senator Brian Schatz (D-HI)[39]

Senator Brian Schatz is an advocate for technology that addresses environmental and social challenges, with AI being central to his vision for the future. He supports using AI to tackle issues like climate change and healthcare disparities while ensuring the ethical use of data and

[36] Burgan, Cate. *"Senate Bill Seeks to Create AI Safety Review Office in Commerce."*
[37] Burgan, Cate. *"Senate Ai Caucus Lead Unveils AI Policy Package."*
[38] "U.S. Senate Releases Roadmap on Artificial Intelligence."
[39] Schatz Urges Tech Companies to Invest in Clean Energy to Meet Surging AI Demands…

privacy protection. Schatz is also interested in policies that promote equitable access to AI benefits.

Senator Todd Young (R-IN)[40]

Senator Todd Young is committed to ensuring that AI drives innovation in American industry, particularly in the manufacturing and tech sectors. He advocates for a balanced approach to AI regulation that encourages growth while safeguarding privacy and security.[41] Young is also interested in how AI can enhance national security and create high-quality jobs.

Senator Chuck Schumer (D-NY)[42]

As Senate Majority Leader, Senator Schumer is keen on harnessing AI to drive economic growth, especially in sectors like healthcare, finance, and manufacturing. He supports creating a national strategy for AI development that balances innovation with strong ethical standards, particularly regarding privacy and data security.[43] Schumer also emphasizes international cooperation in regulating AI.

Senator Marco Rubio (R-FL)[44]

Senator Marco Rubio is focused on ensuring the U.S. remains competitive in the global AI race, especially in defense and cybersecurity. He advocates for AI policies that promote innovation

[40] "Young Praises Commerce Committee Passage of Artificial Intelligence Bills."
[41] "U.S. Senate Releases Roadmap on Artificial Intelligence."
[42] Martina, Michael, and Alexandra Alper.
[43] "U.S. Senate Releases Roadmap on Artificial Intelligence."
[44] Rubio, Colleagues Introduce Bill barring Federal Government from Using Adversarial AI

while addressing national security concerns. Rubio is particularly concerned with the role of AI in China's technological rise and its implications for U.S. dominance in tech.

Senator Ted Cruz (R-TX)[45]

Senator Ted Cruz is a strong proponent of limited government intervention and believes AI should be developed with minimal regulation to foster innovation. He is cautious about AI's impact on privacy and jobs but generally favors free-market solutions over government oversight. Cruz also emphasizes the need for the U.S. to maintain its competitive edge in AI research and development.

Senator Lindsey Graham (R-SC)[46]

Senator Lindsey Graham is focused on the use of AI in national security and defense, particularly in counterterrorism and military operations. He supports AI advancements that enhance U.S. defense capabilities and emphasizes security and ethical concerns. Graham is also interested in AI's role in improving the efficiency and effectiveness of government operations.

Senator Thom Tillis (R-NC)[47]

Senator Thom Tillis advocates for AI's potential to drive economic growth, particularly in the tech and manufacturing sectors. He supports innovation in AI but is cautious about overregulation, preferring market-driven solutions. Tillis also emphasizes the need for workforce development to prepare workers for an AI-driven economy.

---

[45] Crenshaw, Jordan.
[46] "United States Senator Lindsey Graham."
[47] "Peters and Tillis Introduce Bipartisan Bill…"

Witness List

Witnesses will be called both by the chair's discretion and by Senators in committee, as explained in the Senate Rules of Procedure. The witnesses appearing on the list below may or may not be called during this committee, but no witnesses other than those appearing on the list will be accepted. Please note that a Senator can attempt to call a witness and be refused by the chair. The witness list for this committee is as follows:

1. **Sam Altman** - OpenAI CEO. This company owns and runs AI experimental engines open to the public, most notably ChatGPT.
2. **Mark Zuckerberg** - Current CEO and founder of Meta AI, Instagram and Facebook. One of the most notable corporate contributors to AI and social media.
3. **Dr. Yuan Yao** - Current Professor of Industrial Ecology and Sustainable Systems at Yale University, focusing on sustainability and longevity measures in technological development.
4. **Jake Sullivan** -Former National Security advisor for the United States under President Biden, and outspoken about protecting domestic interests in the age of AI.
5. **Christopher Wray**- Current Director of the Federal Bureau of Investigation. A Republican, Wray has been Director since 2017.
6. **Timnit Gebru**- Computer scientist and whistleblower advocating for ethics and increased representation in AI-related fields.

7. **Andrew Ng**- Founder of Google Brain, Ng has also lectured at Stanford, founded Baidu, and made several other contributions to the development of artificial intelligence technology.
8. **Peter Singer**- Philosopher and current Professor of Bioethics at Princeton University.
9. **Jensen Huang** - CEO and Founder of NVIDIA. NVIDIA is an internationally recognized industry leader in semiconductors and other technology used in robotics, artificial intelligence, and other similar fields.

Works Cited

"About Cory." U.S. Senator Cory Booker of New Jersey, www.booker.senate.gov/about-cory. Accessed 27 Jan. 2025.

Adam Zewe | *MIT News. "Explained: Generative AI's Environmental Impact." MIT News | Massachusetts Institute of Technology, news.mit.edu/2025/explained-generative-ai-environmental-impact-0117#:~:text=Rapid%20development%20and%20deployment%20of,Adam%20Zewe%20%7C%20MIT%20News. Accessed 27 Jan. 2025.*

"AI Has an Environmental Problem. Here's What the World Can Do about That." UNEP, www.unep.org/news-and-stories/story/ai-has-environmental-problem-heres-what-world-can-do-about#:~:text=The%20proliferating%20data%20centres%20that,which%20are%20often%20mined%20unsustainably. Accessed 27 Jan. 2025.

"Amid Growing Concerns over AI, Luján Pushes NTIA to Create and Implement Responsible Guardrails to Protect Americans." *Senator Ben Ray Luján*, US Senator for New Mexico, 13 June 2023, www.lujan.senate.gov/newsroom/press-releases/amid-growing-concerns-over-ai-lujan-pushes-ntia-to-create-and-implement-responsible-guardrails-to-protect-americans/.

Appel, Gill., Neelbauer, Juliana., & Schweidel, David. A. *(2025, January 13). Generative AI has an intellectual property problem. Harvard Business Review. https://hbr.org/2023/04/generative-ai-has-an-intellectual-property-problem*

"Artificial Intelligence: Examples of Ethical Dilemmas." UNESCO.Org, www.unesco.org/en/artificial-intelligence/recommendation-ethics/cases. Accessed 27 Jan. 2025.

Burgan, Cate. *"Senate Ai Caucus Lead Unveils AI Policy Package." MeriTalk, 4 Sept. 2024, www.meritalk.com/articles/senate-ai-caucus-lead-unveils-ai-policy-package/.*

Burgan, Cate. *"Senate Bill Seeks to Create AI Safety Review Office in Commerce." MeriTalk, 20 Dec. 2024, meritalk.com/articles/senate-bill-seeks-to-create-ai-safety-review-office-in-commerce/.*

Chow, Andrew R. *"Martin Heinrich: The 100 Most Influential People in AI 2024." Time, Time, 5 Sept. 2024, time.com/7012815/martin-heinrich/.*

"Committee Passes Peters Bipartisan Bill to Ensure the Federal Government Safely and Responsibly Purchases and Uses Artificial Intelligence: U.S. Senator Gary Peters of Michigan." Committee Passes Peters Bipartisan Bill ... | Senator Gary Peters, 31 July 2024, www.peters.senate.gov/newsroom/press-releases/committee-passes-peters-bipartisan-bill-to-ensure-the-federal-government-safely-and-responsibly-purchases-and-uses-artificial-intelligence.

Crenshaw, Jordan. *"Sen. Ted Cruz Talks AI, Privacy with Houston Small Business Leaders." U.S. Chamber of Commerce, U.S. Chamber of Commerce, 12 Sept. 2024, www.uschamber.com/technology/artificial-intelligence/senator-ted-cruz-talks-ai-privacy-with-houston-small-business-leaders.*

Electricity 2024 - Analysis and Forecast to 2026 - Net, International Energy Agency, iea.blob.core.windows.net/assets/6b2fd954-2017-408e-bf08-952fdd62118a/Electricity2024-Analysisandforecastto2026.pdf. Accessed 27 Jan. 2025.

Garthwaite, Josie. *(2024, August 21). AI predicts Earth's peak warming. Stanford Doerr School of Sustainability. https://sustainability.stanford.edu/news/ai-predicts-earths-peak-warming*

Gilmurray, Kieran. *"Top Jobs Most at Risk of Being Replaced by Ai." LinkedIn, 24 Oct. 2024, www.linkedin.com/pulse/top-jobs-most-risk-being-replaced-ai-kieran-gilmurray-9ashe.*

H.R.3369 - 118th Congress (2023-2024): Artificial Intelligence Accountability Act | Congress.Gov | Library of Congress, www.congress.gov/bill/118th-congress/house-bill/3369. Accessed 27 Jan. 2025.

"Kelly Secures Priorities in Annual Intelligence Bill Passed out of Committee." Senator Mark Kelly, Arizona Senator, 24 May 2024, www.kelly.senate.gov/newsroom/press-releases/kelly-secures-priorities-in-annual-intelligence-bill-passed-out-of-committee/.

Kerr, Dara. "Ai Brings Soaring Emissions for Google and Microsoft, a Major Contributor to Climate Change." *NPR*, NPR, 12 July 2024, www.npr.org/2024/07/12/g-s1-9545/ai-brings-soaring-emissions-for-google-and-microsoft-a-major-contributor-to-climate-change#:~:text=In%20its%20sustainability%20report%20released,optimized%20to%20support%20AI%20workloads.%E2%80%9D.

"Legistorm." *Sen. Cory Booker - D New Jersey, In Office - Biography*, LegiStorm, www.legistorm.com/person/bio/211545/Cory_Anthony_Booker.html. Accessed 27 Jan. 2025.

Li, Pengfei, et al. "Making AI Less 'Thirsty': Uncovering and Addressing the Secret Water Footprint of AI Models." *Arxiv*, Cornell University , 6 Apr. 2023, https://arxiv.org/abs/2304.03271.

Martina, Michael, and Alexandra Alper. "Senator Schumer to Propose Framework for AI Legislation in Coming Weeks | Reuters." Reuters, 9 May 2024, www.reuters.com/technology/legislative-roadmap-ai-is-coming-weeks-schumer-says-2024-05-08/.

Olivo, Antonio. (n.d.). *Internet data centers are fueling drive to old power source: Coal - washington post*. The Washington Post. https://www.washingtonpost.com/business/interactive/2024/data-centers-internet-power-source-coal/

"Peters and Tillis Introduce Bipartisan Bill to Ensure the Federal Government Safely and Responsibly Purchases and Uses Artificial Intelligence." Committee on Homeland Security & Governmental Affairs, Homeland Security & Governmental Affairs, 11 June 2024, www.hsgac.senate.gov/media/dems/peters-and-tillis-introduce-bipartisan-bill-to-ensure-the-federal-government-safely-and-responsibly-purchases-and-uses-artificial-intelligence/.

Power, Brad. “If You’re Going to Change Your Culture, Do It Quickly.” *Harvard Business Review*, Harvard Business Review, 7 Aug. 2014, hbr.org/2013/11/if-youre-going-to-change-your-culture-do-it-quickly.

“Recommendation on the Ethics of Artificial Intelligence.” *Unesdoc.Unesco.Org*, UNESCO, unesdoc.unesco.org/ark:/48223/pf0000380455/PDF/380455eng.pdf.multi. Accessed 27 Jan. 2025.

Rubio, Colleagues Introduce Bill barring Federal Government from Using Adversarial AI | Senator Rubio, www.rubio.senate.gov/es/rubio-colleagues-introduce-bill-barring-federal-government-from-using-adversarial-ai/. Accessed 28 Jan. 2025.

Ruggles, and Sobeck. *“Farley_detroit_tables Figures_0.Pdf.” US Department of Commerce , 1997.*

Figures 2.3, 3.1

S.1356 - 118th Congress (2023-2024): Assess AI Act | Congress.Gov | Library of Congress, www.congress.gov/bill/118th-congress/senate-bill/1356. Accessed 27 Jan. 2025.

“S.2065 - 116th Congress (2019-2020): Deepfake Report Act of 2019 | Congress.Gov | Library of Congress.” *Congress*, www.congress.gov/bill/116th-congress/senate-bill/2065. Accessed 27 Jan. 2025.

“S.3965 - 116th Congress (2019-2020): Artificial Intelligence for the Armed Forces Act of 2020 | Congress.Gov | Library of Congress.” *Congress*, www.congress.gov/bill/116th-congress/senate-bill/3965. Accessed 27 Jan. 2025.

“Schatz Urges Tech Companies to Invest in Clean Energy to Meet Surging AI Demands: Maui Now.” | Schatz Urges Tech Companies to Invest in Clean Energy to Meet Surging AI

Demands, Maui Now, 3 Oct. 2024, mauinow.com/2024/10/03/schatz-urges-tech-companies-to-invest-in-clean-energy-to-meet-surging-ai-demands/.

“Senate.” *History.Com*, A&E Television Networks, www.history.com/topics/us-government-and-politics/history-of-the-us-senate. Accessed 27 Jan. 2025.

“Senator Hassan Highlights AI Threats to National S...: U.S. Senator Maggie Hassan of New Hampshire.” Home - Maggie Hassan, United States Senator for New Hampshire, 20 Sept. 2023, www.hassan.senate.gov/news/press-releases/senator-hassan-highlights-ai-threats-to-national-security-and-public-safety-at-senate-hearing.

“Senator Hickenlooper and Congressman Graves on Ensuring U.S. Leadership in AI.” *CSIS*, 13 Nov. 2024, www.csis.org/analysis/senator-hickenlooper-and-congressman-graves-ensuring-us-leadership-ai.

"Text - S.3732 - 118th Congress (2023-2024): Artificial Intelligence Environmental Impacts Act of 2024." *Congress.gov*, Library of Congress, 1 February 2024, https://www.congress.gov/bill/118th-congress/senate-bill/3732/text.

“United States Senator Lindsey Graham.” Biography - United States Senator Lindsey Graham, U.S. Senator South Carolina , www.lgraham.senate.gov/public/index.cfm/biography. Accessed 27 Jan. 2025.

“U.S. Senate Releases Roadmap on Artificial Intelligence.” *National Association of Counties*, 3 June 2024, www.naco.org/news/us-senate-releases-roadmap-artificial-intelligence.

"U.S. Senator Joni Ernst of Iowa." *Home*, www.ernst.senate.gov/. Accessed 27 Jan. 2025.

"Water." *United Nations*, United Nations, www.un.org/en/global-issues/water. Accessed 27 Jan. 2025.

"Young Praises Commerce Committee Passage of Artificial Intelligence Bills." Senator Young, U.S. Senator for Indiana, 2 Aug. 2024, www.young.senate.gov/newsroom/press-releases/young-praises-commerce-committee-passage-of-artificial-intelligence-bills/.