

CARIBBEAN WEBINAR SERIES

AI TOOLS FOR PARLIAMENTS

20 NOVEMBER 2024

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HOSTED BY



A CBS Evening News broadcast from the U.S. Capitol. A woman with long blonde hair, wearing a bright pink blazer, stands at a wooden podium with a microphone, looking down at papers. To her left, a woman with dark hair, wearing a maroon top, is seated and looking towards the speaker. The background shows the ornate interior of the Capitol with brown leather chairs and blue carpeting.

CBS
EVENING
NEWS
WITH NORAH O'DONNELL

Wexton makes history as first member to use AI voice on House floor

By Danya Gainor and Haley Talbot, CNN

1 minute read · Published 2:45 PM EDT, Thu July 25, 2024



In this image from video Rep. Jennifer Wexton, D-Va., uses an AI program on her iPad to speak in the chamber of the House of Representatives of Thursday at the Capitol in Washington. House TV/AP

On July 25, 2024, Rep. Jennifer Wexton [D, VA] became the first lawmaker to use an AI-generated model of her voice to speak for her on the U.S. House floor.

This is just one of many uses of AI in legislatures that have proliferated over the past several years.

What is “artificial intelligence” (AI)?

OECD revised definition (2023):

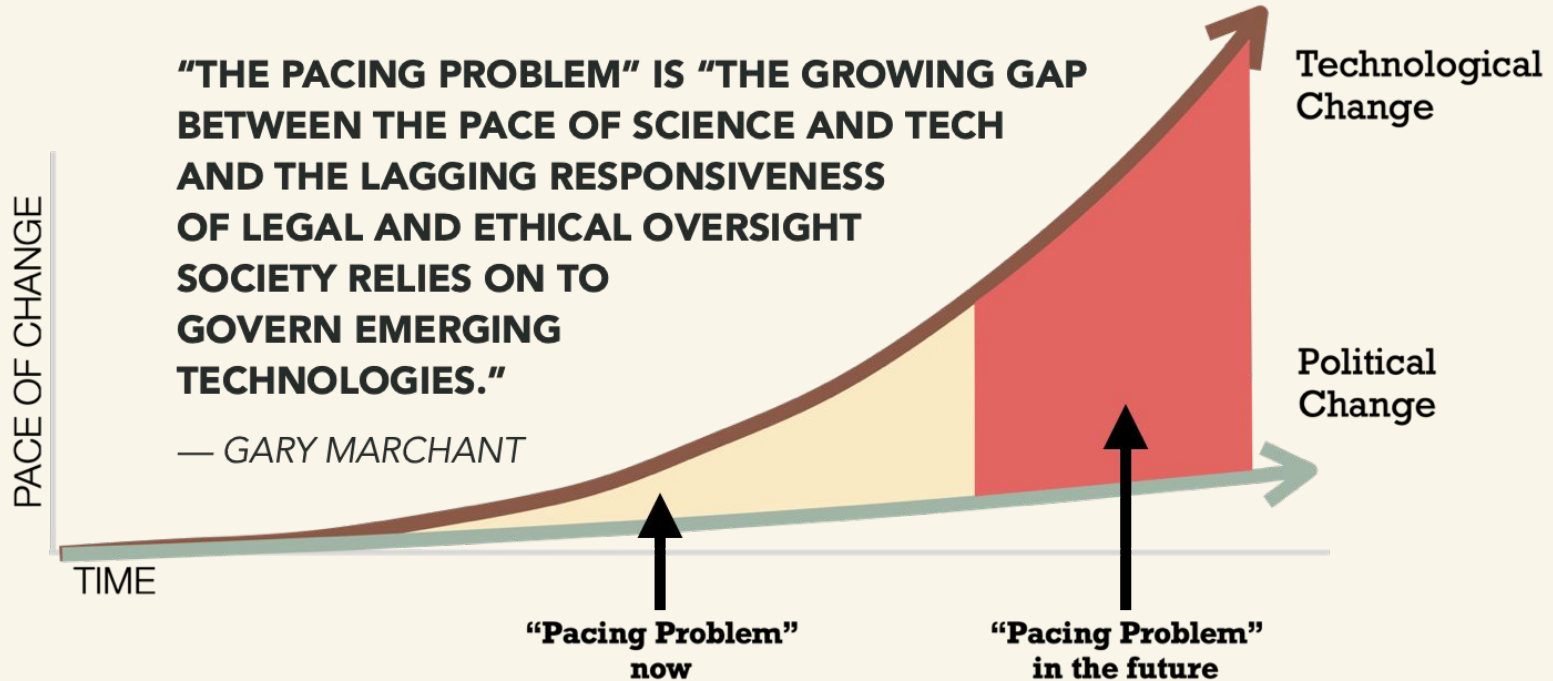
An AI system is a machine-based system that, for explicit or implicit objectives, *infers*, from the input it receives, how to generate outputs such as predictions, content, recommendations, or decisions that can influence physical or virtual environments.

Different AI systems vary in their levels of autonomy and adaptiveness after deployment.

Why should Parliaments consider AI-enabled tools?

- Enhanced efficiency
- Improved constituent services
- Better informed decision-making
- Increased transparency
- Real-time language translation
- Enhanced legislative drafting
- Improved oversight
- Better public engagement
- Predictive analysis
- Resource optimization
- Enhanced accessibility
- **Keeping up with rapid changes/expectations**

The Pacing Problem



Most Legislatures have THREE Pacing Problems

- **THE EXTERNAL**

Legislatures often fail to keep pace with emerging innovations that are changing industries and society

- **THE INTER-BRANCH**

Legislatures often lag the executive branch, compromising ability to act as a co-equal branch of government

- **THE INTERNAL**

Legislatures often do not employ modern practices and technology for their own operations.

Examples of “AI”

- **Predictive Modeling**

Using statistical techniques and algorithms to identify patterns in historical and transactional data to forecast future outcomes

- **Machine Learning**

Using algorithms and statistical models to enable computers to perform specific tasks without using explicit instructions

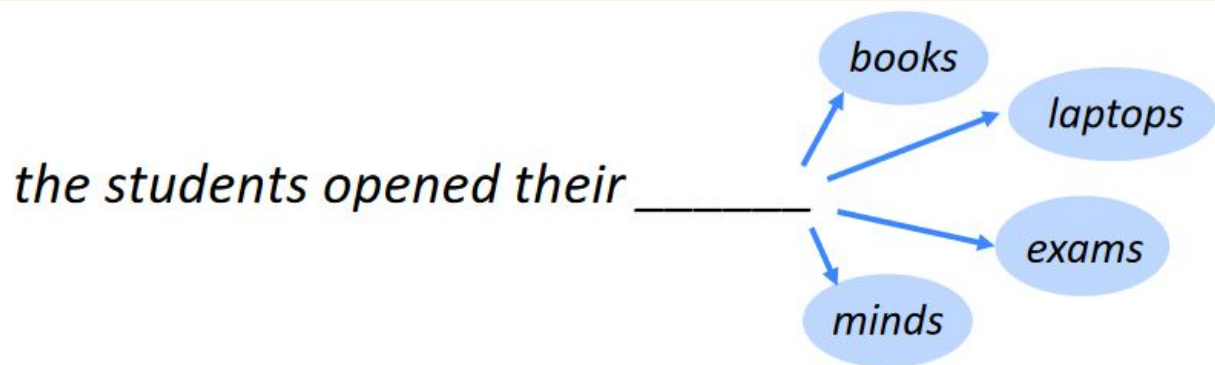
- **Natural Language Processing**

Enable computers to understand, interpret, and generate human language

- **Large Language Models**

Models trained on vast amounts of data and complex algorithms that operate by predicting the next word in a sequence, enabling tasks like answering questions, writing, and translating text.

LLMs: Predicting the next word



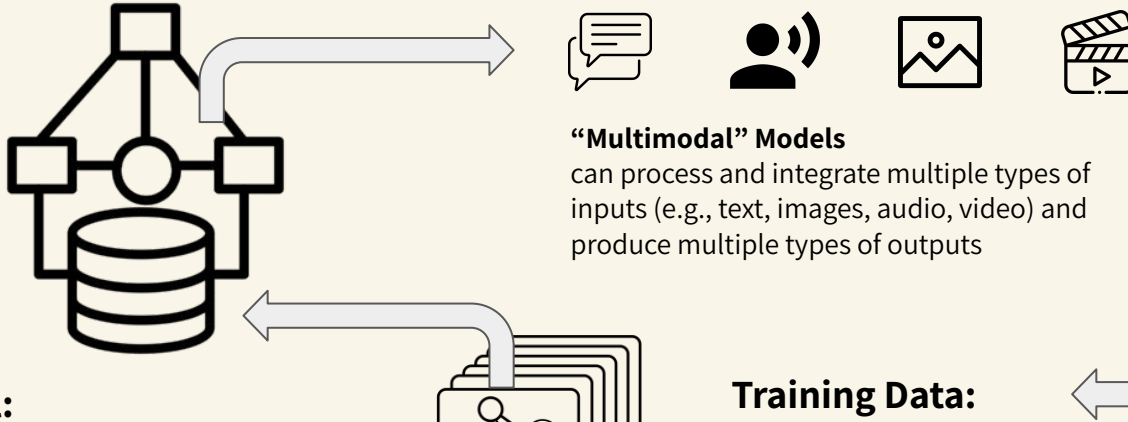


We finish each other's...

Key Concepts & Terms

Interfaces

Mediums or “modes” through which users interact with AI systems



Model:

a computational system trained on data to perform specific tasks

“Multimodal” Models

can process and integrate multiple types of inputs (e.g., text, images, audio, video) and produce multiple types of outputs

****Understand that based on your plan and the terms of service for each tool, your inputs can be used as training data for the model.**

Training Data:

Information used to teach an AI model to recognize patterns, make predictions, or generate outputs

Training Data Examples:

- Books
- Web Data
- Legal & Government Texts
- Code Repositories
- Conversational Data

Training “Window” or “Cut-off Window”:

the period up to which data was included in an AI model’s training process

Current Widely-Available Models



OpenAI

- USA
- Free plan available
- \$20/mo for "Plus"



Anthropic

- USA
- Free plan available
- \$20/mo



Google

- USA
- Free plan available
- \$20/mo



Meta

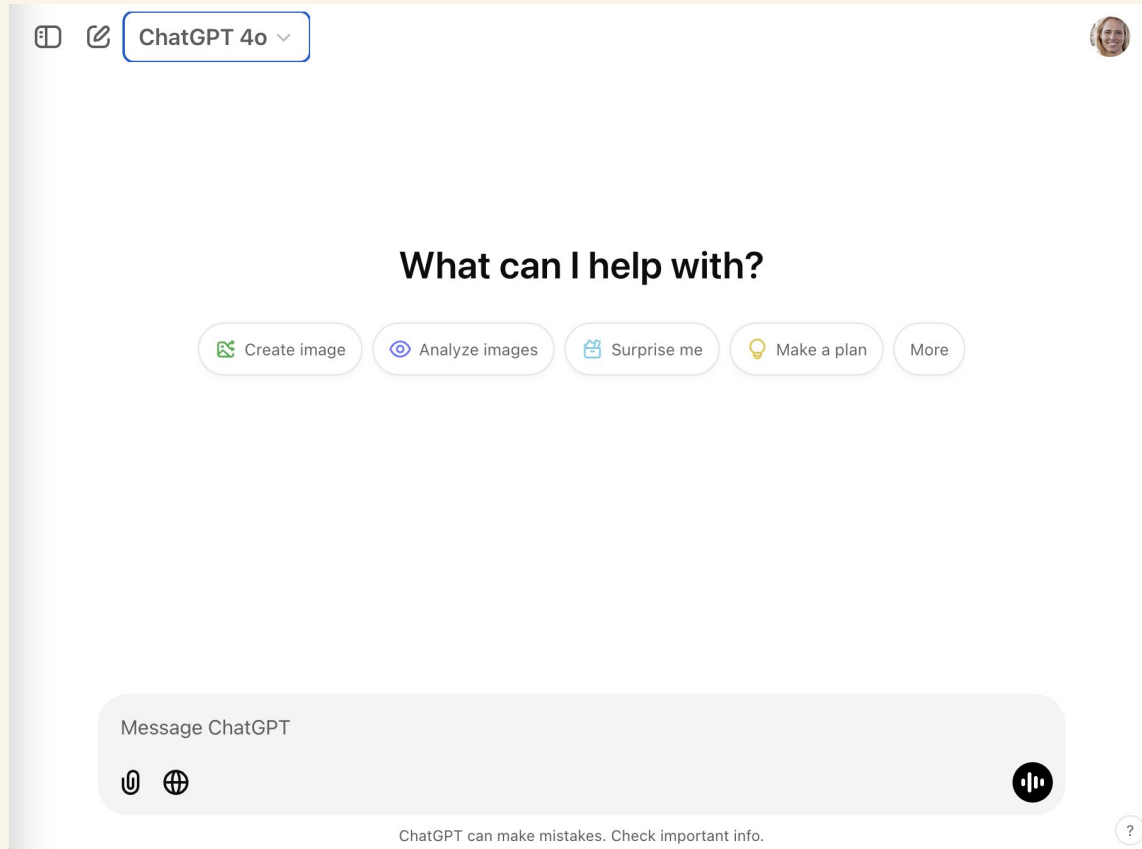
- USA
- "Open Source" model that you can download for free



Mistral

- France
- "Open Source" model that you can download

ChatGPT



Claude

Claude

Professional Plan

 Good morning, Marci

How can Claude help you today?

Claude 3.5 Sonnet   Concise 

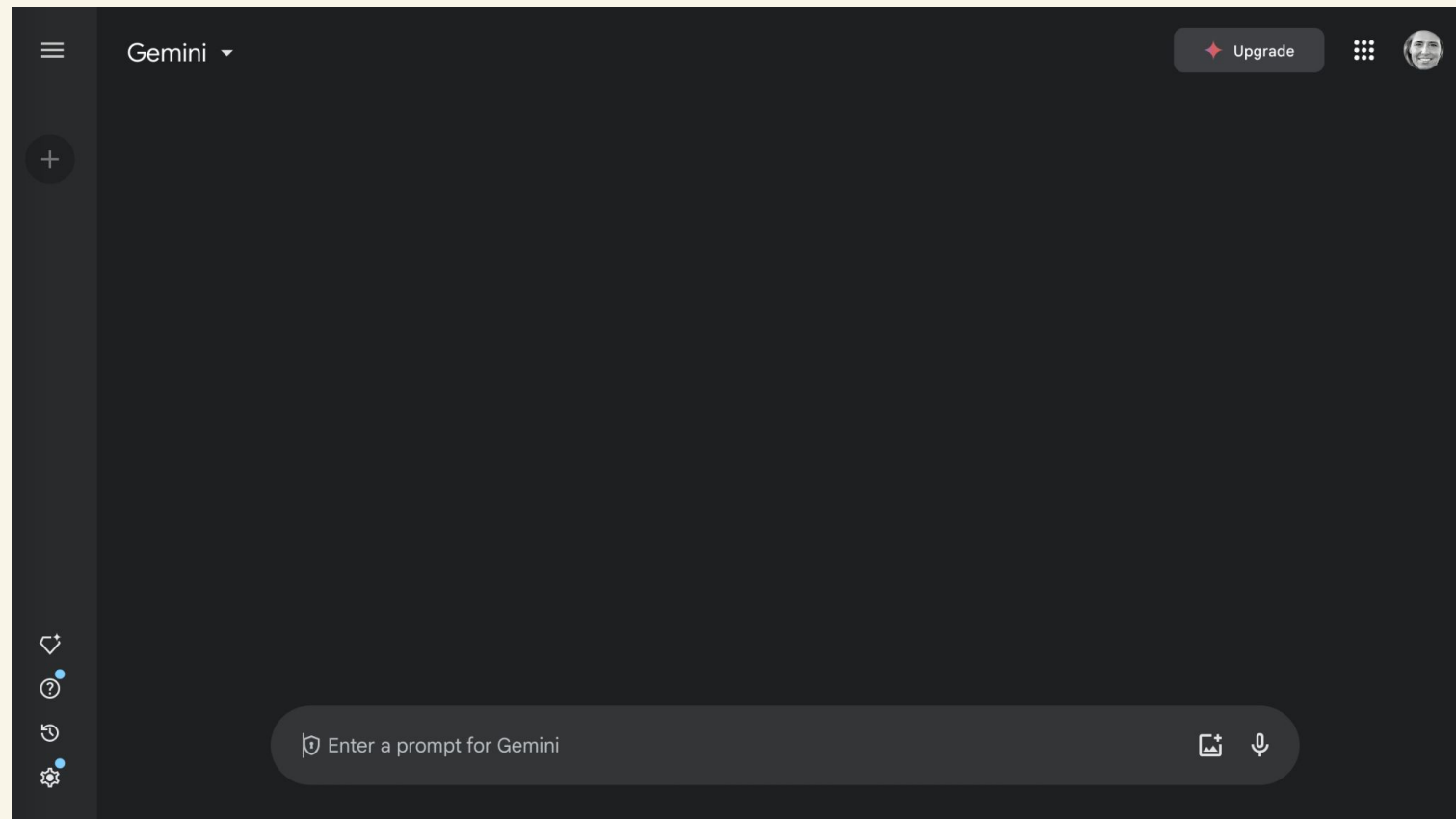


 Use a project 

 Your recent chats  Show

View all →

Gemini



Llama on Meta.ai



Ask Meta AI anything



Make my email sound more professional



Simulate a mock interview



Imagine an image

Ask Meta AI anything...



Messages are generated by AI and may be inaccurate or inappropriate. [Learn more](#)

Microsoft Copilot (leveraging OpenAI's Model)

Sign in 

Good morning, Marci



Wednesday, Nov 20

Trump-Musk federal cuts, and more



Listen to Copilot Daily



Advice for improving your photography



I'll list the best sunscreens for all activity levels



Message Copilot



Using LLMs in Your Work

- **Treat the LLM Like an Eager Intern**

LLMs can draft, summarize, or provide ideas, but they don't inherently verify accuracy. Always double-check the outputs, especially for critical or public-facing work.

- **Provide Source Documents**

Don't rely on the model's pre-existing knowledge. Feed it the relevant documents, reports, or data you want it to process.

- **Set the Tone and Length**

Be explicit about the tone (e.g., formal, persuasive, conversational) and the length of the response. For example, specify, "Write a 200-word summary in a neutral tone."

- **Be Cautious with Sensitive Information**

Models trained on vast amounts of data and complex algorithms that operate by predicting the next word in a sequence, enabling tasks like answering questions, writing, and translating text.

Using LLMs in Your Work (cont.)

- **Avoid Over-Reliance**

Use LLMs to assist and augment your work, not to replace critical thinking, expertise, or political judgment. (Of course, YOU are responsible for what you write or say or send.)

- **Fact-Check Assertions**

Always verify any facts, citations, or references provided by the LLM. Even if they seem credible, they may not be accurate.

- **Explain Parliamentary Context**

If the task involves parliamentary language or processes, provide background. For example, include references to specific parliamentary terms, procedures, or norms.

- **Be Transparent About Usage**

Consider disclosing when LLMs are used to draft or assist in creating materials, where appropriate, to maintain public trust.

EXAMPLES

RESEARCH & ANALYSIS

Task: Analyze proposed legislation's impact

Prompt: "Analyze key provisions and potential impacts of [Bill Name]. Focus on implications for [specific constituency/sector]."

Upload: Bill text, impact assessments, related research papers

WRITING

Task: Speech drafting

Prompt: "Draft a 5-minute speech on [topic] for [event/audience]. Key points to cover: [list points]. Tone should be [formal/conversational]."

Upload: Background materials, previous speeches, event details

Task: Constituent response

Prompt: "Draft a response to this constituent concern about [issue]. Use our standard format but personalize based on their specific situation."

Upload: Constituent letter, relevant policy positions, response templates

POLICY DEVELOPMENT

Task: Policy analysis

Prompt: "Evaluate strengths and weaknesses of these policy options for addressing [issue]. Consider impacts on [stakeholder groups]."

Upload: Policy proposals, stakeholder submissions, research data

Task: Feedback analysis

Prompt: "Summarize key themes from consultation responses on [policy]. Identify areas of consensus and concern."

Upload: Consultation responses, stakeholder submissions

ADMINISTRATIVE

Task: Meeting preparation

Prompt: "Create a briefing pack for upcoming meeting on [topic]. Include key points, background, and suggested questions."

Upload: Meeting agenda, background documents, previous minutes

HOW LEADING EDGE PARLIAMENTS ARE USING AI



Innovative Technology in Legislatures in Selected Countries

September 2024

LL File No. 2024-023307
LRA-D-PUB-002656

The Law Library of Congress, Global Legal Research Directorate
(202) 707-5080 • law@loc.gov • <http://www.law.gov>




Inter-Parliamentary Union
For democracy. For everyone.

World e-Parliament Report 2024





OpenAI ChatGPT 4.0

 20241105_IPU_World_eParliament_...
PDF

 service-Il-IlgIrd-202455211-2024...
PDF

Based on these two reports, what are good examples of how parliaments around the world are using AI for their work?



From the reports, several notable examples demonstrate how parliaments around the world are using AI to enhance their operations:

1. Brazil:

- The Chamber of Deputies utilizes AI algorithms to organize and present legislative data automatically. This tool, introduced in 2018, aims to enhance transparency and facilitate public engagement through the legislative portal ([20241105_IPU_World_ePar...](#)) ([service-Il-IlgIrd-20245...](#)).

2. India:

- AI is leveraged for real-time transcription of parliamentary proceedings.
- Automated metadata extraction from extensive parliamentary records to enhance accessibility.
- An AI-based language translation tool translates parliamentary materials from English to Hindi and is set to expand to other languages ([20241105_IPU_World_ePar...](#)) ([service-Il-IlgIrd-20245...](#)).

3. Israel:

- The Knesset employs a Speech-to-Text AI system to create verbatim records of plenary sessions, complemented by human review for accuracy.
- AI is used to generate summaries of legislative documents and bills, aiding research and analysis ([20241105_IPU_World_ePar...](#)) ([service-Il-IlgIrd-20245...](#)).

4. Italy:

- The Senate employs AI-driven text-clustering algorithms to streamline the amendment process, consolidating similar proposals to improve legislative efficiency ([service-Il-IlgIrd-20245...](#)).

5. Ukraine:

- Parliament is introducing AI tools to visualize legislative bill progress, timeline plenary sessions, and align national laws with EU directives ([service-Il-IlgIrd-20245...](#)).

6. Germany:

- The Berlin State Chancellery's CityLAB has implemented an AI prototype that uses a large language model to generate answers from parliamentary documents, facilitating research ([service-Il-IlgIrd-20245...](#)).

7. Canada:

- AI tools are integrated into broader digital strategies, with ethical frameworks like the 2019 Directive on Automated Decision-Making to ensure responsible use. AI applications are used in legislative processes and public engagement ([service-Il-IlgIrd-20245...](#)).

These examples show how parliaments are adopting AI to automate routine tasks, improve transparency, and enhance accessibility for citizens and legislators alike. Let me know if you need deeper insights into any specific example.



Based on these two reports, what are good examples of how parliaments around the world are using AI for their work?



Claude 3.5 Sonnet ▾ Concise ▾

Use `shift + return` for new line



Use a project ▾

Your recent chats ▾ Show

View all →

Based on the reports, here are notable examples of how parliaments are using AI:

1. Transcription and Records:

- Israel uses Speech To Text AI for creating verbatim records of plenary meetings
- India launched an AI app for real-time transcription of house proceedings
- Italy uses AI-powered automation to sort and consolidate legislative amendments

2. Translation Services:

- India employs AI for translating parliamentary resources from English to Hindi
- Spain is working on AI-based language translation systems

3. Research and Documentation:

- India and Israel are developing AI chatbots to provide research assistance to MPs
- Germany's CityLAB Berlin uses an AI prototype to generate answers from parliamentary documents
- Italy uses AI for automatic classification of parliamentary texts

4. Data Analysis and Accessibility:

- Brazil uses AI algorithms to organize and present legislative data on its website
- Ukraine is implementing AI tools to enhance data accessibility and create visual representations of legislative processes
- India uses AI to extract metadata from digitized parliamentary content

5. Experimental/Pilot Projects:

- Israel is piloting AI for creating summaries of parliamentary documents, analyzing implementation of laws, and contextualizing legal references
- India is testing an AI-powered real-time translator for debates
- Spain has approved an AI regulatory sandbox for testing parliamentary AI systems



The future of AI in Legislatures

ML/NLP

Custom uses of ML/NLP developed either by in-House team or contractor

COTS

Commercial Off-the-Shelf Software that leverages AI (COTS)

3rdParty GenAI

Using third party GenAI tools for basic tasks

Custom GenAI apps

Developing custom apps (either in-house or with contractor) that leverage commercial models

In-house LLM

Maintaining in-house LLM, potentially leveraging open source models



NORWAY

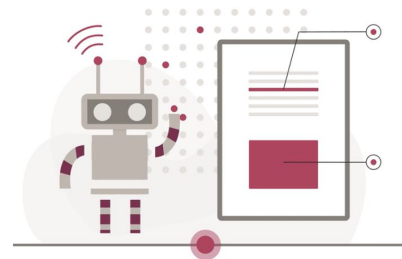
The StorSak-project's strategic goal is to exchange, process, publish and preserve parliamentary information digitally and efficiently, with good quality



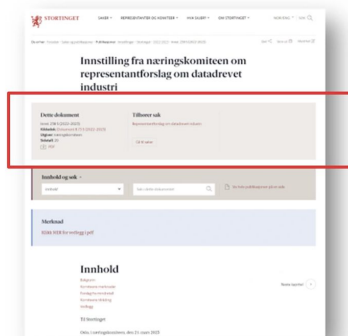
Built-in archiving

It's about designing digital systems and work processes, so we can...

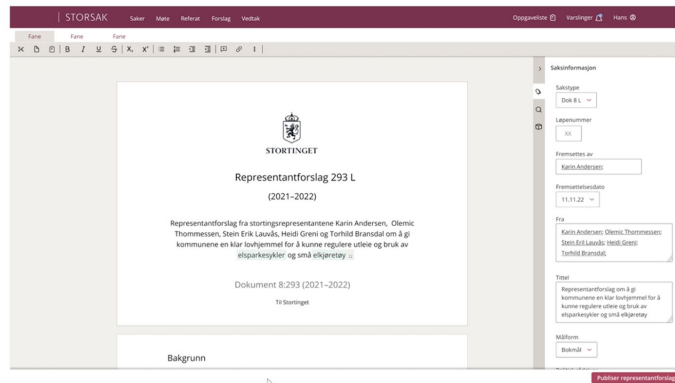
- capture documentation in a user-friendly way,
- ensure high quality and retrievability documentation
- ensure that we can have confidence in the documentation that is created.



Today: Parliamentary output is paper centric



Tomorrow: Output is going to be digital and meta data rich



ESTONIA



Discussions about vision



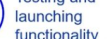
Prototyping, testing



introduction
prototype



analysis



- launching functionality



development



- Preparing to go live



- Testing and launching functionality



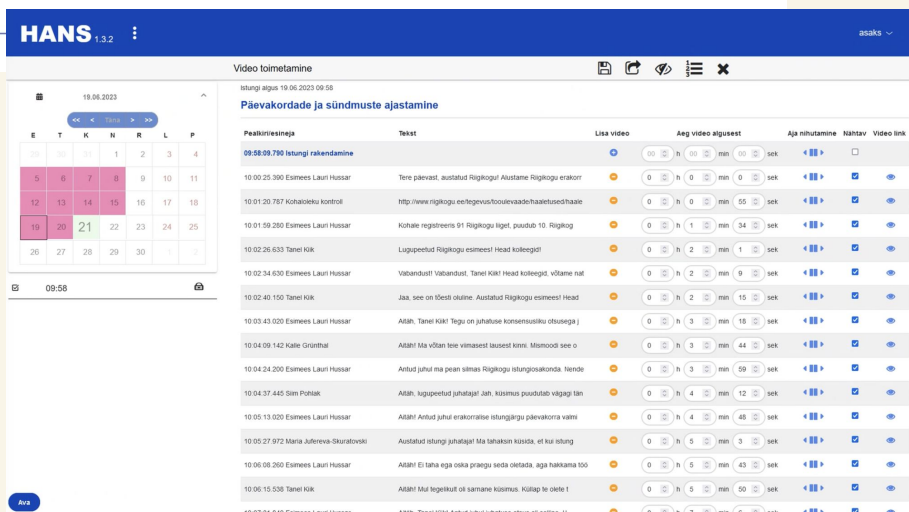
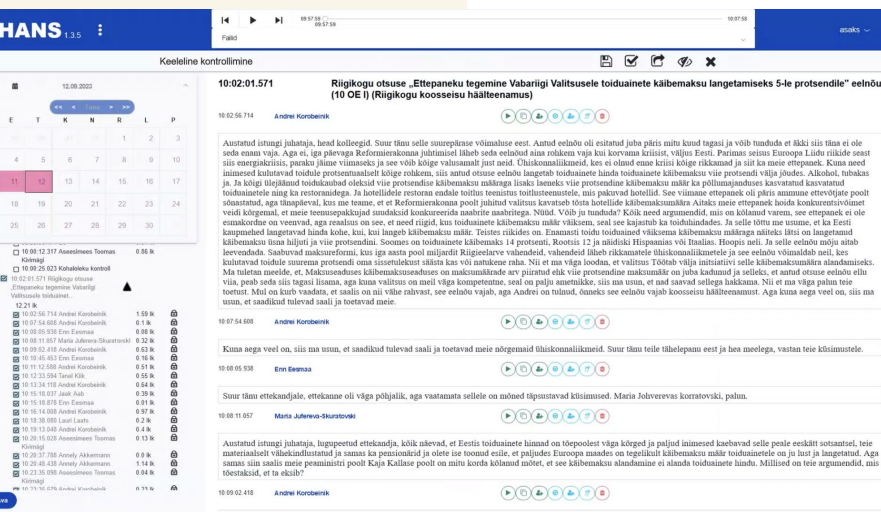
Parliaments functionality



launching
functionality

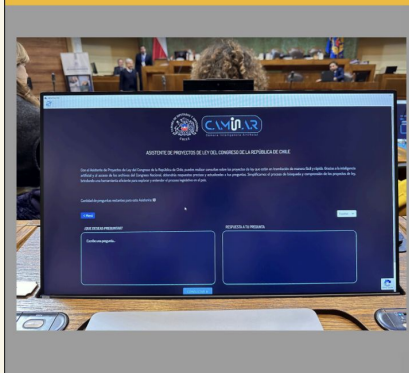


date



CHILE

Cámara de Diputadas y Diputados | Chile CAMINAR



The legislative modules of CAMINAR integrate LLMs from OpenAI ChatGPT, and Claude with RAG (Retrieval-Augmented Generation) to ensure that responses are based on accurate and relevant data, thereby increasing the accuracy of the platform's responses.

CAMINAR-L:

- CAMINAR-L2: Semantic Search Assistant
- CAMINAR-L4: Legislative Tracking Assistant
- CAMINAR-L5: Regulatory Impact Assessment Assistant
- CAMINAR-L6: Constitutional Support Assistant
- CAMINAR-L8: Legal Doctrine Assistant
- CAMINAR-L9: Management of Budget Amendments

From Paper to Tokens: Transforming Legislative Services in the Chamber of Deputies of Chile

Written in September, 2024

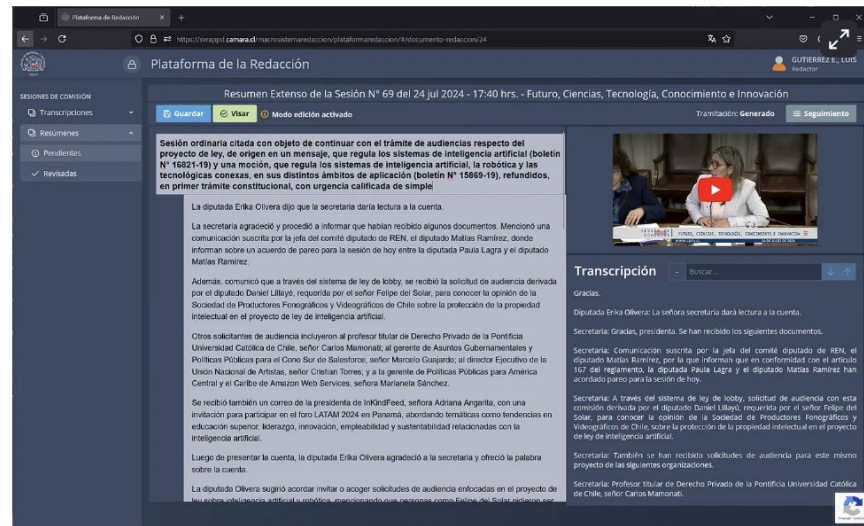


LUÍS KIMAÏD
OCT 18, 2024

III. CAMINAR-L

CAMINAR-L1: Transcription Assistant

The CAMINAR-L1 module is a component of Project CAMINAR, designed specifically to automate the transcription of parliamentary debates. This innovation addresses the need for efficient, accurate, and timely documentation of legislative proceedings.



USA



[Home](#) / [Committee Activity](#) / [Hearings](#)

HEARINGS

Full Committee Hearing, “Artificial Intelligence (AI): Innovations within the Legislative Branch”

Jan 30 2024

On **Tuesday, January 30, 2024, at 10:30 a.m. ET**, the Committee on House Administration will hold a hearing titled, “Artificial Intelligence (AI): Innovations within the Legislative Branch.” The hearing will take place in room 1310 of the Longworth House Office Building.

RULES

ADMINISTRATION



THE USE OF ARTIFICIAL INTELLIGENCE AT THE LIBRARY OF CONGRESS, GOVERNMENT PUBLISHING OFFICE, AND SMITHSONIAN INSTITUTION

Date: Wednesday, January 24, 2024

Time: 02:15 PM

Location: Russell Senate Building 301



UNITED STATES SENATE
COMMITTEE HEARING CHANNELS

Hearing entitled,
"The Use of Artificial Intelligence
at the Library of Congress,
Government Publishing Office,
and Smithsonian Institution."

Coverage begins at 2:15 pm



AI policies in the US House and Senate

The AI guardrails for the House of Representatives are:

- **Human Oversight and Decision-Making:** Even as AI technologies are utilized for efficiency, human oversight remains crucial. Decisions, particularly those with significant impact, must ultimately rest with human experts who can interpret AI outputs within the broader context and with an understanding of potential limitations and biases.
- **Clear and Comprehensive Policies:** To ensure safe and appropriate use of AI, the development of clear and comprehensive policies is essential, as is the maintenance of accurate AI inventories. Any AI policy should address privacy, data security, and ethical considerations, ensuring that AI tools are known and used in ways that preserve public trust and safeguard sensitive information.
- **Robust Testing and Evaluation:** Before AI technologies are deployed, they should undergo thorough testing and evaluation to assess their reliability, validity, and potential biases. Continuous monitoring and regular reassessment are crucial to adapt to technological advancements and emerging risks. The continuous monitoring and evaluation of data that is entered into or taken out of the AI system is critical.
- **Transparency and Disclosure:** Transparency about the use and capabilities of AI technologies is key to maintaining trust. This includes clear communication about how AI is being used, the data it processes, and the measures in place to protect privacy and security. There should be considerations for disclosing when AI has contributed to legislative drafting or other significant tasks.²
- **Education and Upskilling:** To effectively implement AI technologies, ongoing education and upskilling of Members and staff are essential. This includes training on the capabilities and limitations of AI, as well as on the ethical considerations and policy frameworks that guide its use. Building digital literacy and resilience among everyone in the House community will help mitigate risks and foster responsible use of AI.



SAA CIO Notice

Conversational AI Services Available for Research and Evaluation

Risk assessments for three conversational artificial intelligence (AI) services have been released, all at a **moderate level of risk if controls are followed**. Please review the risk assessments carefully, including the required compensating controls prior to use.

- [SPRA001052: OpenAI ChatGPT](#)
- [SPRA001143: Google BARD AI](#)
- [SPRA001145: Microsoft Bing AI Chat](#)

There are two important stipulations for using any of the AI services:

- Use only for research and evaluation.
- Use only with non-sensitive data.

Usage Guidelines

These guidelines are meant to mitigate the privacy and data security risks associated with using these services.

- Treat AI tools similarly to search engines and other public websites, with no expectation of privacy or accuracy.
- Do not put sensitive or private information into an AI tool.
- Assume all information you put into an AI tool could be used elsewhere or be seen by others.
- Keep in mind, information may be gleaned from the series of prompts you provide to interact with an AI tool.
- Always verify accuracy of the information generated by AI tools through additional trusted resources.
- Human review of generated content from an AI tool is essential to ensuring that the content is accurate and appropriate.

Purchasing ChatGPT Plus Licensing

Only Official Office Funds may be used to purchase OpenAI ChatGPT Plus licenses. No other



The future of AI in Legislatures

AUGMENT

AUTOMATE

TRANSFORM

Augment: AI as a supportive tool that augments the human capacity for detailed legal analysis, stakeholder engagement, and policy development.

Automate: AI takes on a more autonomous role in processing vast amounts of legislative data, automating the tracking of bill progress, public opinion analysis, and perhaps even predictive modeling on the impacts of proposed legislation. This automation frees human resources to focus more on strategy, negotiation, and complex decision-making processes.

Transform: More dynamic and responsive lawmaking, real-time simulations of the effects of legislative changes, enhancing public engagement and transparency in governance.



Subscribe to “ModParl” Newsletter

MOD PARL

HIGHLIGHTING MODERNIZATION INITIATIVES FROM
LEGISLATURES AROUND THE WORLD



Paul Evans: Legislative Procedures as Living Institutions

Paul Evans reflects on his latest chapter “Reimagining Parliamentary Procedure,” part of the book *Reimagining Parliament*, in which he identifies the problems with procedures in the British parliament, such as their complexity, illegitimacy, and capture by the Executive.

Read



Reimagining Parliament(s)

How would one go about reimagining the UK Parliament? *Reimagining Parliament*, edited by David Judge and Cristina Leston-Bandiera, presents a surprising list of reform possibilities inspires us all to think bigger about our institutions — and not only in the British context.

Read



Senate Mashinani: Bringing Senators to Kenya's Counties

In Kenya, during a “Senate Mashinani,” the entire Kenyan Senate relocates from the capital in Nairobi to legislate from one of the country's 47 counties, a reminder that often the most effective way for lawmakers to connect with the people they serve is to meet them — literally — where they are.

Read



Bússola Tech Webinar on AI in Portuguese-Speaking Parliaments

In April 2024, Bússola Tech hosted a webinar on Artificial Intelligence in Portuguese-speaking Parliaments, featuring speakers from Angola, Brazil, Mozambique, and Portugal.

Read

<https://popvox.org/modparl>



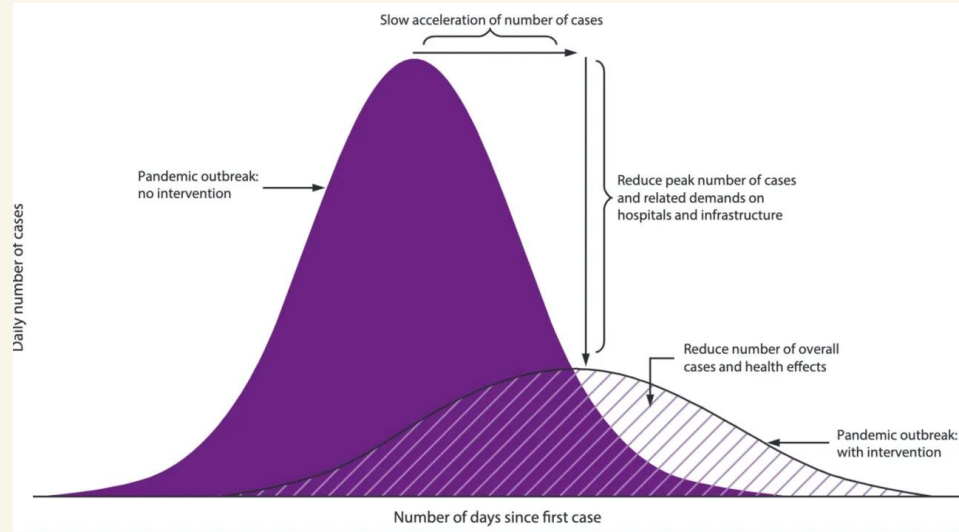
bitly

Q&A

APPENDIX

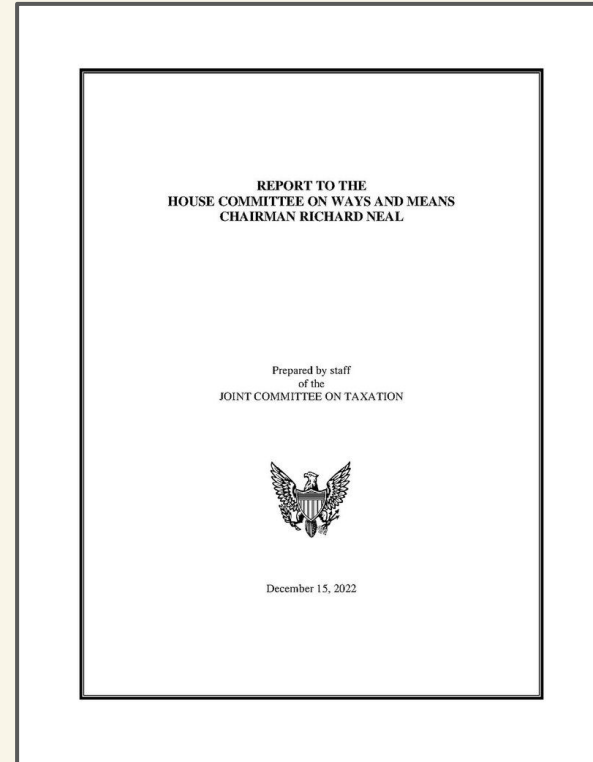
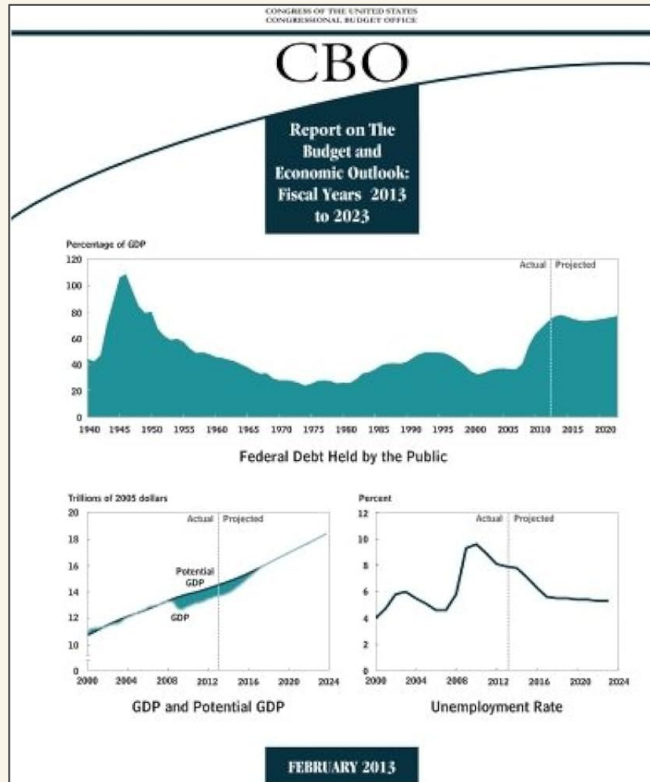
Predictive Modeling

Predictive modeling refers to the use of statistical techniques and algorithms to identify patterns in historical and transactional data to forecast future outcomes. The primary goal of predictive modeling is to create a statistical model that can make predictions about future events or behaviors based on known past data.



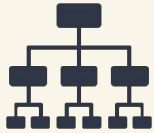
Predictive Modeling Examples

“All models are wrong, some are useful.” – British statistician named George Box (1976)



Machine Learning

Machine learning (ML) is a subset of artificial intelligence (AI) that focuses on the development of algorithms and statistical models that enable computers to perform specific tasks without using explicit instructions. Instead, they rely on patterns and inference derived from data.



Supervised Machine Learning

Trained on labeled data to map inputs to outputs.

“This means this”



Unsupervised Machine Learning

Seeks patterns in unlabeled data.

“Here’s some data. Go learn”



Reinforcement Learning

Learns via feedback from interactions.

“You got this right/wrong.”

Machine Learning Examples

GAO Innovation Lab ID Verification Controls Simulator

Simulation Settings

Can you improve the hypothetical program's performance?

- The selected program configuration **prevented 77% of improper payments**, and simultaneously **prevented 41% of proper payments**.
- The selected program configuration cost for 1,000 applicants is \$350.
- Overall, proper applicants were **dissatisfied** with their experience in the program.

Who is applying to the hypothetical program?

What is the perceived socioeconomic vulnerability of the population served by the hypothetical program?

Balanced

☐ Show Advanced Settings

How will the hypothetical program operate?

Will the hypothetical program track an applicant's digital footprint as they interact with its system?

No

How will the hypothetical program structure its ID verification controls?

Uniform, Low (minimal applicant burden, minimal cost, low accuracy)

Note: selecting a uniform control tier structure may limit your system components available for selection below.

Does the program have a limit on the amount it can spend per applicant to administer the selected system?

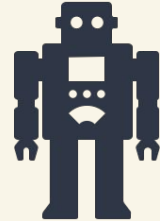
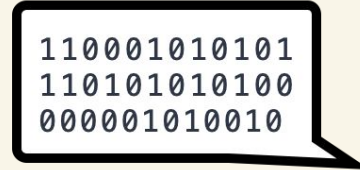
No

What kind of security protocol will the hypothetical program institute?

Minimum Viable Security (high likelihood of compromised data)

Natural Language Processing

Focuses on the interaction between computers and humans through natural language. The primary goal of NLP is to enable computers to understand, interpret, and generate human language in a way that is both meaningful and useful, such as chatbots, translation services, sentiment analysis, and voice recognition systems.



Natural Language Processing Examples



COMPARATIVE PRINT SUITE

CLERK UNITED STATES HOUSE
of REPRESENTATIVES


 COMPARATIVE
PRINT SUITE

v2.0

★ [NEW REPORT](#) [MY REPORTS](#)

[Help](#) [Gullickson, Kirsten](#) ★

New Report

 What would you like to view?

Please Select...



Innovation Lab

- **Project Sia:** an NLP tool that scrapes all congressional committee websites for hearing notices so that GAO can alert committee staff to relevant GAO reports before the scheduled hearing
- **Project Titan:** an NLP tool to help GAO staff identify relevant information in its corpus of past work product
- **Project Wordworkr:** a drafting tool that helps GAO staff better incorporate “GAO style” in their work, including nonpartisan language

Project Sia

Automated congressional activity monitor

Exploring Congressional Activity

Each row in *Sia* represents one entry (item of congressional activity) on one Congressional committee page. In the example here, we have filtered the entries to only include those that are related to the topic of "health care".

Topic Analysis

For the selected word, Sia then performs an analysis of distinct topics. These are presented on a chart to show clusters of related words. Those words that are closest to the selected word are context and related words. (The chart is a 2D projection of potentially hundreds of word-relationship dimensions and so related words will sometimes be visually separated.)

Sig provides a summary of each topic based on the word that is most "central" to a cluster. This word will often, but not always, provide a concise summary of the cluster under the high-level keyword "health." A few examples include "pension" (retirement healthcare benefits); occupational health (FOU); Becama (the confirmation of the Sec healthcare).

Terms Closely Associated with "Health"



Project Titan

GAO report explorer

Project Wordworkr

GAO style implementation drafting tool

Speech Recognition (NLP)

Technology that enables computers to interpret and convert spoken language into text. The primary goal of speech recognition is to allow for voice-based interaction between humans and machines, enabling devices to understand and act upon verbal commands.

CIVIC INNOVATION

Cities Bring Live, Automated Translation to Public Meetings

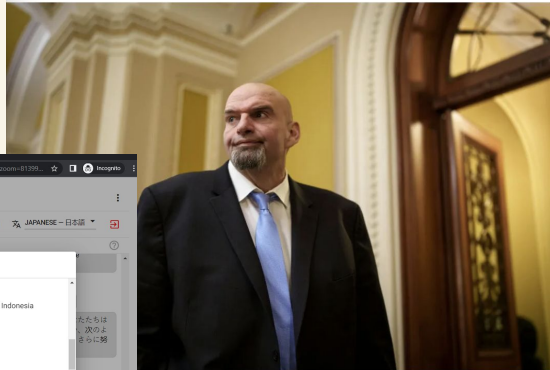
Officials aim to ensure all residents are able to receive important information and can ask questions in the language in which they're most comfortable, a longtime goal that has proved difficult in the past.

August 25, 2023 • Jule Pattison-Gordon



POLITICS • CONGRESS

Exclusive: John Fetterman Is Using This Assistive Technology in the Senate to Help With His Stroke Recovery



Fetterman (D-PA) heads to a lunch meeting with Senate Democrats at November 15, 2022 in Washington, DC. Drew Angerer/Getty Images

BY MINI RACKER

FEBRUARY 1, 2023 7:00 AM EST

- The European Parliament uses speech recognition for transcription of plenary sessions and committee hearings. Transcripts are edited by humans and published shortly after.
- The Parliament of Australia leverages speech-to-text to produce near real-time transcriptions of speeches by members of parliament.
- The Brazilian Senate is experimenting with AI-based speech recognition services for parliamentary activities.

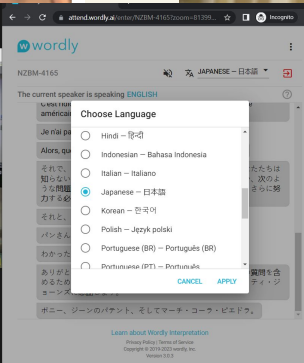


Image Recognition / “Computer Vision

a field within artificial intelligence (AI) that focuses on enabling machines to identify and classify objects, patterns, or features within an image. The primary goal of image recognition is to assign a label to a detected object based on the information derived from the visual data.



- The European Parliament has developed computer vision software to support analyzing large volumes of archived video content
- Facial recognition technologies are being used by some parliaments, such as Brazil, for verification in electronic voting systems
- The Indian parliament introduced facial recognition for managing access throughout their new Parliament building

Generative AI (“GenAI”)

Generative AI (GenAI) refers to models capable of creating novel, human-like content including text, images, audio and video. These include commercial Large Language Models (LLMs) like OpenAI’s GPT tools, Google Gemini, and Anthropic Claude and open source models like LLaMA from Meta and Mistral.



Law is WORDS.



It is linguistic activity (both written and oral) that enables parliaments to create and transmit knowledge and rules and to negotiate between different political positions. However odd or irreverent the juxtaposition may seem, in parliamentary processes as well as in the way LLMs operate, the use of language is what allows for a continuous refinement, alignment and optimisation of the linguistic outputs that are functional to achieving the goals set.

There is thus a common conceptual basis that suggests the use of LLMs by parliaments as an almost natural landing place.

— Alberto Mencarelli, Italian Chamber of Deputies



Current Applications of AI in Legislatures

Transcription

- Portugal: STAAR system using Whisper ASR, WER 1.7-2%, plenary & committees
- Japan: 90% accuracy system (2018), long-term operation
- European Parliament: Europarl-ASR corpus, 1300 hours, multiple languages
- South Africa: Developed resources for South African English (2016)
- Estonia: Kaldi-based system, 8.1% WER, handles challenging acoustics

Summarization

Tagging/Archiving

Document Management

- US Government Accountability Office (GAO)'s internal "Galileo" system (uses Claude) to access GAO reports
- Estonia: Connected OpenAI API from Microsoft store to open data portal. Now being tested it's a "toy". 4 months to launch.
- Norwegian "Støstak" Relaunch
- Example of "chatCRS"

Nascimento, P., Ferreira, J. C., & Batista, F. (2024). Automatic transcription system for parliamentary debates in the context of assembly of the republic of Portugal. International Journal of Speech Technology. <https://doi.org/10.1007/s10772-024-10126-4>

Wahl, T. (2024) The Rise of Data and ai in Parliamentary Proceedings – The Norwegian Parliament, Stortinget. International Journal of Parliamentary Studies Vol. 4 (1), 79-87 <https://doi.org/10.1163/26668912-bja10080>



Current Applications of AI in the US Congress

- Summarize phone notes
- Draft constituent service-related emails
- Write form letter templates
- Summarize publicly-available information
- Swap file formats
- Translate materials into other languages or reading levels
- Bill acronyms
- Draft a bill 1-pager
- Draft an e-Dear Colleague
- Transcribe phone calls, hearings, voice memos
- Produce draft hearing memos
- Augment intern/staff training
- Edit written materials for consistency and grammar
- Draft press releases
- Draft talking points
- Draft PSAs on programs and benefits
- Suggest bill ideas
- Suggest strategy ideas



(also some complications)

Legislative Drafting

Pros:

- GenAI can quickly produce text that looks like passable legislative language; allows lawmakers to introduce bill ideas faster to start conversations
- Potential to improve accuracy and efficiency of legislative drafting if properly developed and implemented

Cons:

- Current commercial AI models lack legislative expertise, so their drafts often have unintended consequences. More work for human drafters to fix.
- Increased volumes of AI-drafted legislation is overburdening legislative counsel offices.
- Misaligned expectations that AI will instantly improve drafting are causing frustrations.
- Integrating new technologies like AI will require investment in skills training and system upgrades many legislatures have not budgeted.
- If not managed carefully, over-reliance on AI tools could undermine human expertise

This is an experimental chatbot that allows you to search and interact with reports from the Congressional Research Service. It is not affiliated or endorsed by CRS. [How does this work? →](#)



Relevant CRS Reports

CRSbot



Hi there! I am your CRS data bot. I can help you find information by searching thousands of reports. What can I help you find?



Office of Rep. Jeff Van Drew

NAVIGATION

My Dashboard

Toolbox

POPVOX

Case

ADD / EDIT CASE

CASE ACTIONS

CASE DOSSIER

CASE INTAKE

Enter notes, text or any other details about the case. Do not worry about formatting. Casework Navigator will extract the relevant details and you can edit later.

Enter text below:

[▶ Populate Case Data](#)

CASE INFORMATION

Short Title

Case Description

Category

Agency

Keywords

Date Started

PRIMARY CONTACT

First Name



Implementation Strategies (As presented to US Congress in April 2023)

IMMEDIATE

- ☒ Enable experimentation, clarify guidance for incorporating new tools
- ☒ Share information
- ☒ Learn from other legislatures
- ☒ Monitor changes in advocacy practices and constituent engagement; look for inauthentic campaigns

SHORT-TERM

- ☒ Hearings in relevant committees
- ☒ Studies commissioned from experts
- ☒ Learning from private sector innovation, international examples
- ☐ CRM vendors may begin to incorporate AI tools into product offerings
- ☒ Encouraging prototypes

MEDIUM-TERM

- ☐ Significantly invest in modernizing technical/IT systems to integrate flows of information and automate routine processes.
- ☐ Create new multi-disciplinary teams to tackle complex policy and oversight work and relieve pressures on existing staff.

LONG-TERM

- ☐ Fundamentally change the way we interact with constituents, make laws, model policy, conduct oversight



AI examples in Constituent Engagement

Talk to the City

HOME ABOUT



Overview

Clusters

● Reentry Challenges

Employment Barriers
Technology Gap
Mental Health Support
Housing Difficulties
Family Reintegration
Educational Opportunities

● Community Support

Family and Social Networks
Collaborative Efforts
Nonprofit Organizations

● Systemic Issues

Resource Allocation
Legislative Barriers
Voting Rights
Prison Gerrymandering

● Success Stories

Advocacy and Leadership
Employment Success
Educational Attainment

Appendix

Representative arguments

Click on argument to see original claim

▶ These claims include video excerpts

- Incarcerated individuals are not provided with modern technology, hindering their reintegration into society.
- Formerly incarcerated individuals struggle to adapt to technological advancements that occurred during their imprisonment.
- The use of outdated technology in prisons, such as typewriters, leaves returning citizens unprepared for current technological demands.
- Returning citizens may feel alienated and overwhelmed by the technological changes that have occurred in society.
- Self-education through returning citizens may feel alienated and overwhelmed by the technological changes that have occurred in society.
- Formerly incarcerated individuals are overwhelmed by the technological changes that have occurred in society.
- Access to technology is essential for returning citizens.
- Returning citizens should have access to technology.
- Digital literacy is essential for returning citizens.
- There is a lack of awareness about technology among returning citizens.
- People are not aware of the importance of technology.
- Access to technology is essential for returning citizens.
- The shift to online applications for services is a barrier for returning citizens.
- Support for returning citizens is needed to help them navigate technological changes.
- Older individuals face significant challenges in learning new technologies.
- Returning citizens struggle to catch up with technology.
- Formerly incarcerated individuals are overwhelmed by the technological changes that have occurred in society.
- Virtual tools are underutilized by returning citizens.
- The process to obtain identification documents is a barrier for returning citizens.
- Technological advancements in communication are a barrier for returning citizens.
- There is a significant gap in digital literacy among returning citizens.
- Expectations of a technologically proficient workforce are a barrier for returning citizens.
- Interest in technology is low among returning citizens.
- Socioeconomic status is a barrier for returning citizens.
- Access to technology in prisons is a barrier for returning citizens.
- The fear of damaging expensive devices is a barrier for returning citizens.
- Returning citizens face significant challenges in learning new technologies.
- Incarceration exacerbates the digital divide.
- The lack of familiarity and ownership of technology among returning citizens hinders their ability to integrate it into their daily lives.
- Older returning citizens face unique difficulties with technology due to age-related resistance to learning new systems.
- The fear and frustration associated with technological challenges can be a common experience, not unique to those who have been incarcerated.
- Long-term incarceration leads to a significant technology gap upon reentry.
- Returning citizens face difficulties in adapting to technological advancements after long periods of incarceration.

Quote

"I said, man, he done went crazy. He talking to himself. My mama said no, he on his Bluetooth... So now as I'm riding, I'm thinking about this man, they got devices but you ain't even gotta touch the phone."

Interview: Lionel Muhammad



is to catch up with technology.

to technology.
y like laptops.

eration.
inology, such as cars and televisions.

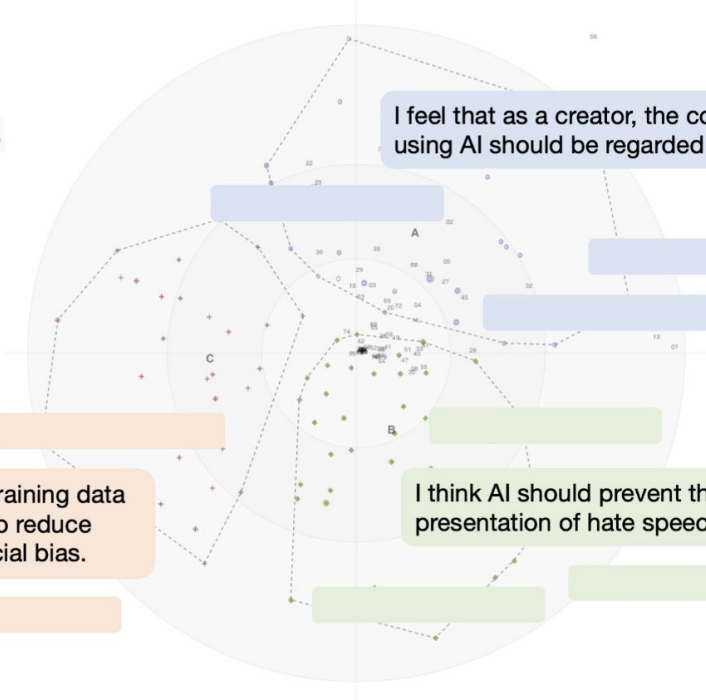
removal from society to under resourced neighborhoods or communities.*
carcerated for a long time.

is.
es.

lung age.

periods of incarceration.
urther behind upon reentry.

vTaiwan: rethinking democracy





AI examples in Constituent Engagement Example

Test Pol.is!

<https://bit.ly/ai-parl-pol>

is



How should parliaments use AI to serve the public?

Welcome to a new kind of conversation - vote on other people's statements.



Anonymous wrote:

9 remaining

Parliaments should use AI to respond to constituent letters



Agree



Disagree

Pass / Unsure

Are your perspectives or experiences missing from the conversation? If so, **add them** in the box below.

What makes a good statement?

- Stand alone idea
- Raise new perspectives, experiences or issues
- Clear & concise (limited to 140 characters)

Please remember, statements are displayed randomly and you are not replying directly to other participants' statements.



Share your perspective...

Submit



Subscribe to “ModParl” Newsletter

MOD PARL

HIGHLIGHTING MODERNIZATION INITIATIVES FROM
LEGISLATURES AROUND THE WORLD



Paul Evans: Legislative Procedures as Living Institutions

Paul Evans reflects on his latest chapter “Reimagining Parliamentary Procedure,” part of the book *Reimagining Parliament*, in which he identifies the problems with procedures in the British parliament, such as their complexity, illegitimacy, and capture by the Executive.

Read



Reimagining Parliament(s)

How would one go about reimagining the UK Parliament? *Reimagining Parliament*, edited by David Judge and Cristina Leston-Bandiera, presents a surprising list of reform possibilities inspires us all to think bigger about our institutions — and not only in the British context.

Read



Senate Mashinani: Bringing Senators to Kenya's Counties

In Kenya, during a “Senate Mashinani,” the entire Kenyan Senate relocates from the capital in Nairobi to legislate from one of the country's 47 counties, a reminder that often the most effective way for lawmakers to connect with the people they serve is to meet them — literally — where they are.

Read



Bússola Tech Webinar on AI in Portuguese-Speaking Parliaments

In April 2024, Bússola Tech hosted a webinar on Artificial Intelligence in Portuguese-speaking Parliaments, featuring speakers from Angola, Brazil, Mozambique, and Portugal.

Read

<https://popvox.org/modparl>



bitly

VOLUME 1

REPRESENTATIVE BODIES IN THE AI ERA

INSIGHTS FOR LEGISLATURES



written by Marci Harris, J.D., LL.M. & Aubrey Wilson for



January 2024

2017

The House began developing its "[Comparative Print Suite](#)" leveraging natural language processing (NLP) to compare bills.

Dec. 15, 2022

House Select Committee on Modernization released its [final report](#), with two mentions of artificial intelligence.

Jan. 26, 2023

Rep. Jake Auchincloss [D, MA] became the first Member of Congress to [deliver a speech](#) on the House floor that had been written by AI.

March 8, 2023

Rep. Nancy Mace [R, SC] [opened](#) a House Oversight hearing on AI with remarks written by ChatGPT.

Oct. 2022

Comparative Print Suite officially launched to all House offices (available behind House firewall at [compare.house.gov](#)).

Jan. 23, 2023

Massachusetts state Sen. Barry Finegold [D-Essex] introduced privacy legislation "[drafted](#) with the help of ChatGPT."

March 3, 2023

Rep. Ted Lieu [D, CA] [introduced](#) a resolution drafted entirely by ChatGPT.

April 13, 2023

Alaska state Rep. Jesse Sumner [R-Wasilla] [used](#) [Microsoft](#) Copilot to write a bill legalizing gambling on Alaska ferries.

April 24, 2023

The House of Representatives CAO announced an experimental [AI working group](#) with 40 licenses of ChatGPT for Congressional offices to try out the technology.

June 26, 2023

The House of Representatives CAO [called for](#) Congressional offices to limit their use of commercial LLM services to the paid version of ChatGPT, with guidance on safeguarding sensitive data.

Sept. 13, 2023

The California legislature became the [first legislature](#) (that we know of) to adopt an AI-written legislative resolution.

Sept. 14, 2023

AI was prominently discussed & AI-enabled prototypes shared at [Congressional hackathon](#).

Nov. 14, 2023

Third AI Flash Report [released](#).

Dec. 2023

Senate issues [guidance](#) for using AI.

May 16, 2023

Sen. Richard Blumenthal [D, CT] kicked off an AI hearing with [opening remarks](#) written and [delivered](#) by AI trained on his voice and previous remarks.

June 26, 2023

Committee on House Administration onboarded a nonpartisan detailee from the Government Accountability Office to work exclusively on AI policy and processes for House operations.

Sept. 14, 2023

Committee on House Administration issued its first "[Flash Report](#)" requesting [public reporting](#) of AI uses by support agencies.

Oct. 20, 2023

Second AI Flash Report [released](#).

Dec. 18, 2023

Fourth AI Flash Report [released](#).



AI policies in the US House and Senate

The AI guardrails for the House of Representatives are:

- **Human Oversight and Decision-Making:** Even as AI technologies are utilized for efficiency, human oversight remains crucial. Decisions, particularly those with significant impact, must ultimately rest with human experts who can interpret AI outputs within the broader context and with an understanding of potential limitations and biases.
- **Clear and Comprehensive Policies:** To ensure safe and appropriate use of AI, the development of clear and comprehensive policies is essential, as is the maintenance of accurate AI inventories. Any AI policy should address privacy, data security, and ethical considerations, ensuring that AI tools are known and used in ways that preserve public trust and safeguard sensitive information.
- **Robust Testing and Evaluation:** Before AI technologies are deployed, they should undergo thorough testing and evaluation to assess their reliability, validity, and potential biases. Continuous monitoring and regular reassessment are crucial to adapt to technological advancements and emerging risks. The continuous monitoring and evaluation of data that is entered into or taken out of the AI system is critical.
- **Transparency and Disclosure:** Transparency about the use and capabilities of AI technologies is key to maintaining trust. This includes clear communication about how AI is being used, the data it processes, and the measures in place to protect privacy and security. There should be considerations for disclosing when AI has contributed to legislative drafting or other significant tasks.²
- **Education and Upskilling:** To effectively implement AI technologies, ongoing education and upskilling of Members and staff are essential. This includes training on the capabilities and limitations of AI, as well as on the ethical considerations and policy frameworks that guide its use. Building digital literacy and resilience among everyone in the House community will help mitigate risks and foster responsible use of AI.



SAA CIO Notice

Conversational AI Services Available for Research and Evaluation

Risk assessments for three conversational artificial intelligence (AI) services have been released, all at a **moderate level of risk if controls are followed**. Please review the risk assessments carefully, including the required compensating controls prior to use.

- [SPRA001052: OpenAI ChatGPT](#)
- [SPRA001143: Google BARD AI](#)
- [SPRA001145: Microsoft Bing AI Chat](#)

There are two important stipulations for using any of the AI services:

- Use only for research and evaluation.
- Use only with non-sensitive data.

Usage Guidelines

These guidelines are meant to mitigate the privacy and data security risks associated with using these services.

- Treat AI tools similarly to search engines and other public websites, with no expectation of privacy or accuracy.
- Do not put sensitive or private information into an AI tool.
- Assume all information you put into an AI tool could be used elsewhere or be seen by others.
- Keep in mind, information may be gleaned from the series of prompts you provide to interact with an AI tool.
- Always verify accuracy of the information generated by AI tools through additional trusted resources.
- Human review of generated content from an AI tool is essential to ensuring that the content is accurate and appropriate.

Purchasing ChatGPT Plus Licensing

Only Official Office Funds may be used to purchase OpenAI ChatGPT Plus licenses. No other



AI hearings in House & Senate Committees



Full Committee Hearing, “Artificial Intelligence (AI): Innovations within the Legislative Branch”

Jan 30 2024

On Tuesday, January 30, 2024, at 10:30 a.m. ET, the Committee on House Administration will hold a hearing titled, “Artificial Intelligence (AI): Innovations within the Legislative Branch.” The hearing will take place in room 1310 of the Longworth House Office Building.

THE USE OF ARTIFICIAL INTELLIGENCE AT THE LIBRARY OF CONGRESS, GOVERNMENT PUBLISHING OFFICE, AND SMITHSONIAN INSTITUTION

Date: Wednesday, January 24, 2024
Time: 02:15 PM
Location: Russell Senate Building 301

**UNITED STATES SENATE
COMMITTEE HEARING CHANNELS**

Hearing entitled,
"The Use of Artificial Intelligence
at the Library of Congress,
Government Publishing Office,
and Smithsonian Institution."

Coverage begins at 2:15 pm



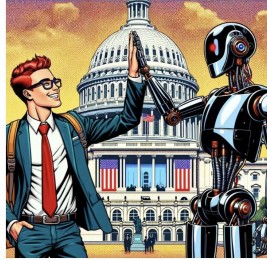
AI Trainings for Congressional Staff



Optimizing the Internal Management Experience with AI

March 18, 2024

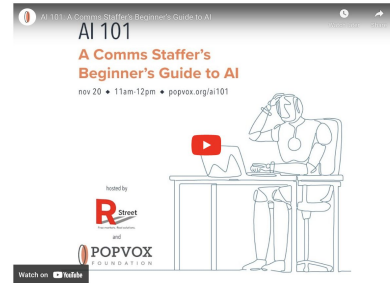
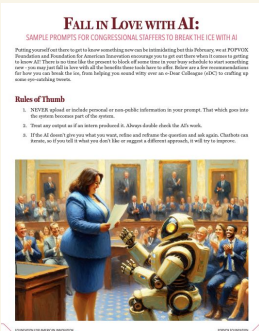
POPVOX Foundation, the Modernization Staff Association, and the Capitol Hill Intern Association are hosting an insightful panel discussion on implementing AI tools to enrich internal learning and maximize program efficiency.



Understanding and Using AI as a Congressional Intern: Tools and Tips from Congressional Experts

March 11, 2024

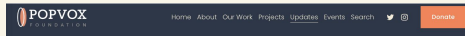
POPVOX Foundation and the Capitol Hill Intern Association hosted a panel discussion exploring actionable tips for utilizing free AI tools to enhance the work of Congressional interns.



ABOUT THE TRAINING

Generative AI (GenAI) is a tool that can be added to a congressional staffer's toolbox to increase capacity and effectiveness. From assisting with background research in preparation for a constituent meeting or summarizing lengthy reports from an executive branch agency, to cutting down on the time it takes to draft responses to constituent mail, GenAI can empower your office to help more constituents and make better informed policy choices.

In the brief break prior to Thanksgiving, POPVOX Foundation and the R Street Institute invite you to spend some of your recess time to join us for a virtual introductory training on how to finally take the plunge and get familiar with generative AI.



Nov 14

A Congressional Office's Guide to Establishing a Generative AI Internal Use Policy

Generative AI (GenAI) refers to artificial intelligence (AI) systems that are capable of generating novel content like text, images, audio, and video in a human-like manner. These GenAI tools can be added to any congressional staffer's toolbox to increase capacity and effectiveness. From assisting with background research in preparation for a constituent meeting or summarizing lengthy reports from an executive branch agency, to cutting down on the time it takes to draft responses to constituent mail, GenAI can streamline tasks to boost staff productivity.



GenAI is advancing at an incredibly rapid pace, with new capabilities being unveiled on a near daily basis. **House and Senate offices should be clear about their internal office guidance and encourage staff to think innovatively about how GenAI can be used across their DC and district office teams to increase effectiveness and efficiency.** If used appropriately, these technologies have the potential to deliver immense value across many use cases and greatly increase office productivity levels.

Below are some sample internal office policy ideas Members and chiefs of staff can consider to ensure these tools are used with intention, an appreciation for the technology's limitations, and to maximize their value.



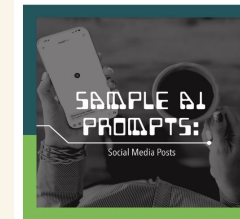
e-Dear Colleague

GenAI help you with the first draft of an attention-catching, persuasive eDC to encourage Members to be original cosponsors of your boss's new bill.



One-Pager

Have GenAI help you with the first draft of an informative 1-pager on your bill that can be used by your staff to answer questions and be used to help inform other offices about the bill's intended effects.



Social Media Posts

Have GenAI help you with the first draft of five X posts celebrating the introduction of your bill that highlights the intent of the legislation and celebrates the original cosponsors.



Constituent Response Letter

Have GenAI help you with the first draft of a constituent response letter that addresses their concerns and informs them of the Representative's proactive legislative actions.



The future of AI in Legislatures

AUGMENT

AUTOMATE

TRANSFORM

Augment: AI as a supportive tool that augments the human capacity for detailed legal analysis, stakeholder engagement, and policy development.

Automate: AI takes on a more autonomous role in processing vast amounts of legislative data, automating the tracking of bill progress, public opinion analysis, and perhaps even predictive modeling on the impacts of proposed legislation. This automation frees human resources to focus more on strategy, negotiation, and complex decision-making processes.

Transform: More dynamic and responsive lawmaking, real-time simulations of the effects of legislative changes, enhancing public engagement and transparency in governance.



The future of AI in Legislatures

ML/NLP

Custom uses of ML/NLP developed either by in-House team or contractor

COTS

Commercial Off-the-Shelf Software that leverages AI (COTS)

3rdParty GenAI

Using third party GenAI tools for basic tasks

Custom GenAI apps

Developing custom apps (either in-house or with contractor) that leverage commercial models

In-house LLM

Maintaining in-house LLM, potentially leveraging open source models



The future of AI in Legislatures

