Task Force on Generative Artificial Intelligence (GenAl)

Wednesday, April 3, 2024 Montgomery, AL

Task Force Creation

On Thursday, February 8, 2024, Governor Kay Ivey signed Executive Order 738 to create a task force to recommend policies for the responsible and effective use of Generative Artificial Intelligence (GenAl) in state executive-branch agencies.



EXECUTIVE OPDER NO. 736

PROVIDING FOR THE RESPONSIBLE AND PRODUCTIVE USE OF GENERATIVE AI IN STATE GOVERNMENT

WHEREAS the State of Alabama is a pioneer in the development and use of advanced technologies, from manufacturing nanotechnology to empowering mankind to walk on the moon;

WHEREAS Generative Artificial Intelligence ("GenAI") represents a significant step forward in technology that will transform the way that the State and the world conduct business and serve the public;

WHEREAS GenAI has the potential to catalyze innovation and the rapid development of a wide range of benefits for Alabamians, but must be deployed carefully to mitigate and guard against a new generation of risks;

WHEREAS responsible and ethical use of GenAl should be conducted within a governance structure that ensures transparency, tests for bias, addresses privacy concerns, and safeguards our values;

WHEREAS the State of Alabama seeks to realize the potential benefits of GenAI for the good of all Alabamians, through the development and deployment of GenAI tools that improve the delivery of services, while balancing the benefits and risks of these new technologies;

WHEREAS the people of Alabama demand and expect that their state government operate in the most efficient way possible; and

WHEREAS the Alabama state workforce is vital to Alabama's continued prosperity and the State seeks to harness the potential of GenAI for the benefit of the state government workforce;

NOW, THEREFORE, I, Kay Ivey, Governor of the State of Alabama, by virtue of the authority vested in me by the Constitution and laws of the State of Alabama do hereby promulgate this executive order, effective immediately:

Website Link: https://governor.alabama.gov/newsroom/2024/02/executive-order-738/

Mission Statement

The purpose of this Task Force is to:

- Understand current uses of GenAl in state executivebranch agencies
- Encourage the responsible and effective use of GenAl in state executive-branch agencies
- Recommend policies and procedures related to the use of GenAl in state executive-branch agencies

Task Force Members

Cabinet

Secretary Daniel Urquhart, Office of Information Technology (Chair)
Secretary Hal Taylor, Alabama Law Enforcement Agency
Commissioner Stephanie Azar, Alabama Medicaid Agency
Director Stacia Robinson, Office of Minority Affairs
Director Bill Poole, Department of Finance
Secretary Fitzgerald Washington, Department of Labor
Commissioner Vernon Barnett, Department of Revenue

<u>Legislators</u>

Senator Sam Givhan
Senator Bobby Singleton
Representative Mike Shaw
Representative Kelvin Lawrence

Higher Education

Dr. Matthew Hudnall, University of Alabama

Dr. Hari Narayanan, Auburn University

Industry Partnerships

Several key industry partners will be consulted over the coming months to help provide the subject matter expertise that will be required to achieve the stated purpose and mission of the GenAl Task Force.

For this first meeting of the Task Force, Microsoft has been invited to present to members on Generative Artificial Intelligence and its responsible and productive use in state government. Additional partners will be included as the work of the Task Force continues.

Representing Microsoft today is Dustin Bailey. Mr. Bailey is a client director in Microsoft's U.S. Public Sector and is responsible for aligning and helping government leaders develop and execute strategic technology plans that deliver modernized digital government services. He leads an extensive team of industry and technology subject matter experts to support the business technology goals for state and local governments in the Southeast.

Originally from Louisiana, Mr. Bailey and his family have called Alabama home since 2001.



Examples of GenAl

for State and Local Government to Serve the Public

Facilitate Policy
Analysis and
Development

Personalized and Interactive Learning Experiences

Evidence-Based Decision Making

Streamline Administrative Tasks, Processes

And more

A Brief History of Al

Artificial Intelligence

Machine Learning

Deep Learning

Generative AI

1950s

Artificial Intelligence

The field of computer science that seeks to create intelligent machines that can replicate or exceed human intelligence

1959

Machine Learning

Subset of AI that enables machines to learn from existing data and improve upon that data to make decisions or predictions

2017

Deep Learning

A machine learning technique in which layers of neural networks are used to process data and make decisions

2021

Generative Al

Creates new written, visual, and auditory content given prompts or existing data

What is Generative Al?

What Generative Al is not

Artificial intelligence that creates content from simple prompts and context based on generative models (GPT).

Related systems fall under the broad category of machine learning and are often known as large language models (LLMs).

GPT is sentiment - FALSE

GPT is unbiased - FALSE

GPT can solve any problem - FALSE

Responsible Al Practices

Principles

Fairness • Privacy & security • Transparency
Reliability & safety • Inclusiveness • Accountability

Standards

Goals • Requirements • Practices

Implementation

Training • Tools • Testing

Oversight

Monitoring • Reporting • Auditing • Compliance

Key Industry Terms to Know

- Al: A broad set of techniques used to train computers to complete tasks that would otherwise require human intelligence, such as answering questions, generating data and recognizing objects.
- Algorithm: A generally applicable framework that can be used to develop an AI model. There are a variety of AI algorithms, including decision trees, neural networks and transformers. An algorithm is not deployed directly but is trained on data to develop an AI model. For example, a transformer model could be trained on large volumes of written text to develop an AI model that can generate new text. "Algorithm" is sometimes used as a catchall term for an AI system which is often unhelpful. Public policy conversations should more precisely address the different layers of the value chain i.e. model/application including as part of addressing AI risks which emerge primarily at the application layer.
- Model: Emerging from the training of an algorithm on data, a model performs one or more generally applicable tasks, for example content generation, pattern detection or recommendation. Models are typically not deployed directly but incorporated by an AI developer into an AI application, turning the generally applicable functionality to a specific real-world use case.
- Al Application/System: A finished Al application that incorporates Al models alongside other software and inputs and is deployed in a real-world use case as part of a broader process or decision-making system, for example as part of a decision on whether to award someone credit.
- Generative Al: Models that can create new data, including visual content, text, audio, code etc.
- Large Language Models: Models trained on large amounts of text data that can perform a wide variety of language tasks, including text summarization, generation, and categorization. These models can perform generative tasks like text generation and so there is some overlap between LLMs and Generative Al.
- Image Generation Models: A type of Generative AI that can create images.
- Multimodal Models: Models that can accept inputs and generate outputs over multiple modalities, or types of data, such as text, images, and video.
- Foundation Models: Models that are trained on a broad set of unlabeled data that can be used for different tasks, with minimal fine-tuning.

Task Force Workgroups

Policies and Governance

- Advise in the development of:
- o Policies and governance tied to GenAl
- Procurement and development guidelines
- Authorization to operate (ATO) process for GenAl systems
- Guidelines for sandbox environments

Workforce Education and Training

- Educate workforce on the technology and its capabilities/limitations
- Inform potential users on how to implement GenAl responsibly
- Identify technical resources to create and sustain AI systems
- Showcase Alabama GenAl talent and service offerings

Responsible and Ethical Usage of GenAl

- Develop inventory of GenAl assets currently in use by state agencies
- Host workshop(s) to develop use cases within state government
- Define data ownership, classification, and readiness
- Provide guidance to help safeguard state and citizen data/resources

Task Force Website



Website Link: https://aitaskforce.alabama.gov

Next Meeting

The next full meeting of the Generative Artificial Intelligence Task Force is scheduled for:

Wednesday, June 26, 2024, at 2:00 PM

Meeting Adjournment

THANK YOU

Daniel Urquhart – Chair Secretary, Office of Information Technology