



CREATE AI Act of 2023

Summary

Senators Heinrich, Young, Booker, and Rounds introduced [S.2714](#), the CREATE AI Act, in July 2023, which authorizes the construction of the National Artificial Intelligence Research Resource (NAIRR), a cloud computing resource that will democratize development and use of artificial intelligence (AI). NAIRR will provide free or low-cost access to datasets and computing resources for development of AI workflows. This will unleash American innovation in science, engineering, medicine, agriculture, and many other fields. NAIRR will also serve as a testbed for development and implementation of trustworthy AI practices.

The need is significant

Companies like Google and Meta annually [invest tens of billions of dollars in research and development](#), and large tech companies [dwarf others in their AI investment](#). Control over the direction of leading-edge AI has become extremely centralized due to the significant data and computation requirements for modern AI. Even well-resourced universities are significantly outpaced by industry in AI research. For example, reaching the state of the art in the AI that underlies tools like Apple's Siri and Amazon's Alexa would take thousands of years for a researcher armed with only a laptop.

Background

Senators Heinrich and Portman, as co-chairs of the bipartisan Senate Artificial Intelligence Caucus, sponsored the [Artificial Intelligence Initiative Act](#) and the [NAIRR Task Force Act](#) in the 116th Congress, which became law as the National AI Initiative Act in the FY2021 National Defense Authorization Act. This followed a recommendation by the [National Security Commission on Artificial Intelligence](#). The congressionally chartered [NAIRR task force](#) completed its work in January 2023, and has drawn up a [full blueprint](#) for how to implement the NAIRR which this legislation draws on.

In FY2023, the National Science Foundation (NSF) received \$700 million for artificial intelligence research, significantly less than what the private sector contributed to foundational and applied AI research in recent years. NAIRR will enable a wide range of researchers to participate in AI, which will truly democratize AI and bring the full force of the American innovation ecosystem to bear on AI development.

The time to do this is now

NSF is currently developing a pilot project for the NAIRR, as directed in the administration's October 2023 AI executive order, but a full implementation of the NAIRR depends on appropriations for FY2025 and beyond. Without full congressional authorization and approval, American leadership in academic AI research could be forfeited. Other countries are not waiting around: in September 2023, the UK government announced a plan to spend \$1.1 billion on a public sector AI supercomputer, and China is moving ahead with similar plans.

Legislative Summary

The CREATE AI Act authorizes the development of the NAIRR. NAIRR would be overseen by NSF through a program management office. An interagency steering committee would also be created. The day-to-day operations of the NAIRR, including procurement of computational and data resources needed to do AI research, would be run by an independent non-governmental entity. This operational entity, which would be selected through a competitive process, would be an educational institution or federally funded research and development center (FFRDC), or a consortium of universities or FFRDCs. After the establishment of the NAIRR, researchers at institutions of higher education (and certain small businesses that receive executive branch funding) would be eligible to use the NAIRR for AI research, with time allocations on the NAIRR selected through a merit-based process. Time allocations on the NAIRR could also be rented for researchers that need more resources.

Appropriations for the NAIRR will occur through the normal annual appropriations process. NSF would be the primary entity for appropriations and would fund the NAIRR through the \$1 billion per year authorized to NSF under the National AI Initiative Act. Other agencies can contribute in-kind resources to the NAIRR (e.g. supercomputer resources or data resources) based on their respective appropriations.

Endorsements

The CREATE AI Act is supported by a wide range of organizations across industry, civil society, and academia, including:

Anthropic
IBM
Information Technology Industry Council
Microsoft
New Mexico AI
SeedAI
Software and Information Industry Association
TechNet
Texas Advanced Computing Center, University of Texas at Austin