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Attachments

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Response to the 2025 National Artificial Intelligence Research and Development Strategic Plan Request for Information

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• Introduction

As our nation charts a new course for artificial intelligence (AI) under Executive Order 14179, this response is submitted from the state of South Carolina, a region whose citizens strongly supported the current administration in the most recent presidential election. That support reflects a broader public alignment with the administration's values around national strength, innovation, and the responsible advancement of transformative technologies.

South Carolina is home to the University of South Carolina, an emerging powerhouse in the strategic application of AI for increased domestic economic competitiveness, better health outcomes, and stronger national defense. South Carolina is one of the fastest-growing States due largely to strong support for the manufacturing sector and a highly attractive climate and living environment. It also includes the Savannah River National Laboratory (SRNL), a vital federal asset uniquely positioned to support AI research and infrastructure that serves regional needs and national priorities for nuclear defense, energy, and cybersecurity. Our state, often underrepresented in federal funding initiatives, stands ready to contribute meaningfully to the nation's AI leadership by leveraging our scientific capacity, workforce potential, and strong public commitment to securing American technological dominance.

This document outlines three key recommendations that align with the administration's directive to promote AI-driven prosperity, national security, and human flourishing.

1. Establishing National Public-Private-University Partnerships for AI Infrastructure at National Labs

We strongly support the U.S. Department of Energy's initiative to expand AI infrastructure on federal lands, as articulated in its [2025 Request for Information on Artificial Intelligence Infrastructure](#). In alignment with the administration's [Executive Order on removing barriers to American leadership in AI](#), we recommend the 2025 AI R&D Strategic Plan prioritize strategic investment in high-performance computing (HPC) clusters and next-generation data centers located at DOE sites, specifically through structured partnerships between the federal government, the private sector, and leading research universities.

We advocate prioritizing the 310-square-mile footprint of the Savannah River Site (SRS) and the Savannah River National Lab (SRNL) in South Carolina as a pilot location for this initiative. The nearly 200,000 acres of the SRS present a unique opportunity to catalyze economic development and technical advancement in a state that has steadfastly supported national security, energy independence, and cutting-edge science. While South Carolina has not historically been a hub of federal AI investment, it offers compelling assets for transformative development: a nationally significant DOE site, a rapidly growing research university ecosystem, strong utility and transportation infrastructure, and a local workforce eager to participate in the next generation of American innovation. Additionally, its proximity to both the headquarters of Army Cybercommand as well as the National Security Agency's Augusta, Georgia facility, offers an excellent opportunity for leveraging AI in ways to ensure the United States' global strategic military advantage.

As DOE's RFI notes, the co-location of AI data centers with an emerging resilient energy supply will be critical to achieving secure and scalable infrastructure. South Carolina's proximity to energy **resources, such as nuclear and biomass**, and underutilized land resources make it a compelling candidate for testbed development. We recommend dedicated funding to build modular, ultra-efficient AI data centers at SRS, supported by collaborative research platforms integrating US DOE laboratory capabilities, local university expertise, and industry innovation. The University of South Carolina is also strategically located and connected to the national high-speed network and AI infrastructure to interact with other DOE and advanced University research communities to lead national AI advances and deployment.

Importantly, this type of development will strengthen America's leadership in AI and deliver meaningful, results-oriented investments in areas with a demonstrated commitment to national security and the ability to mobilize a domestic workforce in support of the Administration's agenda. By focusing on strategic geographic diversity and leveraging existing federal assets like SRNL, we can unlock high-impact outcomes for national security, energy resilience, and job creation. The US DOE's proposal to enable multi-party ground leases or easements is a common-sense, business-friendly approach that empowers local actors, reduces red tape, and accelerates progress. South Carolina stands ready to lead as a model for how AI infrastructure can serve both American interests and the people who make this country strong.

2. Combining Artificial and Human Intelligence for Human Flourishing and Security

To fully realize AI's promise, we must move beyond narrow, technology-only thinking and embrace a people-first, neuroscience-informed strategy that recognizes the unique strengths and irreplaceable value of human intelligence (HI). AI should not be treated as a replacement for human

intellect but rather as a powerful tool that can extend and amplify our capabilities. This starts with a deeper understanding of how the human brain works and interacts with machine intelligence. The human brain is defined by its plasticity—its lifelong ability to adapt, reorganize, and grow in response to new challenges. These qualities make HI inherently dynamic, creative, and capable of abstract thought. In contrast, while impressive, AI systems are constrained by their training data and computational architecture. Unlike the human brain, which evolves through lived experience, AI systems operate through pre-defined optimization mechanisms and cannot yet match the richness of human adaptability, empathy, or judgment. To ensure AI contributes to human flourishing and national resilience, the federal government must lead a bold new research agenda focused on the convergence of AI and HI. This agenda should include:

- **Investing in neuroscience-informed AI development**, leveraging insights from brain plasticity, language, and decision-making to guide the design of more adaptable and interpretable AI systems
- **Developing human-in-the-loop applications** that combine machine precision with human insight in critical areas like national defense, clinical decision-making, and emergency response
- **Studying the impact of AI on learning and cognition**, particularly how overreliance on AI may diminish critical thinking and stunt cognitive development in younger generations
- **Establishing standards for ethical AI integration**, including transparency, privacy, and bias mitigation, especially in applications that affect education, employment, and public safety

The federal government must also address the growing concern that AI, particularly large language models (LLMs), risks weakening the development of human intelligence if used indiscriminately, particularly among America's younger populations, eventually putting the United States at a potential defense and economic competitiveness disadvantage with allies and adversaries alike. As highlighted in recent studies, widespread use of AI tools for academic tasks can short-circuit the learning process, inhibiting the very brain-based skills—creativity, critical thinking, adaptability—that define a flourishing society.

Therefore, this is not merely a call for more powerful AI. It is a call to be a global leader in developing better alignment between AI and HI, grounded in rigorous science and deployed with a clear-eyed view of the ethical and educational consequences. The United States must lead this domain—not only because the risks of misalignment are high but also because the rewards of human-centered AI are immense: improved health outcomes, stronger national security, and a citizenry empowered by—not subordinate to—technology.

3. Protecting the Future: Preventing Existential Risk from Unregulated AI

Artificial intelligence is advancing at an unprecedented pace. While this offers extraordinary opportunities for economic and scientific advancement, it also introduces serious risks, especially if the development and deployment of powerful AI systems are left without the guardrails necessary to ensure adversarial foreign powers do not exploit those systems. As global AI leaders such as [Geoffrey Hinton](#) and [Yoshua Bengio](#) have warned, the trajectory of AI could lead to outcomes that are misaligned with human values, or worse, weaponized by hostile actors.

The United States must utilize its competitive scientific advantages to lead the world in this arena. Adversaries, most notably China, are aggressively developing AI systems designed not only to optimize control over their own populations but also to undermine democratic institutions, challenge U.S. military and economic leadership, and dominate the global AI landscape. These regimes do not operate with the same ethical guardrails or transparency standards as the United States. If we do not lead the development of safe and controllable AI technologies, we risk falling behind in a race that could determine global power balance for decades to come. The 2025 National AI R&D Strategic Plan should prioritize an integrated approach to AI safety and national security, focused on the following actions:

- Support the creation of federally governed testbeds at national labs and DoD-affiliated institutions to evaluate the safety, security, and controllability of advanced AI systems, especially those capable of autonomous decision-making
- Fund cross-disciplinary research into AI alignment and adversarial resilience, drawing on neuroscience, computer science, cybersecurity, and defense expertise to build AI systems that can operate safely in contested environments
- Establish proactive government oversight mechanisms that can monitor, audit, and respond to the misuse or uncontrolled evolution of AI systems, before crises emerge
- Promote international coalitions and diplomatic approaches that prevent adversaries from developing AI systems intended to target or destabilize the United States or its allies

The risks we face are real. From autonomous weapons to cognitive warfare, unregulated AI could be used to infiltrate systems, manipulate populations, and paralyze national infrastructure. The United States must lead with strength, foresight, and resolve—establishing norms of control and accountability before it is too late.

This administration has a unique opportunity to take action where others hesitated: to treat AI safety as not just a research priority, but a national imperative. With the right strategy, the United States can ensure that artificial intelligence serves the cause of liberty, security, and enduring human dignity, rather than becoming a tool of repression or destruction in the hands of our adversaries.

Closing Remarks

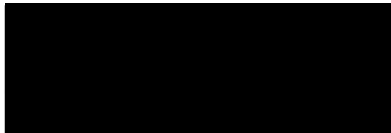
The future of American leadership in artificial intelligence will not be decided solely in Silicon Valley or Washington, D.C.—it will be shaped in places like South Carolina, where innovation is fueled by resolve, rooted in community, and powered by a deep commitment to America's greatness. At the heart of this momentum stands the University of South Carolina, a flagship public institution that is rapidly emerging as a national leader in AI-driven research, education, and strategic collaboration.

As we face global competition and rising technological complexity, the University of South Carolina exemplifies what it means to meet national challenges with local ingenuity. We are committed to harnessing AI to improve health outcomes, strengthen infrastructure, secure our homeland, and uplift the people of our state and beyond. Our work is guided by scientific excellence, civic responsibility, and a clear-eyed view of both the promise and the peril of emerging technologies.

We believe the 2025 National AI R&D Strategic Plan is a defining moment: an opportunity for the federal government to partner with institutions that are not only prepared to lead but deeply invested in the long-term prosperity of the American people. With the right support and vision, universities like ours will anchor the next generation of AI innovation rooted in liberty, driven by purpose, and unwavering in service to our country.

The University of South Carolina stands ready to lead.

Sincerely,



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