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Request for Information: Development of a 2025 National Artificial Intelligence Research and Development Strategic Plan

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Submitter Information

Organization: Coalition for Academic Scientific Computation

General Comment

CASC Response to the OSTP NITRD RFI on the 2025 National AI R&D Strategic Plan

V1 5/26/2025
Contact:
Kathryn Kelley
Executive Director, CASC

Statement of Approval:
This document is approved for public dissemination. It contains no business-proprietary or confidential information. Document contents may be reused by the government in developing the 2025 National AI R&D Strategic Plan and associated documents without attribution.

Introduction
The Coalition for Academic Scientific Computation (CASC) represents over 105 U.S. institutions committed to advancing scientific computing and cyberinfrastructure. Our members are at the forefront of AI research, development, and education, leveraging high-performance computing (HPC) resources to drive innovation across disciplines. We appreciate the opportunity to provide input on the development of the 2025 National AI R&D Strategic Plan.

Key Recommendations

Sustained Investment in Foundational AI Research
To maintain U.S. leadership in AI, it is imperative to invest in long-term, foundational research that may not yield immediate commercial returns but is critical for future breakthroughs. This includes support for novel algorithms, architectures, and computing paradigms beyond current deep learning approaches. Such investments will ensure the U.S. remains at the cutting edge of AI innovation.

Development of a National AI Research Infrastructure
We advocate for the establishment of a National AI Research Resource (NAIRR) that provides equitable access to computational resources, datasets, and tools. This infrastructure should be designed to support researchers across institutions, including those in underrepresented regions, to increasee participation in AI R&D.

Promotion of Responsible and Ethical AI
The strategic plan should prioritize research into the ethical, legal, and societal implications of AI. This includes developing frameworks for transparency, accountability, and fairness in AI systems. By embedding ethical considerations into the R&D process, we can build AI technologies that align with societal values and public trust.

Enhancement of AI Education and Workforce Development
To address the growing demand for AI expertise, we recommend initiatives that support AI education and workforce development. This includes curriculum development, training programs, and partnerships between academia and industry to prepare a diverse and skilled AI workforce and citizenry.

Strengthening Public-Private Partnerships
Collaboration between government, academia, and industry is vital for translating AI research into practical applications. We encourage mechanisms that facilitate such partnerships, enabling the sharing of resources, expertise, and data to accelerate AI innovation.

Support for AI in Scientific Discovery
AI has the potential to revolutionize scientific research by enabling new methods of data analysis and hypothesis generation. We recommend dedicated support for AI applications in scientific domains, ensuring that researchers have the tools and resources necessary to integrate AI into their work effectively.

Conclusion
CASC is committed to advancing AI research and development that benefits society and maintains U.S. leadership in this critical field. We urge OSTP and NITRD to consider these recommendations in the formulation of the 2025 National AI R&D Strategic Plan. By investing in foundational research, infrastructure, ethical frameworks, education, and collaboration, we can foster an AI ecosystem that drives innovation and serves the public good.

Note: This response is based on CASC's prior submission to the NSF RFI on the AI Action Plan and reflects our continued commitment to shaping a strategic AI research agenda.

Attachments

CASC Response OSTP NITRD RFI on the 2025 National AI Strategic Plan

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