

PUBLIC SUBMISSION

Received: May 03, 2025 Tracking No. ma8-cbpc-1gps Comments Due: May 28, 2025 Submission Type: Web
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Docket: NSF-2025-OGC-0001
NITRD_FRDOC_0001

Comment On: NSF-2025-OGC-0001-0001
Request for Information: Development of a 2025 National Artificial Intelligence Research and Development Strategic Plan

Document: NSF-2025-OGC-0001-DRAFT-0041
Comment on FR Doc # 2025-07332

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General Comment

See attached file

Attachments

AI Gov Submission

Response to RFI on the Development of the 2025 National Artificial Intelligence (AI) Research and Development Strategic Plan

To: National Science Foundation

Docket ID: NSF-2025-OGC-0001

Submitted via: <https://www.regulations.gov/commenton/NSF-2025-OGC-0001-0001>

Introduction

We commend the National Science Foundation (NSF) and the Networking and Information Technology Research and Development (NITRD) National Coordination Office (NCO) for initiating this Request for Information (RFI) to inform the 2025 National Artificial Intelligence (AI) Research and Development Strategic Plan. As a U.S.-based software development services firm, we are deeply committed to advancing AI technologies that promote national competitiveness, public-sector modernization, and responsible innovation.

The Strategic Role of U.S.-Based Software Development Services Firms

U.S.-based software development services firms are critical enablers of AI implementation. We work at the intersection of technical research and applied business outcomes, delivering robust, scalable solutions across sectors such as defense, finance, healthcare, logistics, and energy.

Example: Our firm recently partnered with a U.S. healthcare network to develop an AI-driven patient prioritization system using federated learning to protect sensitive data. The results led to improved patient outcomes and operational efficiency—demonstrating how expert U.S. firms can translate cutting-edge AI into impact at scale.

Recommendations for the 2025 AI R&D Strategic Plan (with Examples)

1. Foster Public-Private Partnerships

Encourage collaborations between federal research programs and domestic software development firms to shorten the time between R&D and implementation.

Example: A government agency working on AI-enabled disaster response systems could issue a challenge in partnership with U.S. software firms to rapidly build and deploy AI-powered tools for real-time damage assessment and resource allocation during emergencies.

2. Invest in Workforce Development

Support technical upskilling programs that empower American developers, analysts, and product managers to work on AI applications in both commercial and federal domains.

Example: Co-funding a bootcamp program with U.S.-based firms that retrain veterans or displaced workers in MLOps and prompt engineering, placing them directly into live AI implementation projects at participating software firms.

3. **Prioritize Applied Research**

Emphasize funding for projects that have direct routes to real-world deployment, focusing not just on foundational models but also domain-specific applications.

Example: A DOE-backed project on predictive maintenance in nuclear energy facilities could be paired with U.S. engineering firms to integrate anomaly detection AI models directly into legacy control systems through secure APIs.

4. **Enhance Infrastructure Support**

Invest in infrastructure and tools that make AI integration more practical—especially secure data pipelines, model governance frameworks, and modular orchestration platforms.

Example: Provide grants for U.S. firms to build open-source AI middleware that allows government departments to plug different LLMs into internal workflows (e.g., summarizing case files, automating document classification), complete with audit logs and role-based access control.

5. **Adopt a Proof-of-Concept (POC) Pathway for Applied Innovation**

Establish a POC framework to stimulate fast, iterative exploration of targeted national AI problems. Open up priority problems for public proposal submission, fund a portfolio of POCs with small grants (e.g., \$50K–\$150K), and showcase validated prototypes for further consideration and scaling.

Example Implementation Flow:

- The Department of Agriculture posts a challenge to develop AI models that predict crop disease outbreaks based on satellite data and farmer-reported observations.
- U.S.-based firms submit 4–6 page proposals.
- Selected firms receive small grants to build a demo in 6–10 weeks.
- A virtual demo day is held with agency stakeholders and scientists.
- Promising POCs move to larger funding stages or pilot programs with agency partners.

This approach mirrors successful innovation funding models like DARPA's Small Business Innovation Research (SBIR) Phase I but focuses on speed, applied results, and modern AI tooling. It would reduce time-to-value, increase solution diversity, and provide measurable proof points before awarding full contracts.

Conclusion

To maintain global leadership in AI, the United States must pair its research excellence with practical, deployable innovation. U.S.-based software development services firms are uniquely positioned to bring AI strategies to life through secure, ethical, and scalable execution. By creating clearer pathways to implementation—including rapid POCs, applied research funding, and public-private collaboration—we can accelerate national AI goals responsibly and inclusively.

We appreciate the opportunity to contribute and are eager to support the NSF and its partners in building the next generation of AI leadership.

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