

# PUBLIC SUBMISSION

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**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-0201  
Comment on FR Doc # 2025-07332

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## Submitter Information

**Organization:** Hewlett Packard Enterprise

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## General Comment

See attached file for Hewlett Packard Enterprise's submission for Docket ID No. NSF-2025-OGC-0001

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## Attachments

White House 2025 National AI RD Strategic Plan\_RFI\_HPE



May 29, 2025

2025 National AI R&D Strategic Plan  
Attn: Faisal D'Souza, NCO  
2415 Eisenhower Avenue  
Alexandria, VA 22314, USA

Reference: Request for Information on the Development of a 2025 National Artificial Intelligence (AI) Research and Development (R&D) Strategic Plan

Dear Mr. D'Souza:

On behalf of Hewlett Packard Enterprise (HPE), I am honored to submit our response to the White House's Request for Information (RFI) regarding the 2025 National Artificial Intelligence Research and Development (AI R&D) Strategic Plan. We commend the Office of Science and Technology Policy (OSTP) and the Networking and Information Technology Research and Development (NITRD) National Coordination Office (NCO) for advancing this vital initiative to secure the United States' leadership in artificial intelligence.

As a global leader in advanced computing and AI innovation, HPE recognizes the Federal government's unique role in fostering foundational, high-risk AI research and development that addresses national priorities. Our response outlines actionable recommendations to accelerate AI-driven innovation, enhance national security, and promote human progress. These recommendations prioritize:

- **AI Data Readiness:** Launching an AI Data Initiative to transform Federal datasets into AI-ready resources, enabling breakthroughs in healthcare, manufacturing, national security, and scientific discovery.
- **Next-Generation AI Hardware, Software and Architectures:** Investing in high-performance computing infrastructure optimized for AI workloads and workflows and novel hardware and software systems, including energy-efficient computing, neuromorphic technologies, and quantum accelerators.
- **Responsible and Trustworthy AI:** Advancing explainability tools, auditing frameworks, and adversarial resilient AI models to ensure transparency, security, and public trust.

Additionally, we emphasize strengthening AI for national security by leveraging Department of Energy and Department of Defense resources to develop classified AI systems, while equipping personnel with targeted AI training to maintain U.S. competitiveness. To accelerate innovation, we recommend streamlining Federal procurement processes and fostering international collaborations to address global challenges in energy, computing, health, science and national security.



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HPE is committed to supporting the Federal government's efforts to ensure AI serves as a driver of economic growth, national security, and societal well-being. We welcome the opportunity to discuss our recommendations further and contribute to the development of the 2025 National AI R&D Strategic Plan.

Thank you for considering HPE's perspective. Please feel free to contact me with any questions.

Sincerely,

Mark Guiton  
Vice President, Government Programs & Business Development  
HPC & AI Infrastructure Solutions



# The White House

## White House 2025 National AI R&D Strategic Plan

Request for Information on the Development of a  
2025 National Artificial Intelligence (AI)  
Research and Development (R&D) Strategic Plan



HPE Response

May 29, 2025

Mark Guiton

Vice President, Government Programs & Business Development

HPC & AI Infrastructure Solutions



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## Introduction

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The Federal government's leadership in artificial intelligence (AI) research and development (R&D) is critical to ensuring the United States remains the global leader in AI innovation, national security, and economic competitiveness. While industry investments often focus on immediate commercial returns, Federal efforts must prioritize foundational, high-risk, and long-term research that addresses national priorities, advances scientific discovery, and promotes human progress.

This response outlines strategic priorities and actionable recommendations for a 2025 National AI R&D Strategic Plan, emphasizing the Federal government's unique role in fostering AI advancements that serve the public interest over the next three to five years and beyond.

### 1. Strategic AI R&D Priorities

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The Federal government possesses vast classified and unclassified datasets that can drive breakthroughs in domains like healthcare, energy, national security, and scientific discovery. Transforming these datasets into AI-ready resources will accelerate innovation and foster collaboration. For the future, data produced AI-ready from the start should be a priority.

#### **Recommended actions include:**

- Establishing an AI Data Initiative to create federated data infrastructures that integrate datasets across Federal agencies, ensuring quality, security, and accessibility.
- Developing tools for efficient data curation, metadata standardization, and synthetic data generation to overcome data scarcity and bias.
- Promoting open data-sharing frameworks to enhance collaboration while safeguarding privacy and security.

#### **1.1 Next-Generation AI Hardware, Software, and Architectures**

Scaling AI workloads requires advancements in computing infrastructure and software and hardware efficiency. Investments in energy-efficient systems and heterogeneous architectures will be pivotal to maintaining U.S. leadership in AI.

#### **Recommended actions include:**

- Expanding funding for high-performance computing (HPC) infrastructure optimized for AI workloads, including large-scale training and real-time analytics and inference workflows.
- Supporting public-private partnerships to co-develop innovative and novel hardware and software, such as modular systems, quantum accelerators, analog, optical, and neuromorphic technologies.
- Promoting open standards to ensure interoperability and reduce vendor lock-in across diverse hardware and software systems.

## 1.2 Responsible and Trustworthy AI

AI systems deployed in national security, critical infrastructure, and public services must be robust, explainable, and secure. Federal leadership in ethical AI principles will foster trust and accountability.

**Recommended actions include:**

- Investing in explainability tools and red-teaming practices to assess vulnerabilities and improve transparency.
- Developing auditing frameworks and trustworthy AI algorithms.
- Promoting robust AI models that prioritize adversarial resilience and data privacy.
- Developing methods to detect and counter AI-generated malicious content, nullify AI-agent attacks, and restrict AI abuse by criminals and terrorists.

## 2. Strengthening AI for National Security, Global Leadership, and Economic Competitiveness

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AI will transform national security operations, from predictive threat analysis and deterrence to autonomous systems and counter proliferation. Federal investment in secure AI models and infrastructure is essential to safeguarding critical defense capabilities.

**Recommended actions include:**

- Leveraging DOE national laboratories and DoD resources (e.g., High-Performance Computing Modernization Program) to develop classified AI models for national security applications.
- Expanding funding for AI-enabled defense systems, including autonomous platforms, cybersecurity tools, and simulation environments.
- Enhancing workforce readiness by equipping military and civilian personnel with AI expertise through targeted training programs.

## 3. Federal Leadership and Implementation Mechanisms

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Current Federal procurement cycles often lag behind the rapid pace of AI innovation. Restructuring these processes will enable faster deployment of cutting-edge technologies.

**Recommended actions include:**

- Implementing structured framework contracts to allow incremental technology upgrades and faster deployment of AI systems.
- Simplifying procurement processes to accelerate access to advanced AI infrastructure and capabilities.

Global challenges like severe weather prediction, energy security and production, cybersecurity, and pandemic preparedness require collaborative AI solutions. The Federal government must lead in fostering ethical AI standards and international partnerships.



**Recommended actions include:**

- Promoting ethical AI standards and data-sharing frameworks.
- Encouraging joint research programs with trusted international allies to drive breakthroughs in AI for science and security.

**Conclusion**

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The Federal government plays a vital role in ensuring AI serves as a driver of economic growth, national security, and societal well-being. By prioritizing strategic investments in data, computing, workforce development, and responsible AI practices, the United States can secure its position as the unrivaled global leader in AI innovation, national security and economic competitiveness. HPE welcomes the opportunity to discuss these recommendations further and contribute to the development of the 2025 National AI R&D Strategic Plan.



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