September 11, 2024

The Honorable Mike Johnson
Speaker of the House
United States House of Representatives
Washington, DC 20515

The Honorable Chuck Schumer
Majority Leader
United States Senate
Washington, DC 20515

The Honorable Mitch McConnell
Republican Leader
United States Senate
Washington, DC 20515

The Honorable Hakeem Jeffries
Democratic Leader
United States House of Representatives
Washington, DC 20515

Dear Speaker Johnson, Leader Schumer, Leader McConnell, and Leader Jeffries:

As six leading organizations representing more than 400,000 people in computing, information technology, science, and innovation across US industry, academia, and government, we urge Congress to appropriate the vital funding levels authorized in the CHIPS and Science Act of 2022 for the National Science Foundation (NSF), the Department of Energy's (DOE) Office of Science, the National Institute of Standards & Technology (NIST), and other critical technology and innovation-driven agencies.

For several years and across both parties, Congress has rightly prioritized U.S. leadership in the global future of critical technologies and industries. Investments in fundamental R&D across the federal government foster innovative breakthroughs, drive job growth, and ensure the country's national and economic security amidst growing global competition.

The U.S. is the current world leader in R&D of critical and emerging technologies because of our dynamic research ecosystem, a key component of which is the federal investment in fundamental research. We have seen time and time again, from the Internet to exascale computing to artificial intelligence, that breakthroughs supported by the federal research agencies pay huge dividends to the country and help launch new sectors of the economy. By one measure, the return on investment of non-defense government R&D is between 150 and 300 percent. All Americans should be proud of that record of accomplishment and the return on their investment.

But the nation's commitment to fundamental research, particularly in the computing and IT fields, has been slipping. Significant cuts to the budgets of NSF, NIST, and DOE in FY2024 will have a serious impact on the future of U.S. leadership in technological innovation. Fewer good ideas and new research visions will see investments, fewer graduate students will be produced, and the innovation economy driven by what the National Science Board has described as the "extraordinarily productive interplay between academia, government, and industry" will move forward more slowly – at a time when our global adversaries are increasing their investments. A nation that is striving to lead the world in artificial intelligence, quantum computing, high performance computing, and related fields cannot do that with cuts or flat funding at NSF, DOE, NIST, and the other research agencies.

Congress should fund these agencies at the highest amount possible in the Fiscal Year 2025 budget and look at opportunities for supplemental funding, such as in artificial intelligence legislation, to meet our emerging technology and computing research, workforce, and infrastructure needs. We are not alone in calling on the nation's leaders to prioritize the commitments made to the country's research efforts at NSF, DOE, NIST, and the other federal research agencies, at the levels authorized in the CHIPS and Science Act of 2022 – the National Science Board, the Science and Technology Action Committee, and chief technology officers from across industry have recently made similar calls. This is not a partisan issue; it must be an American priority. We cannot risk missing this moment and losing our hard-fought position as the world leader in scientific research to our competitors.

Association for the Advancement of Artificial Intelligence (AAAI) aaai.org

Association for Computing Machinery (ACM) acm.org

Computing Research Association (CRA) cra.org

Institute of Electrical and Electronics Engineers (IEEE-USA) ieeeusa.org

Society for Industrial and Applied Mathematics (SIAM) siam.org

USENIX – The Advanced Computing Systems Association usenix.org