



## NITRD News Brief

We are pleased to continue NITRD's News Brief that offers insight into the activities NITRD's member agencies are conducting to achieve the Nation's priorities through the lens of the public-facing news sources. These are divided into networking and information technology topics that have been identified as of great importance for improving Americans' daily lives.

For ease of access, under NITRD's logo, the title of each section is listed as a link to that section. The titles of the articles under the section's heading are links that provide immediate access to the news article listed. We hope you find this informative and helpful in your daily activities.

Do you know someone who would like to receive NITRD's weekly news brief? They can email NITRD's IT aficionados at [nco@nitrd.gov](mailto:nco@nitrd.gov) and voilà they will receive the news brief with the cool technology articles each week!

## NITRD News

### **FEDERAL CYBERSECURITY RESEARCH AND DEVELOPMENT STRATEGIC PLAN (2023)**

...This 2023 Federal Cybersecurity Research and Development Strategic Plan supersedes the 2019 Federal Cybersecurity Research and Development Strategic Plan. The Plan aims to coordinate and guide federally funded R&D in cybersecurity, including development of consensus-based standards and best practices. This Plan identifies five priority areas (human-centered cybersecurity, trustworthiness, cyber resilience, cybersecurity metrics, and cybersecurity research infrastructure) and three federal priority application scenarios (secure software and hardware supply chain, trustworthy artificial intelligence, and secure clean energy future) as the focusing structure for federal cybersecurity R&D activities and investments to benefit the nation.

NITRD - Jan 11, 2024

## Federal Agency Funding Opportunities

### **DOE Announces \$30 Million Funding for Next Generation Cybersecurity Tools to Protect Clean Energy Infrastructure**

...The U.S. Department of Energy (DOE) today announced an initiative to ensure cybersecurity is integrated into the development of clean energy solutions. The Office of Cybersecurity, Energy Security, and Emergency Response (CESER) will fund the research and development of new tools and technologies to detect and mitigate cyber threats to clean energy delivery infrastructure, including cloud infrastructure that underpins modernization. Topic areas include: \* Improving the ability to do forensic analysis of infected renewable energy field devices \* Identifying and mitigating cyber threats to inverter-based resources (IBR) \* Improving the communications security of Distributed Energy Resources (DERs) and Distributed Energy Resource Aggregations (DERA) \* Strengthening the cybersecurity of virtual power plants (VPP)...

Department of Energy - Jan 17, 2024

### **Biden-Harris Administration Announces Awards to Increase Access to Clean, Affordable Domestic Biofuels as Part of President Biden's Investing in America Agenda**

...The U.S. Department of Agriculture (USDA) Secretary Tom Vilsack announced that USDA is awarding \$19 million in grants to U.S. business owners to increase the availability of domestic biofuels in 22 states and give Americans cleaner, more affordable fuel options. The Department is making the awards through the Higher Blends Infrastructure Incentive Program (HBIIIP). USDA continues to accept applications for funding to expand access to domestic biofuels. These grants will support the infrastructure needed to reduce out-of-pocket costs for transportation fueling and distribution facilities to install and upgrade biofuel-related infrastructure such as pumps, dispensers and storage tanks.

There are three quarterly application windows left, and the program ends Sept. 30, 2024. The next application deadline is March 31, 2024...

USDA APHIS - Jan 11, 2024

## HPC

### **Researchers Visualize Energetic Ion Flow in Fusion Devices**

...Plasma physics and fusion research are moving from experimental facilities toward demonstration power plant designs. To make this move a success, researchers need accurate simulations and other tools that predict how power plant designs will perform. Recent measurements at the DIII-D National Fusion Facility provide the first direct observations of energetic ions moving through space and energy in a tokamak. Researchers combined these measurements with advanced computer models of electromagnetic waves and how they interact with energetic ions. A new diagnostic system, the Imaging Neutral Particle Analyzer (INPA), observes the flow of energetic ions in a tokamak. After being injected into the tokamak by neutral beams, energetic ions interact with electromagnetic plasma waves and flow in energy and position through the tokamak. Simulations reproduce the observed behavior, thereby demonstrating the accuracy of first-principles models in describing the underlying physics. The INPA measures the energy of neutral beam-injected energetic ions, which have energies greater than that of the background plasma, across time and spatial position from the hot plasma core to the cold plasma edge, where the ions may be lost. Coupled with advanced high-performance computing simulations that model both the spectrum of electromagnetic waves and the interactions with energetic ions, these experiments provide the most detailed understanding of the interplay between plasma waves and energetic ions in fusion plasmas...

Department of Energy - Jan 11, 2024

## Artificial Intelligence / Machine Learning

### **Readout of Justice Department's Interagency Convening on Advancing Equity in Artificial Intelligence**

...The Justice Department's Civil Rights Division convened a meeting yesterday with the heads of civil rights offices and senior officials from multiple federal agencies to discuss the critical intersection of artificial intelligence (AI) and civil rights. Assistant Attorney General Kristen Clarke detailed the division's comprehensive approach to address the potential impact of AI on civil rights through enforcement, education and outreach, interagency coordination and policy. She also noted the division's guidance explaining how algorithms and AI can lead to disability discrimination in hiring. Agency representatives explored ways to leverage shared resources to address discrimination or other adverse situations that may arise through the use of AI and other advanced technologies. All participants highlighted the importance of educating the public about how AI and similar systems can violate federal protections...

The United States Department of Justice - Jan 11, 2024

### **IRS Ramps Up New Initiatives - Including Machine Learning - Using Inflation Reduction Act Funding to Ensure Complex Partnerships, Large Corporations Pay Taxes Owed, Continues to Close Millionaire Tax Debt Cases**

...The Internal Revenue Service (IRS) has made continued progress in expanding enforcement efforts related to high-income individuals, large corporations, and complex partnerships as part of wider efforts to transform the agency using Inflation Reduction Act (IRA) resources. In 2021, the IRS launched the first stage of its Large Partnership Compliance (LPC) program with examinations of some of the largest and most complex partnership returns in the filing population. The IRS announced in September that it would expand this program to additional large partnerships. With the help of AI, the selection of these returns is the result of groundbreaking collaboration among experts in data science and tax enforcement, who have been working side-by-side to apply cutting-edge machine learning technology to identify potential compliance risk in the areas of partnership tax, general income tax and accounting, and international tax in a taxpayer segment that historically has been subject to limited examination coverage...  
U.S. Department of the Treasury - Jan 12, 2024

### **AI helps whittle down candidates for hydrogen carriers in liquid form from billions to about 40**

...In a computational study leveraging artificial intelligence (AI), scientists at the U.S. Department of Energy's (DOE) Argonne National Laboratory assessed 160 billion molecules with the goal to screen molecules for suitability as liquid carriers of hydrogen. Hydrogen in its pure form exists as a gas under normal conditions. For use as a fuel, one of the challenges is shipping this gas safely to refueling stations and storing it. The liquid compound form would essentially eliminate certain problems with pure hydrogen gas. The most visible form of a liquid hydrogen carrier compound is water and another form is organic molecules. "Assisted by AI, we are searching for organic liquid molecules that, through a low-cost chemical reaction with a catalyst, one could alternately add or release hydrogen for use as a fuel," said computational scientist Logan Ward. The team screened the candidate molecules based on four factors. The team's calculations necessitated access to supercomputers and also relied on Bebop, a computing cluster operated by the Laboratory Computing Resource Center at Argonne. This research was supported by Laboratory Directed Research and Development funding from Argonne...  
Argonne National Laboratory - Jan 10, 2024

## **Robotics / Autonomous Vehicles**

### **USDA-funded research indicated drone use substantially increasing in precision agriculture**

...In a new study, Tong Wang and her research team investigated farmers' viewpoints on the most influential factor behind adopting new technologies and practices: profitability. In this study, researchers highlighted eight widely adopted precision ag technologies, including auto-steering and guidance, automatic section control, satellite/aerial imagery, unmanned aerial vehicle/drone imagery, variable rate fertilizer application, variable rate seed and application, variable rate pesticide application and variable rate irrigation application. To understand farmers' viewpoints regarding profitability and adoption, the research team sent out surveys to 6,000 regional farmers in 2021. The most widely adopted precision ag technologies include auto-steering and guidance, which fit under the "georeferencing technology" category. This technology helps farmers navigate their fields and use resources more efficiently. Satellite imagery was the next most widely adopted technology. Drones and unmanned aerial vehicles fall under a similar category to satellite imagery; however, drones are much less prevalent, with an adoption rate at 26%. While 26% is low in comparison to other adoption rates, it is a substantial increase from previous research, indicating that drone usage is on the rise amongst farmers. Funding for this work was provided by a grant from the U.S. Department of Agriculture's National Resources Conservation Service....  
South Dakota State University - Jan 10, 2024

## **Quantum**

### **Atomic dance gives rise to a magnet: chiral phonons for transformative quantum effect**

...Rice University researchers in the lab of quantum materials scientist Hanyu Zhu were supported in part by the U.S. National Science Foundation through two research grants, including a CAREER award, and one of the authors is an NSF Graduate Research Fellow. Quantum materials hold the key to a future of lightning-fast, energy-efficient information systems. However, the problem with tapping their transformative potential is that, in solids, the vast number of atoms often drowns out the exotic quantum properties of electrons. When the atomic lattice in a rare-earth crystal becomes animated with a corkscrew-shaped vibration known as a chiral phonon, the crystal is transformed into a magnet. Exposing cerium fluoride to ultrafast pulses of light sends its atoms into a dance that momentarily enlists the spins of electrons, causing them to align with the atomic rotation. Zhu and the team members had to find a way to drive a lattice of atoms to move in a chiral fashion. This required both choosing the right material and creating light at the right frequency to send its atomic lattice aswirl...  
National Science Foundation - Jan 11, 2024

### **Emerging field of quantum computers advances at MSU through \$500K Department of Energy grant**

...A Mississippi State University research team is using more than half a million dollars from the U.S. Department of Energy nuclear physics program to study the emerging field of quantum computing. Quantum computing, a multidisciplinary field combining computer science, physics and mathematics, uses quantum mechanics to solve complex problems faster than classical computers and can create better models for how atoms and nuclei interact with one another, leading to a more precise understanding of molecular structure. The team will develop and test algorithms on currently available quantum computers to study three-body nuclear forces that will directly impact future research on nuclear structure and reactions over a wide range of atomic masses...

Mississippi State University - Jan 12, 2024

## **Cybersecurity / Privacy**

### **Journey into the Immersive Frontier: Preliminary NIST Research on Cybersecurity and Privacy Standards for Immersive Technologies**

...Immersive technologies have the potential to transform the way we interact with each other and the world. With these exciting potential benefits may come new vulnerabilities for cybersecurity and privacy. In cybersecurity, digital technologies that bridge into new domains via novel interfaces, protocols, etc. can increase attack surface. These new technologies also have a distinctly human element and so will bring a host of human factors considerations related to cybersecurity. To function, these technologies rely on spatial and body-based data about individuals, which can create significant privacy risks. This includes integration of behavioral data about emotional/psychological states with biometric data used beyond identity verification. Immersive technologies can also create limitations for the application of traditional privacy principles. In the coming months, NIST will research the current state of immersive technologies, gathering insights and feedback on cybersecurity and privacy considerations from our stakeholder community. This work will include soliciting stakeholder feedback through a call for input and comments, holding a workshop, and issuing a final report outlining findings and recommendations for next steps...

National Institute of Standards and Technology - Jan 11, 2024

### **DOD Releases First Defense Industrial Strategy**

...The 59-page National Defense Industrial Strategy lays out long-term priorities that will guide DOD actions and resource prioritization with the aim of creating a modern, resilient defense industrial ecosystem designed to deter U.S. adversaries and meet the production demands posed by evolving threats. The defense industrial base must continue to meet present demands, while at the same time remaining capable of adapting to future conflicts. The strategy focuses on four key areas critical to building a modernized defense industrial ecosystem over the next three to five years. Those areas include resilient supply chains, workforce readiness flexible acquisition and economic deterrence. The strategy calls for several actions to achieve resilient supply chains, including establishing public-private partnerships, risk-sharing mechanisms and technology. These are sharing structures aimed at incentivizing industry to improve resilience and invest in extra capacity. The strategy also seeks to develop flexible acquisition strategies by emphasizing interoperability with key partners and paying consideration to exportability during the system design phase. The NDIS also calls for the prioritization of commercial, off-the-shelf acquisition where applicable to drive innovation and expand the defense supplier base. An unclassified overview of the implementation plan is slated for publication in February with the full classified version to follow in March...

U.S. Department of Defense - Jan 12, 2024

### **LSU Cybersecurity Team Awarded \$1M from U.S. Department of Homeland Security to Help Fight Terrorism, Online Crime**

...Two separate research projects led by LSU cybersecurity experts Golden Richard and Aisha Ali-Gombe have each been awarded half a million dollars in defense funding through the Department of Homeland Security. LSU's cybersecurity team is one of the leading developers of memory forensics in the world. The power of memory forensics lies in its ability to document short-term memory on computers and digital devices, including cellphones. Memory forensics experts can extract evidence in ways that seem almost supernatural compared to traditional digital forensics, which involves the discovery of permanently stored data and long-term memory on hard drives. Effective memory forensics requires deep technical expertise, which creates an accessibility and scalability problem for most agencies that often lack easy-to-use tools in combination with enough workforce. Golden Richard's project will help solve this challenge. His research will integrate the Structured Threat Information Expression, or STIX, language—one of the most common ways investigators describe, document, and communicate cyber incidents—with the open-source Volatility Framework, the most widely used memory forensics toolset. The second LSU project that's been newly funded by the Department of Homeland Security aims to recover code and reconstruct processes on Android devices, which have at least a 70 percent global market share. The framework will be able to reconstruct the execution path of a mobile application that clearly shows the most recent user activity, thus providing investigators with actionable evidence they can use in court.

Louisiana State University - Jan 11, 2024

# 5G, Wireless Spectrum, Networking & Communications

## **Biden-Harris Administration invests \$34 million for NOAA fire weather research through Investing in America agenda**

...The Department of Commerce and NOAA announced the award of more than \$34 million to reduce the risk to Americans' lives and property from wildfires. This funding will be provided over five years to six research universities in NOAA's Cooperative Institute system to support wildfire preparedness and response. The overarching goal is to improve the understanding and modeling of wildfire behavior and integrate that into weather forecasting and wildfire warnings. Knowledge and tools generated from this funding will help NOAA build and deploy new observing systems that detect and monitor wildfires and their impacts, as well as to advance high-resolution models to predict fires, emissions and air quality. The funding will also establish a new NOAA Fire Weather Testbed that will allow scientists and forecasters to evaluate experimental products and speed their transition to operations. To address these needs, NOAA has developed a comprehensive approach to its wildfire research: \* Developing early detection and forecast tools, including satellite-based fire detection systems that send alerts as soon as a fire starts, \* Accelerating the development of tools that improve delivery of fire-related information and services, making the information easier to access by more people...

National Oceanic and Atmospheric Administration - Jan 10, 2024

## **Biden-Harris Administration Awards Nearly \$80M For Wireless Innovation**

...The Department of Commerce's National Telecommunications and Information Administration (NTIA) awarded nearly \$80 million in the third round of grants from the Public Wireless Supply Chain Innovation Fund's first Notice of Funding Opportunity. This round includes the first awards in the Testing & Evaluation (T&E) category, designed to expand industry-accepted T&E activities, making testing more accessible to the entire wireless ecosystem. The \$1.5 billion Wireless Innovation Fund supports the development of open and interoperable wireless networks. By investing in open, interoperable networks, NTIA is laying the foundation for a stronger, more secure and more resilient telecommunications supply chain. The transition to open networks will enable the U.S. and its global partners to lead the next generation of wireless innovation. The funding totals \$79,652,945 and was awarded to six projects across five states...

National Telecommunications and Information Administration - Jan 10, 2024

## **Chasing the light: Sandia study finds new clues about warming in the Arctic**

...Researchers at Sandia National Laboratories are pulling back the curtain on the reduction of sunlight reflectivity, or albedo, which is supercharging the Arctic's warming to gain a better understanding of the reduction in reflectivity in the Arctic. The scientists have tapped into data from GPS satellite radiometers, capturing the sunlight bouncing off the Arctic. This data dive could be the key to cracking the Arctic amplification code. The study represents one of the first comprehensive examinations of year-to-year effects in the Arctic region. Sandia's data analysis revealed a 20% to 35% decrease in total reflectivity over the Arctic summer. According to microwave sea-ice extent measurements collected during the same period, one-third of this loss of reflectivity is attributed to fully melted ice. The key discovery here is just how much the weathered ice - remaining sea ice, which can be thinner and may contain melt ponds - is reducing reflectivity. The GPS satellites are expected to continue providing data through 2040...

Sandia National Laboratories - Jan 15, 2024

## **NASA/NSF-funded astronomers discover Earth-sized planet in 'our solar backyard'**

...A team of astronomers have discovered a planet closer and younger than any other Earth-sized world yet identified. It's a remarkably hot world whose proximity to our own planet and to a star like our sun mark it as a unique opportunity to study how planets evolve. The planet is known as HD 63433d and it's the third planet found in orbit around a star called HD 63433. Based on its orbit, the astronomers are relatively certain HD 63433d is tidally locked, which means one side is perpetually facing its star. The star is about 73 light years away from our own sun and part of the group of stars moving together that make up the constellation Ursa Major, which includes the Big Dipper. The astronomers used data from NASA's Transiting Exoplanet Survey Satellite to identify two mini-Neptune-sized planets orbiting HD 63433. TESS took four more looks at the star, compiling enough data for the researchers to detect HD 63433d crossing between the star and the satellite. This research was supported in part by grants from NASA and the National Science Foundation...

University of Wisconsin - Madison News - Jan 12, 2024

## Microelectronics

### **Measurement Technique Sheds New Light on Semiconductors for Solar Fuels**

...Scientists are advancing the use of semiconductors to convert sunlight into renewable energy. In solar cells, semiconductors convert sunlight into electricity. When brought into direct contact with water, semiconductors can instead use sunlight to convert water into hydrogen. Researchers have developed a new technique to measure this photovoltage quantitatively. Measuring the photovoltage is essential to finding the best conditions to make fuel from sunlight and water. Scientists conducted contactless photovoltage measurements on bismuth vanadate, a semiconductor for water oxidation, and on copper gallium selenide, a semiconductor for hydrogen generation from water. The researchers found that the photovoltage depends not only on the semiconductor, but also on the color of the light (the photon energy), the light intensity, and the chemical properties of the water solution...

Department of Energy - Jan 10, 2024

## Climate Change / Green Energy & IT

### **Snow-Capped Mountains at Risk from Climate Change**

...The average global temperature has already increased by 1.9 degrees F since pre-industrial times. With that shift, scientists have seen more than a 20 percent decline in the amount of water stored in snowpack in the Western U.S. compared to the 1950s. That's the same as the entire volume of Lake Mead. Researchers from seven different institutions supported by the Department of Energy's Office of Science are using powerful computer models to calculate how much climate change will affect snowpack in the future. They've found that 4.5 degrees F (2.5 degrees C) of warming above pre-industrial levels is likely to cause many mountainous areas to experience low-to-no snow years more than 10 years in a row. During these seasons, there is 10 percent less runoff each year than there would be otherwise. This 10 percent is essential for water supplies when precipitation is low. At the high emissions scenario, people in the southern midlatitudes areas could have consistent low-to-no snow seasons as early as 2046. The prediction that the mountains in South America would be hit harder surprised the researchers. The mountains in North America would feel major effects as well. Scientists use simulations called Earth systems models that include many different parts of the climate system that shape the global environment. The models are so complex that the scientists used supercomputers at the National Energy Research Scientific Computing Center...

Department of Energy - Jan 10, 2024

### **Biden-Harris Administration Announces \$623 Million in Grants to Continue Building Out Electric Vehicle Charging Network**

...The Biden-Harris Administration today announced \$623 million in grants to help build out an electric vehicle (EV) charging network across the U.S. and ensure more drivers can charge their electric vehicles. The grants being announced today are made possible by the Bipartisan Infrastructure Law's \$2.5 billion Charging and Fueling Infrastructure (CFI) Discretionary Grant Program, a competitive funding program, and will fund 47 EV charging and alternative-fueling infrastructure projects in 22 states and Puerto Rico. The CFI program complements the \$5 billion National Electric Vehicle Infrastructure (NEVI) formula program to build the "backbone" of high-speed EV chargers along our nation's highways. To provide a consistent charging experience for users that ensures a convenient, affordable and reliable national charging network, EV chargers constructed with CFI funds must adhere to the same minimum standards established for NEVI-funded chargers – including requirements that CFI-funded chargers are Made in America as well as installed and maintained in accordance with strong workforce standards...

Department of Transportation - Jan 11, 2024

## Digital Health

### **Ensuring Health IT API Accessibility for Seamless Data Exchange**

...It's been just over a year since certified Health IT developers aligned their Health IT Modules with the requirements outlined in the Cures Act Final Rule. As part of this transformative update, developers of certified application programming interface (API) technology completed certification to 45 CFR 170.315(g)(10) Standardized API for patient and population services. But certification isn't a one-time event; it's an ongoing commitment. There are essential obligations to support ongoing conformance to Certification Program requirements. This includes making "service base URLs" in a patient access context publicly available through the ONC Certified Health IT Product List (CHPL). To ensure service base URL lists continue to be available and accessible to the public, two monitoring tools are available: Lantern and the CHPL Service Base URL List Uptime report. Lantern gathers information from FHIR Capability Statements returned by these endpoints and provides visualizations to show FHIR API and patient data availability. The Service Base URL List Uptime report provides information on the public availability of the service base URL provided by the developer of any product listing certified to § 170.315(g)(10) listed on CHPL...

Health IT - Jan 16, 2024

### **NIH-funded researchers train a computational model for a noninvasive technique that reveals how cells' gene expression changes over time**

...MIT researchers developed a new method, which is based on a noninvasive imaging technique known as Raman spectroscopy, doesn't harm cells and can be performed repeatedly. Using this technique, the researchers showed that they could monitor embryonic stem cells as they differentiated into several other cell types over several days. This technique could enable studies of long-term cellular processes such as cancer progression or embryonic development, and one day might be used for diagnostics for cancer and other diseases. Raman spectroscopy is a noninvasive technique that reveals the chemical composition of tissues or cells by shining near-infrared or visible light on them. However, on its own it is not sensitive enough to detect signals as small as changes in the levels of individual RNA molecules. To measure RNA levels, scientists typically use a technique called single-cell RNA sequencing, which can reveal the genes that are active within different types of cells in a tissue sample. The MIT team sought to combine the advantages of single-cell RNA sequencing and Raman spectroscopy by training a computational model to translate Raman signals into RNA expression states. Using this approach, the researchers were able to observe the transitions that occurred in individual cells as they differentiated from embryonic stem cells into more mature cell types. They also showed that they could track the genomic changes that occur as mouse fibroblasts are reprogrammed into induced pluripotent stem cells, over a two-week period. The research was funded by the U.S. National Institutes of Health...

MIT News - Jan 10, 2024

### **Researchers receive a \$1.2 million NIH grant to stop viral infections**

...A four-year \$1.2 million grant funded by the National Institutes of Health is aimed at helping Washington State University researchers stop viruses before they cause infections in their hosts. The interdisciplinary research project uses biology, machine learning, and multiscale modeling to study virus-cell interactions at the moment a virus merges with a cell to initiate an infection – a process known as virus fusion. The physics-based machine learning method and multiscale model will be developed to simulate cell-virus interactions and expedite the research. "This is not data-driven machine learning as used by most scientists and engineers. Rather, our novel machine learning algorithm captures important biological phenomena from fundamental physics and chemistry," said Prashanta Dutta. The experimentally validated computational models developed by the team may provide critical, new insights and guidance to new experiments...

Washington State University - Jan 12, 2024

## **STEM / Workforce & IT**

### **Tuskegee University receives major grant from NIH project to support Ethical Artificial Intelligence/Machine Learning Initiative**

...Tuskegee University College of Arts & Sciences received a \$500,000 grant from the AIM AHEAD Consortium, a National Institutes of Health (NIH) project. This funding will support the "Promoting Health Equity through Ethical Artificial Intelligence/Machine Learning (AI/ML): A Collaborative Initiative for Data Governance and Access in Healthcare" project, a groundbreaking initiative aimed at strengthening data governance and promoting health equity in the healthcare sector, focusing on minority populations. The project will unfold in Phase I, which includes team-building, needs assessment, and planning activities to establish a robust partnership between Tuskegee University and the University of Texas Health Houston...

Tuskegee University - Jan 12, 2024

## **STEM / Workforce Resources & Opportunities**

### **R&D WORKFORCE TRAINING: FEDERAL AGENCIES' STEM INTERNSHIPS, SCHOLARSHIPS, AND TRAINING OPPORTUNITIES**

...Increasing the availability of STEM opportunities is a priority in the Biden Harris Administration. To help facilitate this, the team at NITRD developed a STEM Portal that allows anyone to search for internships and other training opportunities at Federal agencies. The NITRD STEM PORTAL is a searchable database that includes a description, link, and contact information for each program listing. Government sponsored internships and training programs are competitive, but there are many Federal opportunities and the NITRD STEM Portal is here to help.

The Networking and Information Technology Research and Development (NITRD) Program - Jan 1, 2024

### **FEDERAL HIGH END COMPUTING INFORMATION PORTAL**

...Networking and Information Technology Research and Development (NITRD) has a portal that provides information about U.S. Federal government high performance computing activities, including available computing resources; relevant publications; fellowship and training opportunities; and technology transfer, licensing, and industry

engagement opportunities. The High End Computing (HEC) Interagency Working Group (IWG) agencies provide the information contained in this portal. HEC IWG agencies are involved in various Federal activities in the HEC area including R&D and providing infrastructure and application. Take a look at it!  
Networking and Information Technology Research and Development - Dec 19, 2023

## Upcoming Conferences / Workshops / Webinars

### **Discover DSO Day (D3)**

...The Defense Advanced Research Projects Agency (DARPA) Defense Sciences Office (DSO) is sponsoring a Discover DSO Day (D3) event to familiarize participants with DSO's mission, promote understanding of DSO funding opportunities, and facilitate discussions with DSO program managers. The two-day event will be held in person February 21- 22, 2024, in San Francisco, California. To identify and explore ideas that could potentially revolutionize the state of the art, DARPA strongly encourages participation by non-traditional proposers. Advance registration is required for all individuals attending. Registration closes: Wednesday, February 7, 2024, at 5:00 p.m. ET, or when capacity is reached, whichever comes first. DSO anticipates a second Discover DSO Day event to be held in Arlington, Virginia, in the fall of 2024...  
DARPA - Jan 15, 2024

**Note:** Any mention in the text of commercial, non-profit, academic partners, or their products, or references is for information only; it does not imply endorsement or recommendation by any U.S. Government agency.

## Innovation Through NITRD Coordination

Networking and Information Technology Research and Development - National Coordination Office, Washington, DC USA

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