

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 and voilà they will receive the news brief with the cool technology articles each week!

Upcoming Conferences / Workshops / Webinars

NITRD & NNCO Co-Host the CHIPS R&D Standards Summit Sept 26-27

... The CHIPS R&D Standards Summit will bring together thought leaders within the semiconductor industry and academia to shape the future of semiconductor and microelectronics standards and drive innovation. The summit will have sessions that facilitate consensus building on the top priority areas within industry, ways to accelerate strategic efforts across these priority areas, and cover concepts from incubators and accelerators as practiced in the technology sector that might be adapted for use in standards development and enabling a diverse, standards-capable workforce. Participants will explore ways to improve the agility and efficiency of the standards process, ensuring its continued growth in the rapidly evolving semiconductor industry. The scope of the Summit includes the full range of standards types, including best practices, de facto, and formal standards, while spanning the semiconductor and microelectronics sector, from materials and design to fabrication, packaging, and testing and certification. Co-hosted by the CHIPS Research and Development Office the Networking and Information Technology Research and Development Program (NITRD), the National Nanotechnology Coordination Office (NNCO), and others. The CHIPS Research and Development Office's Standards Summit will be held as an in-person and virtual event on September 26 and 27, 2023, from 8:30 a.m. to 5:30 p.m. Eastern Time...

National Institute of Standards and Technology - Aug 9, 2023

Federal Agency Funding Opportunities

Biden-Harris Administration Announces \$15.5 Billion to Support a Strong and Just Transition to Electric Vehicles, Retooling Existing Plants, and Rehiring Existing Workers

...As part of President Biden's Investing in America agenda, the U.S. Department of Energy (DOE) announced a \$15.5 billion package of funding and loans primarily focused on retooling existing factories for the transition to electric vehicles. The Department also announced a Notice of Intent to make available \$3.5 billion in funding to expand domestic manufacturing of batteries for electric vehicles and the nation's grid, as well for battery materials and components currently imported from other countries... Department of Energy - Aug 31, 2023

Artificial Intelligence / Machine Learning

Department of Energy Announces \$29 Million for Research on Machine Learning, Artificial Intelligence, and Data Resources for Fusion Energy Sciences

...The U.S. Department of Energy announced \$29 million in funding for seven team awards for research in machine learning, artificial intelligence, and data resources for fusion energy sciences. Nineteen institutions will apply advanced and autonomous algorithms to address high-priority research opportunities in fusion and plasma sciences. The teams include fusion and plasma researchers working in partnership with data and computational scientists through the establishment of multi-institutional, interdisciplinary collaborations. The recipients will pursue research in science discovery, diagnostic data analysis, model extraction and reduction, plasma control, analysis of extreme-scale simulation data, and data-enhanced prediction...

Department of Energy - Aug 31, 2023

DOD Will Deploy Al-Enabled Detection System to Monitor D.C. Airspace

...An artificial intelligence-powered airspace monitoring system is set to be installed to enhance protection of the nation's capital with the potential to scale across other Defense Department and U.S. government installations and systems. The upgraded visual recognition, identification and warning system delivers a tenfold increase in performance capability compared to the 9/11-era system it replaces. It's a cutting-edge surveillance, identification and tracking system that monitors and defends the controlled airspace around Washington, D.C. The new system leverages "market advancements in machine learning and augmented reality features in surveillance cameras that assist air battle managers with their ability to identify flying objects within NCR airspace. The production effort focuses on upgrading the cameras and eye-safe lasers used for tracking and visually warning aircraft in violation of the special flight rules within the region. The auto-tracking capabilities of the system are applicable to full-motion video feeds, irrespective of the domain, opening the door to augment remotely piloted aircraft video feed tracking capabilities. The software from this prototype has the potential to run on any edge device or cloud-provided, full-motion video feed...

Hanscom Air Force Base - Aug 31, 2023

DOE funds fast-tracking fusion energy's arrival with AI and accessibility

...As the impacts of climate change continue to grow, so does interest in fusion's potential as a clean energy source. As part of their strategy to accelerate fusion energy's arrival and reach carbon neutrality by 2050, the U.S. Department of Energy (DoE) has announced new funding for a project led by researchers at MIT's Plasma Science and Fusion Center (PSFC) and four collaborating institutions. The newly funded three-year collaboration will pilot the integration of fusion data into a system that can be read by AI-powered tools. The project aims to encourage diverse participation in fusion and data science, both in academia and the workforce, through outreach programs led by the group's co-investigators, of whom four out of five are women. The project's proposed data platform addresses technical barriers by being FAIR — Findable, Interoperable, Accessible, Reusable — and by adhering to UNESCO's Open Science (OS) recommendations to improve the transparency and inclusivity of science. The platform's databases will be built using MDSplusML, an upgraded version of the MDSplus open-source software developed by PSFC researchers in the 1980s to catalogue the results of Alcator C-Mod's experiments. Today, nearly 40 fusion research institutes use MDSplus to store and provide external access to their fusion data...

DOE funds research to explore if artificial intelligence can power the future of fusion?

...Researchers from the University of Rochester and Hewlett Packard Enterprise believe artificial intelligence can help scientists take the next step toward creating fusion energy sources. The US Department of Energy is providing a team of fusion physicists and computer scientists nearly \$3 million to explore how machine learning and data science can

help predict, design, and improve laser-fusion implosions. Scientists have been using lasers to try to generate fusion energy through a process called inertial confinement fusion, but have generated less energy than simulations predicted. There is not a clear path to the high-energy gains required for inertial fusion energy, however now a wealth of experimental data can systematically correct the simulations and guide real-time adjustments to experiments with machine learning. The team will use the OMEGA experimental database as training data as well as the simulation databases from the LLE radiation hydrodynamic codes. Ultimately, they hope the machine learning models they develop will help them design higher performing implosions and better understand the complexity of the underlying nonlinear physics of fusion... University of Rochester School of Nursing - Sep 5, 2023

Robotics / Autonomous Vehicles

First autonomous flight advances AI proving ground forward

...The Osprey MK III, an unmanned aerial system, made its first autonomous test flight July 20, which was the start and demonstration of a testbed that allows autonomy and AI software developers to quickly flight test their algorithms with ADAx on Eglin's range. That mission falls under Autonomy Prime Environment for Experimentation or APEX, a subset of ADAx. APEX's autonomy watchdog feature was the subject of these initial tests. The onboard autonomy was purposely programmed to fly the MK III outside the user-defined airspace boundary constraints. Each time the aircraft was about to violate the airspace boundary the watchdog feature would disengage the autonomy and send the aircraft to a safe remediation point. This feature is part of the unit's Test of Autonomy in Complex Environments system or TACE. ADAx is a relatively new venture here. Its mission is to operationalize autonomy and artificial intelligence through experimentation and testing... Edwards Air Force Base - Aug 31, 2023

NAVY funds project Automating aircraft ship landings at rough seas

...Landing a helicopter on a ship's flight deck is one of the most challenging and complex maneuvers demanded of a Navy pilot. Unlike a runway, the landing area of any ship is small and a constantly moving target that sways with the sea. Solutions have been proposed to automate ship landing. Still, none have effectively held up to the added challenges helicopter pilots face when nature delivers gusty winds. The U.S. Navy is pursuing a solution capable of adapting to these difficult conditions and is turning to Texas A&M University researchers to develop the next generation of fully autonomous vertical takeoff and landing (VTOL) aircraft. By combining an optimal aircraft design with a robust machine learning algorithm, the researchers are proposing a new approach to automated aircraft ship landing at rough seas. Texas A&M researchers are automating the landing process by mimicking a pilot's behavior while tracking the horizon bar. They have shown success in using reinforcement learning to track and safely land an unmanned aerial system (UAS) in various conditions, including moderate horizontal winds, foggy visibility and changes in course and speed. The Navy is funding this three-year project to develop a robust solution to automated VTOL aircraft ship landing...

Texas A&M University College of Engineering - Aug 31, 2023

Cybersecurity / Privacy

NIST's Planned Updates to Implementing the HIPAA Security Rule: A Cybersecurity Resource Guide

...Healthcare organizations face many challenges from cybersecurity threats. Healthcare organizations also must comply with regulatory requirements, such as the Health Insurance Portability and Accountability Act of 1996 (HIPAA) Security Rule, which focuses on safeguarding the electronic protected health information (ePHI) held or maintained by HIPAA covered entities. Draft NIST Special Publication (SP) 800-66 Revision 2 provides practical guidance and resources that can be used by regulated entities of all sizes to safeguard ePHI. The following changes are planned for the final version of NIST SP 800-66 Revision 2: * We will include more specific resources for small, regulated entities. * Respondents asked for clarification on the terms 'risk analysis' and 'risk assessment.' * We will make Appendix E - Security Rule Standards and Implementation Specifications Crosswalk more useful. * Reorganize the resources within each topic area to progress from more foundational resources to more complex resources... National Institute of Standards and Technology - Sep 5, 2023

SECURE platform enhances security enterprise capabilities

...A new tool aims to streamline operations, reduce data isolation and redundancy, and optimize resource usage across the security enterprise. The Security Enterprise Communication and User Reporting Environment consolidates security-related information and data from multiple systems and users into a single platform, enabling security professionals to attain an enterprise risk picture more efficiently and stay ahead of adversaries. SECURE is the first Total Air Force digital security enterprise system. Built by the Air Force Research Laboratory and championed by AFMC, the platform includes a suite of tools for security process reporting, with the ability to build customized workflows and analytic reports. A key aspect of SECURE is the ability for users at all levels to input data into the system, which rapidly integrates information to generate an enterprise sight picture. Two additional SECURE modules will begin pilot testing in early 2024. A Security Classification Management module will enable accurate and consistent classification levels and support classification management across the life cycle. The Security Incident Management module will help report and manage security incidents... Air Force Link - Sep 5, 2023

DOE Releases Resources to Advance Cybersecurity by Design for the U.S. Energy Sector

...The Department of Energy (DOE) Office of Cybersecurity, Energy Security, and Emergency Response (CESER) released two resources to support the implementation of several strategic recommendations from the National Cyber-Informed Engineering (CIE) Strategy. This strategy, developed by the Securing Energy Infrastructure Executive Task Force at the direction of Congress, provided recommended actions to enable the energy sector to lead the nation in incorporating CIE by proactively building cybersecurity into the design of infrastructure systems. The National CIE Strategy provides a critical framework for the delivery of a more secure and resilient energy sector in the United States. * The CIE Resource Library consists of tools, case studies, and lessons which will continue to support designers, manufacturers, and asset owners and operators in applying CIE principles. * The CIE Implementation Guide outlines questions engineering teams should consider during each phase of a system's lifecycle to employ CIE principles. The guide is geared toward supporting engineers who design, build, operate, and maintain the physical infrastructure. These materials will be shared at a CIE Practitioner's Workshop, hosted by Auburn University on September 6...

Department of Energy - Sep 6, 2023

Information Integrity Research & Development

Using AI, NSF-funded researcher Nishant Vishwamitra is developing a better solution to combat online hate

...Nishant Vishwamitra, an assistant professor in the UTSA Department of Information Systems and Cyber Security has been awarded a two-year, \$175,000 grant from the National Science Foundation's Computer and Information Science and Engineering Research Initiation Initiative to combat cybersecurity threats such as cyberbullying, cyber harassment and online offensiveness by creating more effective content moderation systems for social media platforms. Vishwamitra and his collaborators will develop machine learning techniques that can be trained using only a few samples of hate speech, called few-shot learning. Vishwamitra's research focuses on how AI can address cybersecurity issues like hate speech and misinformation and how technology can exacerbate certain cybersecurity and social-cybersecurity issues. Additionally, Vishwamitra is working on projects that address the large-scale hate speech and mis/dis-information caused by large language models such as ChatGPT...

The University of Texas at San Antonio - Sep 5, 2023

5G, Wireless Spectrum, Networking & Communications

Building for a new age of open exploration

...As part of the Biden-Harris Administration's work to ensure continued leadership in space, the United States embraced these trends in the first-ever National Cislunar Science and Technology Strategy released last November. This strategy addresses how the United States will support responsible, peaceful, and sustainable exploration and use of cislunar space, including the moon. New communications and navigation infrastructure in cislunar space will enable enduring human and robotic activities at the moon, enable a cooperative and sustainable ecosystem in cislunar space, and lower barriers to entry and foster new commercial space activities. The U.S. government is coordinating new initiatives on lunar gravity and geology maps, lunar geodetic systems, and timing standards that can work across the Earth-moon system, so that we can open new discussions with nations worldwide to advance safe and sustainable operations throughout cislunar space. U.S. government initiatives will support development of "space situational awareness" (SSA) capabilities for cislunar space, including from commercial SSA sources. This information will help satellite operators... The White House - Aug 31, 2023

2023 5G Challenge Update: Three Contestant Pairs Pass Stage Three End to End Interoperability Testing

...National Telecommunications and Information Administration is working to catalyze the development of an open 5G wireless ecosystem to help the private sector move away from a highly consolidated marketplace with few vendors and technologies. Their lab at the Institute of Telecommunications Sciences is partnering with the Department of Defense on the 2023 5G Challenge, which tests whether an open 5G ecosystem can work in real world scenarios. The challenge tests whether components of an open radio access network (Open RAN) can work together to ultimately create an end-to-end 5G network. There are four stages of the challenge. During Stage Three, a CU+DU contestant and an RU contestant work together to establish end-to-end (E2E) interoperability and work to ultimately create a 5G network. During Stage Four, two pairs from Stage Three work together to demonstrate mobility...

National Telecommunications and Information Administration - Sep 2, 2023

NTIA Promotes 5G Supplier Diversity At Home and Abroad

...At NTIA, we believe that open and interoperable networks are the future of wireless technologies, including 5G and its successors. Such networks will increase the reliability of our telecom supply chain, drive competition and provide our allies with additional choices for trustworthy equipment. NTIA is administering a \$1.5 billion Public Wireless Supply Chain Innovation Fund to promote the development and deployment of open and interoperable equipment in America. NTIA participates in a range of international engagements to promote 5G supplier diversity and raise awareness of Open RAN. NTIA's involvement in events demonstrates commitment to both public-private dialogue and 5G cooperation with partner governments in Europe, Asia, and other regions...

National Telecommunications and Information Administration - Sep 1, 2023

As part of Advanced Wireless Research (PAWR) program NSF/USDA funded 'Broadband Prairie' rural wireless project that moves to public phase of researching, testing

...A wireless tower at Iowa State University's Ag Engineering/Agronomy Farm west of Ames is loaded with hardware sending radio waves across the countryside, creating wireless internet connections for rural users. The \$16 million ARA Wireless Living Lab for Smart and Connected Rural Communities is moving to a public testing phase. The ARA project launched in June 2021, when the Platforms for Advanced Wireless Research (PAWR) program, which is supported by the National Science Foundation (NSF) and a consortium of 30 wireless companies and associations, announced \$16 million in support for Agriculture and Rural Communities (ARA). Over five years, the NSF is providing \$7 million, the U.S. Department of Agriculture's National Institute of Food and Agriculture is providing \$1 million and PAWR industry partners are providing \$8 million of cash and in-kind support. As a wireless testbed, researchers write and talk of ARA's technical details...

Iowa State University News Service - Aug 31, 2023

Climate Change / Green Energy & IT

From Clouds to Penguins: How Atmospheric Field Research Helps Us Understand Our World

...In the Macquarie Island Cloud and Radiation Experiment (MICRE), scientists shared their field site with Gentoo penguins that lived on the island, as it's an ideal location to study atmospheric processes that help drive global climate. Before this campaign, computer simulations of the global climate didn't represent clouds in this region well. The Southern Ocean tends to have more low-altitude, supercool clouds than oceans in the Northern Hemisphere. But satellite data about the area's clouds and aerosols (small particles in the atmosphere) had a large amount of uncertainty. These gaps affected computer models' ability to predict the regional and global climate. To improve these models, scientists needed to collect data in the field. The Department of Energy shipped equipment to this remote island, including instruments to measure solar radiation. Other instruments measured precipitation and the amount and type of aerosols in the atmosphere. Climate modelers have been finding ways to integrate the data into and reduce uncertainties in climate models...

Department of Energy - Aug 31, 2023

Digital Health

Inspired by Baldrige Concepts, Digital Health Transformations Possible through "Most Wired" Analytics

...For 20 years, the Most Wired Survey, which assesses the digital achievements of health care entities, was managed through a successful partnership with the American Hospital Association and College of Healthcare Information Management Executives (CHIME). But, about five years ago, CHIME decided to rebuild the survey inspired by core concepts of the Baldrige Excellence Framework with the key concept of helping organizations measure their performance. The survey now aims to deliver even more data insights to health care entities through the survey tool and an online analytics portal. The updated Digital Health Most Wired Survey increased from about 2,000 respondents five years ago, to just under 39,000 facilities represented last year and more than 40,000 expected this year. The greatest area of challenge continues to be cybersecurity. Cyberattacks are on the rise and health care organizations are rising to the challenge by adopting additional frameworks, sharing information, and implementing new security measures. What we continue to see is that the larger, more complex organizations do better overall in cybersecurity than smaller organizations without the same level of resources. We call that the 'Cyberdivide.' ...

National Institute of Standards and Technology - Sep 5, 2023

Popular AFRL invention supports joint military needs with mobile medical documentation

... A mobile medical documentation tool developed by Air Force Research Laboratory, or AFRL, researchers, has been selected as the joint integrated electronic health record for point-of-injury and en route care by the Joint Operational Medicine Information Systems. The Battlefield Assisted Trauma Distributed Observation Kit, or BATDOK, increased tenfold among military agencies. As of 2023, BATDOK, a smartphone application that replaces pen and paper records, has been provided for evaluation and testing to all the Department of Defense services. AFRL developed a robust operational medicine tool that has been widely acknowledged by medical commanders as the future of information technology in combat point-of-injury medicine. BATDOK captures medical documentation to include injury types and the treatment provided to the warfighter. To document their observations and actions, medical providers simply touch buttons on a smartphone. The team continues to develop the tool by incorporating additional requirements and even provides an updated version of the BATDOK application every two weeks...

Air Force Materiel Command - Aug 31, 2023

Navigational technology used in self-driving cars aids brain surgery visualization

...A team of researchers at the Imaging for Surgery, Therapy, and Radiology (I-STAR) Labs at Johns Hopkins University is working on a less invasive solution that doesn't require additional equipment or expose patients to the extra radiation or long scan times typically associated with live imaging. They have partnered with medical device company Medtronic and the National Institutes of Health to develop a real-time guidance system that uses an endoscope. This study demonstrates the superiority of this realtime 3D navigation method over current visualization techniques. The team's surgical guidance method builds on an advanced computer vision technique called simultaneous localization and mapping, or SLAM, which has also been used for navigation in self-driving cars. After calibrating an endoscopic video feed, the team's SLAM algorithm tracks important visual details in each frame and uses those details to determine where the endoscope camera is and how it's positioned. The algorithm then transforms those details into a 3D model of the object. This model is then overlaid with the real-world video feed to visualize targeted structures on-screen in real time... Hub - Johns Hopkins University - Aug 31, 2023

NIH-Funded Researcher Utilizes 'Mini-brain' to Trace Link between Concussion and Alzheimer's Disease

... How much time elapses between a blow to the head and the start of damage associated with Alzheimer's disease? A device that makes it possible to track the effects of concussive force on a functioning cluster of brain cells suggests the answer is in hours. The "traumatic brain injury (TBI) on a chip" being developed at Purdue University opens a window into a cause and effect that announces itself with the passage of decades but is exceedingly difficult to trace back to its origins. The TBI on a chip device can also be used to test possible therapeutics, including drugs known to reduce acrolein levels. The device, custom-fabricated at the Center for Paralvsis Research, uses a pendulum to deliver a specific g-force to a small chamber housing a cluster of a quarter million neurons supported by a bed of nutrients. A microelectronic array embedded in the chamber measures the electrical activity of the neurons, which will sustain functional firing patterns for several weeks, while a clear viewing port allows microscopic observation of the neurons. The study was supported by the National Institutes of Health...

Purdue University - Sep 1, 2023

Al institute for speech, language disorders to help children

... The National AI Institute for Exceptional Education - a \$20 million, UB-led initiative — funded by the U.S. National Science Foundation and Institute of Education Sciences will create artificial intelligence systems that ensure children with speech and language disorders receive timely, effective assistance. The work addresses the nationwide shortage of speech-language pathologists. The institute's research team comprised of dozens of investigators that specialize in artificial intelligence, natural language processing, social robotics, diversity and inclusivity, and other fields. The researchers have begun lab researching and building prototypes of two AI systems: the AI Screener, which will identify potential speech and language impairments by listening to and observing children in classrooms; and the AI Orchestrator, which acts as a virtual teaching assistant to SLPs by providing students with ability-based interventions...

University at Buffalo - Sep 6, 2023

Other IT Related

Agents of Contrast, Software Runaway Hit, Our Early Universe: A Sample of Stories on NIST Social Media

...NIST researcher Tammy Lucas is building tools to help astronomers and cosmologists look back in time to the earliest moments of our universe — and see what we can learn about our world now. One of Tammy's projects will help researchers study the leftover radiation from the early universe, aka the cosmic microwave background. The detector she's working on will be used in the skies over the Chilean desert. Tammy is also working on a satellite mission - currently slated to launch in 2035 - that will study supermassive black holes and attempt to answer how black holes are created and how they influence their surroundings. NIST has a research tool that helps test software more effectively than ever before — including the software that helps keeps cars and airplanes operating safely. It helps ensure that the entire range of situations a software system might encounter, including very rare combinations of parameters, will be included in the tests, NIST researchers Sam Oberdick and Gary Zabow are working on microscale and nanoscale magnetic devices that can be used with magnetic resonance imaging (MRI) to enhance images and highlight biological activity. Their low-field MRIs could be portable, cheaper alternatives to the bulky machines using high magnetic field strengths in hospitals... National Institute of Standards and Technology - Sep 6, 2023

The Department of Defense Launches the All-domain Anomaly Resolution Office Website

...The Department of Defense launched a website on the All-domain Anomaly Resolution Office to provide the public with information concerning AARO and its efforts to understand and resolve unidentified anomalous phenomena. This website will provide information, including photos and videos, on resolved UAP cases as they are declassified and approved for public release. AARO will launch a secure reporting tool on the website to enable current and former U.S. government employees, service members, or contractors with direct knowledge of U.S. government programs or activities to contact AARO directly to make a report... U.S. Department of Defense - Aug 31, 2023

STEM / Workforce & IT

FACT SHEET: Ahead of Labor Day, Biden-Harris Administration Announces New Actions to Empower Workers— Building on the President's Historic Support for Workers and Unions

...Support for unions is at its highest level in more than half a century, inflation-adjusted income is up 3.5% since the President took office, and the largest wage gains over the last two years have gone to the lowest-paid workers. The unemployment rate is near a 50-year low, and a greater share of working-age people have a job today than at any other time in more than two decades. America is seeing a historic level of public and private investment in manufacturing and new industries. The Department of Energy opened applications for the \$2 billion Domestic Manufacturing Conversion Grants program. The program will provide funding for auto manufacturers transitioning from internal combustion engine vehicles and components to electric vehicles and components. Strengthening electric vehicle (EV) battery supply chains and supporting high-quality jobs, including for auto workers. The Department of Energy is releasing a second-round Notice of Intent for \$3.5 billion for the Battery Manufacturing grant programs under the Bipartisan Infrastructure Law. The Department of Labor released a proposed rule to increase the overtime salary threshold from under \$36,000 per year to roughly \$55,000 per year. Under this proposal, more salaried employees making less than \$55,000 per year and working more than 40 hours a week would receive at least one and one-half times their regular rates of pay for the overtime hours they work. The Department of Labor relaunched the Worker Organizing Resource and Knowledge (WORK) Center. The WORK Center is the federal government's premiere online resource center providing information about labor unions and their importance to workers and communities... The White House - Sep 1, 2023

SULI Program Helps Computing Sciences Area Summer Interns Break New Ground

...Andy Nonaka, staff scientist and group lead of the Center for Computational Sciences and Engineering (CCSE) at Lawrence Berkeley National Laboratory, hosted three of six Science Undergraduate Laboratory Internship (SULI) interns in Berkeley Lab's Computing Sciences Area this summer. The DOE SULI program is designed to encourage undergraduate students from two- and four-year colleges, post-baccalaureates, and graduate students to pursue science, technology, engineering, and mathematics (STEM) careers by providing research internships at one of 17 DOE national laboratories. Aside from their project mentors, WD&E recruits guest speakers and tour guides from across the Lab to interact with the interns...

Berkeley Lab - Aug 31, 2023

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 - Jun 21, 2023

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; HEC relevant publications; fellowship and training opportunities; and technology transfer, licensing, and industry engagement opportunities. The HEC IWG (Interagency Working Group on High End Computing) 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 - Jun 14, 2023

National Preparedness Month: Class Is in Session

...S&T is celebrating National Preparedness Month this year by offering a "back to school" toolkit. The Advanced Open/Obstructed Test Proctor Course for Evaluating Drone Capabilities and Remote Pilot Proficiency uses a suite of standardized test methods developed in collaboration with the National Institute of Standards and Technology. It consists of 24 hours of classroom and hands-on flight instruction to "train the trainer," so newly certified proctors can take what they've learned back to their home agencies and subsequently certify their drone operators. The First Aid for Severe Trauma (FAST) education program helps mitigate potential tragedy by empowering high school students with the training needed to treat bleeding emergencies until an ambulance can arrive. The course is offered at no cost thanks to S&T sponsorship. The Person-Borne Explosives Detection (PBED) Canine Training Guideline is an interactive, HTML-based tool for handlers and trainers of explosive detection canines to upgrade their capabilities. Traditional explosive detection dogs are trained to seek out threats hidden within stationary objects, but PBED canines must also detect and track explosives in motion and concealed on a person. S&T's Technologically Speaking podcast gives a deep dive into the science of homeland security in a matter of minutes so tune in for season three this fall... Homeland Security - Sep 5, 2023

Federal Register: Request for Information (RFI)

NIST Seeks Input on Implementation of National Standards Strategy for Critical and Emerging Technology

...The U.S. Department of Commerce's National Institute of Standards and Technology (NIST) has published a Request for Information seeking public input on how best to implement the U.S. Government National Standards Strategy for Critical and Emerging Technology. NIST is seeking information that will support the development of the most effective implementation plan for the USG NSSCET. The agency is seeking public input on the best ways to partner with relevant stakeholders, remove barriers to participation in international standards development, and enhance the U.S. government's support for an international standards system that is open, consensus-based, and led by the private sector. The RFI poses several questions in each of four broad categories: investment, participation, workforce, and integrity and inclusivity. Responses are due by 5 p.m. Eastern time on Nov. 6, 2023...

National Institute of Standards and Technology - Sep 7, 2023

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

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