



LOOKING  
BACK ON  
2022 &  
FORWARD TO  
2023

NITRD  
NEWS

HPC

ARTIFICIAL  
INTELLIGENCE /  
MACHINE  
LEARNING

ROBOTICS /  
AUTONOMOUS  
VEHICLES

CYBERSECURITY  
/ PRIVACY

5G, WIRELESS  
SPECTRUM,  
NETWORKING &  
COMMUNICATIONS

DIGITAL  
HEALTH

OTHER IT  
RELATED

STEM /  
WORKFORCE  
& IT

STEM /  
WORKFORCE  
RESOURCES &  
OPPORTUNITIES

## 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!

## Looking Back on 2022 & Forward to 2023

### 2022 in Review

...The past year undoubtedly brought its share of daunting challenges yet, 2022 also yielded remarkable progress for the American people. It was a year of historic accomplishments. President Biden signed the landmark Inflation Reduction Act, making unprecedented investments in clean energy, and also signed into law the CHIPS and Science Act to boost American manufacturing, strengthen supply chains, and create jobs. As we close out a remarkably productive year, here are 12 Biden-Harris Administration achievements you might have missed over the past 12 months...

The White House - Dec 29, 2022

### NIST's Researchers Look Ahead to High-Tech Trends in 2023 and Beyond

...As 2022 draws to a close, we asked NIST's senior researchers to look ahead to the new year and beyond. They research topics that impact all of us, from indoor air quality to cybersecurity. We asked our fellows, "How will the technology you are working on today affect society in the years to come?" Here are their thoughts and predictions. ... \*Artificial intelligence (AI) tools that can write and talk like people are getting a lot of attention right now. NIST is working to help mitigate these risks with trustworthy AI. \*Because of the important role forensic science plays in our society, we are assessing forensic science's past to strengthen its future. We are working on a series of important studies of forensic science, including digital investigation techniques. \*NIST recently published a comprehensive set of design principles that can be used to develop more trustworthy and secure systems that can withstand modern cyberthreats. These systems can help protect every aspect of society from the electric grid to medical devices. NIST's set of security engineering design principles can be used to "build it right" from the start, helping to keep our devices and vital technology safe and operational...

National Institute of Standards and Technology - Dec 27, 2022

### NSF 2022: Transformational developments that benefit society

...In 2022, the U.S. National Science Foundation powered a diverse range of discoveries and innovations that will benefit humanity. The "CHIPS and Science Act" codified NSF's first new directorate in more than 30 years: Technology, Innovation and Partnerships, or TIP, to nurture public and private partnerships across the nation to accelerate innovation. Through TIP: \* NSF and Intel launched a unique program to support research and workforce development in advance semiconductor design and manufacturing. \* NSF announced the creation of five new I-Corps Hubs. These hubs increase the operational backbone of the National Innovation Network \* NSF announced a new investment of over \$37 million in Resilient and Intelligent Next-Generation

Systems, a public-private partnership focused on the development of intelligent, resilient and reliable NextG networks. \* NSF's Convergence Accelerator is tackling ocean-wide challenges related to the blue economy through a \$30 million investment. ... The "CHIPS and Science Act" also outlines investments that help scale up pre-K-12 STEM education innovations and authorizes new funding for STEM education. NSF also continued to make advancements across all scientific and research disciplines. NSF grantee researchers at the Massachusetts Institute of Technology developed an approach that increases computing speed by 12% by enabling computer memory hardware to be shared without compromising security...  
National Science Foundation - Dec 28, 2022

### **U.S. Department of Energy Top Accomplishments in 2022**

...Department of Energy Top Accomplishments in 2022: \* Fusion Energy Breakthrough: In December, scientists at the National Ignition Facility at DOE's Lawrence Livermore National Laboratory achieved fusion ignition, creating more energy from fusion reactions than the energy used to start the process. \* The CHIPS and Science Act authorizes \$67 billion for DOE, including a \$50 billion authorization for our Office of Science to enable cutting-edge research and development in clean energy and advanced computing and manufacturing. \* Accelerating Clean Energy Breakthroughs: DOE added three new Energy Earthshots to our initiative to dramatically cut costs for lynchpin technologies over the next decade that will help us achieve 100% clean power and net-zero carbon pollution...  
Department of Energy - Dec 23, 2022

### **An Astronomical and Historic 2022 – What We Did This Year @ NASA**

...In 2022, we launched our mega Moon rocket for the first time – sending the uncrewed Orion spacecraft around the Moon, we kicked off a new era in astronomy with record-breaking new imagery from the Webb Space Telescope, we moved an asteroid in humanity's first ever planetary defense demonstration and much more. Here's a look back at those and other things we did, this year @NASA!  
National Aeronautics and Space Administration - Dec 23, 2022

### **Best Space Station Science Imagery of 2022**

...Spacecraft carried crew from around the world to and from the space station, where they participated in and supported hundreds of scientific investigations and technology demonstrations this past year. From deploying CubeSats to studying fluid dynamics in space, the orbiting lab expanded its legacy of science and discovery for the benefit of humanity. Look back at some of the best photos of breakthrough science the crew members conducted in 2022...  
National Aeronautics and Space Administration - Dec 29, 2022

### **A year in review: Argonne's breakthroughs in 2022**

...2022 was a busy year at the U.S. Department of Energy's (DOE) Argonne National Laboratory, full of game-changing innovations, powerful collaborations, and the construction of new facilities. Here is a recap of just some of Argonne's scientific accomplishments this year. \* Designed flexible, wearable electronics for health sensing: The device relies on neuromorphic computing, an artificial intelligence (AI) technology that mimics how the brain works by training on past data sets and learning from experience. Its advantages include compatibility with stretchable material, lower energy consumption and faster speed than other types of AI. \* Argonne, AT&T and the Federal Emergency Management Agency (FEMA) have launched the Climate Risk and Resilience Portal (ClimRR), which helps ensure access to cutting-edge science for climate projections to help improve America's preparedness for future climate extremes. Climate projections from ClimRR can be overlaid with community and infrastructure information sourced from Argonne's Resilience Analysis and Planning Tool (RAPT). \* A team of researchers from Argonne and Purdue University has developed "neuromorphic" materials — electronic components that function similarly to the human brain. These materials can "learn" new information and reconfigure their circuitry in a brain-like way. Combining this ability with the power of AI, computers could carry out complex tasks faster and more accurately, while expending much less energy. One example is in interpreting complex medical images. \* Researchers at Argonne, UChicago and Washington University in St. Louis created a new qubit platform by freezing neon gas into a solid at very low temperatures, spraying electrons from a light bulb's filament onto the solid, and trapping a single electron there. This relatively simple system shows great promise to be developed into ideal building blocks for future quantum computers...  
Argonne National Laboratory - Dec 22, 2022

## **NITRD News**

### **CAREER OPPORTUNITIES: Program Manager, National Strategic Computing Reserve Pilot Program Office: DEADLINE JAN 15th**

...The Federal Government is creating a National Strategic Computing Reserve (NSCR) that can be called up in times of urgent national needs to address emergencies from pandemics to earthquakes to other natural or man-made disasters. The NSCR is envisioned as a coalition of resource providers (of compute, software, and data) and technical experts spanning government, academia, industry, nonprofits/foundations, civil society, and communities of practice supported by appropriate coordination structures and mechanisms that can be mobilized quickly to provide critical cyberinfrastructure capabilities and services in times of urgent need. The Networking and Information Technology Research and Development (NITRD) Program is seeking candidates interested in serving as the Program Manager for the NSCR Pilot Program Office. The NSCR Pilot Program Office will (1) develop a plan, to include the structures, policies, and processes for an NSCR Program Office, and (2) prototype the implementation and operation of these structures, policies, and processes. Submit your resume by January 15, 2023.  
The Networking and Information Technology Research and Development (NITRD) Program - Dec 14, 2022

# HPC

## **NSF gave Duolingo its wings!**

...The number of people learning a second language using Duolingo is more than in the entire U.S. public school system. At the core of Duolingo is artificial intelligence research, guiding each learner through individualized learning experiences - originally supported by NSF. NSF supported Duolingo CEO Luis von Ahn from graduate school through his early career research as a professor at Carnegie Mellon University. Luis von Ahn's research centered on human computation systems, a method of improving computational models by collecting data as a byproduct of someone doing something else. The original goal of the NSF-driven research for Duolingo was to harness the knowledge of bilingual people to supplement translation software on internet sites. Funding continued during Duolingo's early development and growth, totaling over \$1.5 million from 2009 to 2016. Not only was Duolingo created out of this period of research, but the team also developed new computational algorithms to better understand how connections are formed and how information self-organizes on social networks. The work also demonstrated that education is a good incentive for people to engage with problems that computers cannot solve alone...

National Science Foundation - Dec 22, 2022

## **UNM scientists use high-performance computing to examine magma accumulation beneath Yellowstone Caldera**

...With the help of new tomographic images of shear wave speed of the Yellowstone magmatic system, scientists are gaining new insights into what's going on beneath the Yellowstone Caldera, sometimes referred to as the Yellowstone Supervolcano. Ross Maguire was awarded a National Science Foundation (NSF) Postdoctoral Fellowship for the study that examined the magmatic system at Yellowstone. He used a modern seismic wave imaging technique called full waveform inversion of ambient noise correlations which revealed shear wave speed reductions greater than 30 percent associated with Yellowstone's silicic magma reservoir. There were a few different periods when there were a lot of seismometers around Yellowstone, beyond the normal monitoring network. Ross kind of stitched together all of those data and made a conventional tomography model, which then served as the starting model for iterative full waveform inversion using high-performance computing systems. The technique eliminates many of the simplifying assumptions about wave propagation that limit other methods. At each iteration, 3D simulations of the seismic wavefield are used to determine which parts of the structural models need to be updated so that the predictions better match the observational seismograms...

UNM Newsroom - Dec 22, 2022

# Artificial Intelligence / Machine Learning

## **NSF/NIH-funded research provides insight: This is your brain. This is your brain on code**

...Functional magnetic resonance imaging (fMRI), which measures changes in blood flow throughout the brain, has been used over the past couple of decades for a variety of applications, including "functional anatomy" — a way of determining which brain areas are switched on when a person carries out a particular task. One pursuit that's received little attention is computer programming — both the chore of writing code and the equally confounding task of trying to understand a piece of already-written code.

Researchers used fMRI to monitor the brains of programmers as they "comprehended" small pieces, or snippets, of code. The code comprehension did not consistently activate the language system, brain regions that handle language processing, instead the multiple demand network — a brain system that is linked to general reasoning and supports domains like mathematical and logical thinking — was strongly active. Based on the patterns of brain activity that were observed, the group could tell whether someone was evaluating a piece of code involving a loop or a branch. The researchers could also tell whether the code related to words or mathematical symbols, and whether someone was reading actual code or merely a written description of that code. The MIT researchers found that for dynamic analysis, information is encoded much better in the multiple demand network than it is in the language processing center. That finding was one clue in their quest to see how code comprehension is distributed throughout the brain — which parts are involved and which ones assume a bigger role in certain aspects of that task. This project was funded by grants from the MIT-IBM Watson AI Lab, MIT Quest for Intelligence, National Science Foundation, National Institutes of Health...

MIT News - Dec 21, 2022

# Robotics / Autonomous Vehicles

## **NASA's Perseverance Rover Deposits First Sample on Mars Surface**

...A titanium tube containing a rock sample is resting on the Red Planet's surface after being placed there on Dec. 21 by NASA's Perseverance Mars rover. Over the next two months, the rover will deposit a total of 10 tubes at the location, called "Three Forks," building humanity's first sample depot on another planet. The depot marks a historic early step in the Mars Sample Return campaign. Perseverance has been taking duplicate samples from rock targets the mission selects. The rover currently has the other 17 samples (including one atmospheric sample) taken so far in its belly. Based on the architecture of the Mars Sample Return campaign, the rover would deliver samples to a future robotic lander. The lander would, in turn, use a robotic arm to place the samples in a containment capsule aboard a small rocket that would blast off to Mars orbit, where another spacecraft would capture

the sample container and return it safely to Earth. The depot will serve as a backup if Perseverance can't deliver its samples. In that case, a pair of Sample Recovery Helicopters would be called upon to finish the job...  
National Aeronautics and Space Administration - Dec 21, 2022

### **NASA Retires InSight Mars Lander Mission After Years of Science**

...NASA's InSight mission has ended after more than four years of collecting unique science on Mars. Mission controllers at Jet Propulsion Laboratory (JPL) were unable to contact the lander after two consecutive attempts, leading them to conclude the spacecraft's solar-powered batteries have run out of energy – a state engineers refer to as “dead bus.” NASA had previously decided to declare the mission over if the lander missed two communication attempts. The agency will continue to listen for a signal from the lander, just in case, but hearing from it at this point is considered unlikely. The last time InSight communicated with Earth was Dec. 15. The seismometer was the last science instrument that remained powered on as dust accumulating on the lander's solar panels gradually reduced its energy, a process that began before NASA extended the mission earlier this year. All Mars missions face challenges, and InSight was no different. The lander featured a self-hammering spike – nicknamed “the mole” – that was intended to dig 16 feet (5 meters) down, trailing a sensor-laden tether that would measure heat within the planet, enabling scientists to calculate how much energy was left over from Mars' formation. Designed for the loose, sandy soil seen on other missions, the mole could not gain traction in the unexpectedly clumpy soil around InSight. The instrument, which was provided by the German Aerospace Center (DLR), eventually buried its 16-inch (40-centimeter) probe just slightly below the surface, collecting valuable data on the physical and thermal properties of the Martian soil along the way...  
National Aeronautics and Space Administration - Dec 21, 2022

## **Cybersecurity / Privacy**

### **DoDIIS 2022 Shines Light on Need for Collaboration**

...Professionals from across the Department of Defense and the Intelligence Community gathered to collaborate and share insights during this year's annual Department of Defense Intelligence Information Systems Conference. On the first day, Principal Deputy Director of National Intelligence Dr. Stacey Dixon delivered her keynote remarks and emphasized the importance of data interoperability for effective collaboration. Also giving a keynote address at the conference was IC Chief Information Officer Dr. Adele Merriitt, who spoke about the need for cybersecurity improvements and the work her office is doing to lead the “Improving Cybersecurity for the Intelligence Community Information Environment Implementation Plan 2.0,” or I-Plan...  
Office of the Director of National Intelligence - Dec 23, 2022

### **International experts put Argonne's cybersecurity defense software through the wringer at NATO's Cyber Coalition 2022**

...Six teams of cyberdefenders at Cyber Coalition 2022, the flagship cyberdefense event hosted by North Atlantic Treaty Organization (NATO) in Estonia in November, had a special mission. Their task? Set up computer-based systems and power grids at an imaginary military base and keep them running during a cyberattack. If hackers interfered with system operations or the power went down for more than 10 minutes, critical systems could go offline with grave consequences. The faux mission hid a few trip wires. None of the teams knew the scenario or networks prior to the experiment, and all the defending teams — operating remotely from various nations — were simultaneously cyberattacking each other. Three of the six teams had access to a novel Autonomous Intelligence Cyberdefense Agent (AICA) prototype developed by the U.S. Department of Energy's (DOE) Argonne National Laboratory that helped them understand the attacks and the attackers. Argonne's AICA prototype is an advanced, award-winning computer defense software. It uses artificial intelligence to collect data, learn about its environment and advise users on next steps. Argonne recently received funding to further develop its groundbreaking potential through the Commercialization Accelerator Program of U.S Department of Homeland Security's Science and Technology Directorate...  
Argonne National Laboratory - Dec 21, 2022

## **5G, Wireless Spectrum, Networking & Communications**

### **Fielding the Radios of the Future with MARCORSYSCOM**

...In order to maintain fleet lethality, Marine Corps Systems Command is working on fielding a state-of-the-art multichannel handheld radio system that mitigates against peer adversary threats and enables Marines to quickly add new waveforms and enhanced capabilities to address evolving requirements. The Multichannel radio family of systems will provide the [Fleet Marine Force] with an enhanced capability that increases resiliency and survivability through network interoperability during missions involving both ground and vehicular-based forces. These new radios will provide the fleet with many new options in configuring communications and network pathways while leveraging newer, more secure waveforms. Fielding a tactical radio that allows data to be transmitted helps advance JADC2 because the framework itself requires connectivity at all levels. In order to fully realize this vision across the Department of Defense, our team has worked tirelessly to develop a radio that closes communications links between the Corps and the joint forces; prevents communications from being compromised; ensures resiliency; and operates on the right waveforms...  
Marines - Dec 22, 2022

### **Flood prediction breakthrough by NASA, Pacific Disaster Center**

...NASA's Earth Science Applied Sciences Disasters program area has partnered with the University of Hawaii's Pacific Disaster Center (PDC) and other leading scientific institutions to release a significant breakthrough in flood prediction technology to help save lives and aid early responses to rising flood impacts worldwide. The "Model of Models" (MoM) tool combines data from open-source hydrological models with Earth-observing satellite data to generate global flood-risk severity updates several times per day. This is the first time that comprehensive global flood early warnings have been available at the sub-watershed level. NASA partnered to integrate MoM into the PDC's global multi-hazard alerting platform DisasterAWARE. When MoM detects a high likelihood of flooding in a region, DisasterAWARE sends a flood early warning notification to impacted communities, letting them quickly take the steps necessary to save lives and livelihoods. PDC's DisasterAWARE platform serves tens of thousands of disaster management and humanitarian assistance professionals worldwide and reaches millions more through PDC's free public app Disaster Alert...

The Magazine of the University of Hawaii - Malamalama - Dec 22, 2022

## Digital Health

### **USDA Developing New Tools to Identify COVID Virus in Wild and Domestic Animals**

...USDA's Animal and Plant Health Inspection Service (APHIS) is currently implementing a \$300 million provision in the American Rescue Plan Act to monitor susceptible animals for the COVID virus. Through this initiative, APHIS is partnering with USDA's Agricultural Research Service (ARS) on five research projects to improve understanding of the virus and to help USDA accomplish its goal of building an early warning system to potentially prevent or limit the next zoonotic disease outbreak or global pandemic. The new tools and data generated from this research will provide the insights necessary to accelerate our understanding of the COVID virus and help us build a more resilient national capacity to address future disease threats...

USDA APHIS - Dec 21, 2022

## Other IT Related

### **Moon Water Imager Integrated With NASA's Lunar Trailblazer**

...Lunar Trailblazer, NASA's mission to understand lunar water and the Moon's water cycle led by Caltech in Pasadena, California, is one step closer to launching next year. Earlier this month, the agency's Jet Propulsion Laboratory in Southern California delivered a key science instrument to Lockheed Martin Space in Colorado, and the teams integrated it with the small satellite, or SmallSat. The instrument, called the High-resolution Volatiles and Minerals Moon Mapper (HVM3), is one of two on Lunar Trailblazer. HVM3 will detect and map water on the Moon's surface to determine its abundance, location, form, and how it changes over time. This information will provide data on the lunar water cycle and help inform future human missions as to where supplies of water may be found and extracted as a resource...

National Aeronautics and Space Administration - Dec 22, 2022

### **Assembly Begins on NASA's Next Tool to Study Exoplanets**

...Scientists have discovered more than 5,000 exoplanets, or planets outside our solar system. As technologies for studying these worlds continue to advance, researchers may someday be able to search for signs of life on exoplanets that are similar in size, composition, and temperature to Earth. But to do that they'll need new tools, like those being tested on the Coronagraph Instrument on NASA's Nancy Grace Roman Space Telescope. The science instrument will block the light from each distant star it observes so that scientists can better see the planets around the star, and it will demonstrate technologies needed to eventually study potentially habitable planets with future missions. Roughly the size and shape of a baby grand piano, the Coronagraph Instrument is composed of two main sections that will stack on top of each another: the optical bench and the instrument electronics pallet. The more delicate of the two is the optical bench, which contains 64 elements, such as mirrors and filters, designed to remove as much starlight as possible without suppressing the light from planets. This approach to finding and studying exoplanets is called direct imaging, and it is expected to be the best way to study the atmospheres and surface features of rocky worlds similar to Earth. The pallet, or bottom layer, houses the electronics that receive instructions from the Roman spacecraft and return the Coronagraph Instrument's scientific data. The electronics also control the mechanical components on the optical bench as well as the instrument heaters...

National Aeronautics and Space Administration - Dec 21, 2022

### **NASA Sets Table for Safe Air Taxi Flights**

...Tabletop exercises allow researchers to explore options and test scenarios in fields from military strategy and cybersecurity to disaster response planning. Now, NASA is using tabletop exercises to test how electric air taxis will fit safely into the national airspace – allowing passengers to one day hop across town or to a neighboring city by using new highways in the sky. To successfully map out this new air transportation system, NASA partnered with industry, academia, and other government agencies in a series of 10 tabletop exercises led by the agency's Advanced Air Mobility (AAM) National Campaign team. Conducted throughout 2022, these expert-led discussions examined potentially unforeseen technical, operational, and regulatory gaps and defined the best use of combined resources to address them. NASA's AAM mission envisions a revolutionary new air transportation system, and the National Campaign team leads research on the autonomy, infrastructure, and airspace planning that will allow an AAM ecosystem to materialize...

National Aeronautics and Space Administration - Dec 29, 2022

# STEM / Workforce & IT

## **Eight Ways Students Can Dive Into NASA STEM in 2023**

...NASA had a stellar year in 2022, with the spectacular Artemis I mission paving the way for future crewed flights to the Moon, dazzling images beamed back to Earth from the new James Webb Space Telescope, and more. As the calendar turns to 2023, NASA is launching into a new era of human spaceflight. Looking for ways to bring the excitement of space exploration into your classroom or to learners at home? Here are some fun and engaging resources to get you started! ...  
National Aeronautics and Space Administration - Dec 29, 2022

## **New NSF program seeks to engage minority serving institutions in artificial intelligence research**

...The U.S. National Science Foundation — in collaboration with the U.S. Department of Homeland Security, Science and Technology Directorate; U.S. Department of Agriculture, National Institute of Food and Agriculture; National Institute of Standards and Technology and U.S. Department of Defense, Office of the Under Secretary of Defense for Research and Engineering — has established the Expanding AI Innovation through Capacity Building and Partnerships program. ExpandAI aims to significantly broaden the participation of minority serving institutions in artificial intelligence research, education and workforce development through capacity development projects and partnerships within the NSF-led National AI Research Institutes ecosystem. "In close collaboration with our federal partners and with the AI Institutes program, NSF is launching ExpandAI in order to enable an even broader community of researchers to advance the Nation's AI capacity in scientific power and workforce." said Margaret Martonosi, NSF assistant director for Computer and Information Science and Engineering. "We hope to see a more diverse, more inclusive participation of talented innovators from across our nation, driving AI research and innovation that continues to build our country's AI leading capabilities and workforce development." ...  
National Science Foundation - Dec 28, 2022

## **University Students Test Futuristic Flight Hardware in NASA Facility**

...The scene inside a NASA test facility sometimes looks a lot like the set of a science fiction movie. That's certainly the case with a 1 megawatt electric machine with an integrated power electronics system university students are now testing with NASA support. This university project is one part of NASA's strategy under ULI to tap the research power of universities, engage their students, and help research one potential approach in reducing aircraft emissions as part of the United States' and international community's goal to achieve net zero carbon emissions by 2050...  
National Aeronautics and Space Administration - Dec 22, 2022

## **U.S. Space Force Debuts Immersive New Redesign of Recruiting Website**

...The Space Force has launched an expanded interactive redesign of its recruiting website as the newest military branch marks its third anniversary. Originally launched in December 2021, SpaceForce.com is where future Guardians from both military and civilian backgrounds can learn more about the mission, history and capabilities of the Space Force, the careers available in fields as varied as space operations, intelligence, engineering and tech, and most importantly, policies and procedures on how to join. New to SpaceForce.com are video interviews with those serving in the Space Force from both military and civilian backgrounds, sharing their perspectives and personal experiences on life as a Guardian, common misconceptions about the newest branch, and what it's like to collaborate with the commercial space industry, government agencies and its allied partners. Unique to the Space Force is a more even division of labor and responsibilities between active-duty Guardians and their civilian counterparts. SpaceForce.com introduces a gamified approach for potential careers for both audiences. Prospective recruits interested in service both in and out of uniform can identify potential career paths through self-discovery tools based on their skills and strengths and learn what service in the Space Force could look like for them...  
Air Education and Training Command - Dec 21, 2022

## **Oregon State University receives \$4.8M from NSF to address national cybersecurity workforce shortage**

...Oregon State University has received \$4.8 million from the National Science Foundation to help the United States close a big gap between the number of cybersecurity job openings and the number of qualified applicants for those positions. The grant, part of the NSF's CyberCorps: Scholarship for Service program, will fund scholarships to cybersecurity students and also support CyberClinic, a new College of Engineering program that involves students providing cybersecurity services to organizations across the Pacific Northwest. The grant will cover scholarships for up to 29 total students, both graduate and undergraduate. The program emphasizes the recruitment, retention and placement of underrepresented and underserved groups in cybersecurity including women, first-generation college students and low-income students...  
Oregon State University - Dec 27, 2022

# 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 - Dec 29, 2022

## **Innovation Through NITRD Coordination**

Networking and Information Technology Research and Development

National Coordination Office, Washington, DC USA

To unsubscribe from this newsletter please reply to [news-brief@nitrd.gov](mailto:news-brief@nitrd.gov) with the subject line "Unsubscribe"