

Hyperlink to: [Federal Programs & Initiatives](#) | [Non-Federal Programs & Initiatives](#)

Federal Programs & Initiatives

FEDERAL PROGRAM/INITIATIVE	DESCRIPTION	HOST ORGANIZATION	LINK
Advanced Technological Education (ATE) Centers	With an emphasis on two-year colleges, the Advanced Technological Education (ATE) program focuses on the education of technicians for the high-technology fields. The program involves partnerships between academic institutions and industry to promote improvement in the education of science and engineering technicians at the undergraduate and secondary school levels. The ATE program supports curriculum development; professional development of college faculty and secondary school teachers; career pathways; and other activities.	National Science Foundation	https://atecenters.org/
Advancing Informal STEM Learning (AISL)	The Advancing Informal STEM Learning (AISL) program seeks to advance new approaches to and evidence based understanding of the design and development of STEM learning opportunities for the public in informal environments; provide multiple pathways for broadening access to and engagement in STEM learning experiences; advance innovative research on and assessment of STEM learning in informal environments; and engage the public of all ages in learning STEM in informal environments.	National Science Foundation	https://www.nsf.gov/pubs/2017/nsf17573/nsf17573.pdf

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Air Force Life Cycle Management Center (AFLCMC)	<p>Wright-Patterson Air Force Base has been a leader in military aviation development from the time of airplane inventors Wilber and Orville Wright to today's aerospace age. With over 27,000 employees, including military, civilian and contractors, Wright-Patterson is the largest single site employer in the state of Ohio with an economic impact of \$4.2 billion per year. The base covers more than 8,000 acres of land (12.5 square miles) and provides operational support for more than 100 associate units located at Wright-Patterson. There are two runways, supporting an average of 47,000 aircraft operations every year. The base is divided into two areas - A and B. Ohio SR 444 runs between the two areas.</p>	Air Force	http://www.wpafb.af.mil/aflcmc/
American Technology Council	<p>It is the policy of the United States to promote the secure, efficient, and economical use of information technology to achieve its missions. Americans deserve better digital services from their Government. To effectuate this policy, the Federal Government must transform and modernize its information technology and how it uses and delivers digital services.</p> <p>The purpose is to promote the policy set forth in section 1 of this order, this order establishes the American Technology Council (ATC).</p>	White House Administration	https://www.whitehouse.gov/the-press-office/2017/05/01/presidential-executive-order-establishment-american-technology-council

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CAE-2Y	<p>The CAE2Y designation serves as a capacity-builder and powerful motivator for the growth of Information Security programs in two-year institutions while at the same time strengthening the national infrastructure at CAE2Y. All CAE-2Y applicants must be a regionally accredited two-year community college or technical school, or a U.S. Government Cybersecurity training center, or a state or federally endorsed Cybersecurity training center. All CAE-2Y applicants must map the institution's curriculum to the core Knowledge Units (KUs); the CAE-2Y criteria include demonstration of program outreach and collaboration, student development, CD Center establishment and maintenance, CD multidisciplinary efforts, practice of CD at the institution level, CD faculty, and student curriculum path and recognition.</p>	National Security Agency/Department of Homeland Security	https://www.nsa.gov/resources/educators/centers-academic-excellence/cyber-defense/

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CAE-CDE	<p>The goal of the CAE in Cyber Defense Education (CDE) program is to reduce vulnerability in our national information infrastructure by promoting higher education and research in cyber defense (CD) and producing a growing number of professionals with CD expertise in various disciplines.</p> <p>All CAE-CDE applicants must be a regionally accredited four-year college or graduate-level University, or a DoD school.</p> <p>CAE-CDE applicants must map the institution's curriculum to core Knowledge Units (KUs), and chose five (out of 50) optional KUs. The CAE-CDE criteria include: demonstration of program outreach and collaboration, student development, CD Center establishment and maintenance, CD multidisciplinary efforts, practice of CD at the institution level, CD faculty, and student curriculum path and recognition.</p>	National Security Agency/Department of Homeland Security	https://www.nsa.gov/resources/educators/centers-academic-excellence/cyber-defense/

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CAE-CO	<p>The National Security Agency's (NSA) National Centers of Academic Excellence (CAE) in Cyber Operations Program supports the President's National Initiative for Cybersecurity Education (NICE): Building a Digital Nation and furthers the goal to broaden the pool of skilled workers capable of supporting a cyber-secure nation. The National Security Agency's (NSA) National Centers of Academic Excellence (CAE) in Cyber Operations Program supports the President's National Initiative for Cybersecurity Education (NICE): Building a Digital Nation and furthers the goal to broaden the pool of skilled workers capable of supporting a cyber-secure nation. The CAE-Cyber Operations program is intended to be a deeply technical, interdisciplinary, higher education program firmly grounded in the computer science (CS), computer engineering (CE), and/or electrical engineering (EE) disciplines, with extensive opportunities for hands-on applications via labs/exercises.</p>	National Security Agency	https://www.nsa.gov/resources/educators/centers-academic-excellence/cyber-operations

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CAE-R	All NSA/DHS National Center of Academic Excellence in Cyber Defense Research (CAE-R) applicants must be either a DoD school, a PhD producing military academy, or a regionally accredited, degree granting four-year institution rated as either Research University - Very High Research Activity (RU-VH), Research University – High Research Activity (RU-H), or Doctoral/Research University (DRU) as determined by the Carnegie Foundation Basic Classification system (and/or other independent body to measure CD) or provide a written justification as to significant CD research.	National Security Agency/Department of Homeland Security	https://www.nsa.gov/resources/educators/centers-academic-excellence/
California Cyber Innovation Challenge	A statewide high school cybersecurity competition along with the CyberCalifornia Coalition. The CCIC is part of a statewide campaign to expand access to technology career pathways for students and empower businesses to support cybersecurity education and training. The CCIC allows high school level cybersecurity competition teams to demonstrate their expertise, while encouraging the formation of new cybersecurity teams for future statewide challenges.	California Governor’s Office of Business and Economic Development	http://www.business.ca.gov/Programs/Innovation-and-Entrepreneurship/Cybersecurity

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Career and Technical Education	Career and Technical Education (CTE) prepares youth and adults for a wide range of careers through hands-on, industry-based, curriculum, and learning opportunities. The CTE program allows students to see the relevance of core academic skills within the workplace and also learn valuable critical thinking, employability, and job-related technical skills; Programs receive about \$1.3 billion annually from the federal government through the Carl D. Perkins Career and Technical Education Act.	Department of Education	https://www2.ed.gov/about/offices/list/ovae/pi/cte/index.html
Career One Stop	One-Stop service for resource and activities at state or local level	Department of Labor	https://www.careeronestop.org/
Centers of Excellence	The DHS S&T Centers of Excellence (COEs) develop multidisciplinary, customer-driven, homeland security science and technology solutions and help train the next generation of homeland security experts.	Department of Homeland Security	https://www.dhs.gov/science-and-technology/centers-excellence
Chief Human Capitol Officers (CHCO) Council	Advise and coordinate the activities of members' agencies on such matters as the modernization of human resources systems, improved quality of human resources information, and legislation affecting human resources operations and organizations.	Office of Personnel Management	https://www.chcoc.gov/

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CIO Council Workforce Committee	The CIO Council Workforce Committee addresses the myriad challenges CIOs face in creating an effective and efficient workforce that enables Agency mission success. This committee focuses CIO Council resources on creating the tools and resources necessary for CIOs to create an exemplary IT workforce. It leverages working relationships with the Chief Human Capital Officers Council and the Office of Personnel Management to highlight and address Federal IT workforce issues. They coordinate on activities to identify effective solutions for the hiring, training, classification, and professional development needs of the Government related to information technology.	Office of Personnel Management/Chief Human Capital Officers Council	https://www.cio.gov/about/committees-affiliates/workforce-committee/
Codebreaker Challenge	Tests the ability and skills of computer scientists and engineers to code and solve problems, and encourages collaboration across several STEM disciplines at the university level.	National Security Agency	https://codebreaker.ltsnet.net/
College of Cyber	The College of Cyber is a two-fold part of the same branch of a program within the NSA called the Centers of Academic Excellence program. It is responsible for education and training of the cyber-related workforce for the NSA, and also support training of Cyber Command personnel.	National Security Agency	http://www.military.com/education/2014/08/29/the-nsas-school-of-cyber.html

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Communications Security, Reliability, and Interoperability Council	The mission of the Communications Security, Reliability and Interoperability Council (CSRIC) is to provide recommendations to the Federal Communications Commission (FCC) to ensure, among other things, optimal security and reliability of communications systems. Furthermore, the Council's recommendations specifically address the prevention and remediation of detrimental cyber events. Working Group 7 of the CSRIC V is specifically chartered to provide recommendations for the CSRIC's consideration regarding any actions the FCC should take to promote improvements in cybersecurity workforce development.	Federal Communications Commission	https://www.fcc.gov/files/csric5-wg7-finalreport031517pdf
Competency Model Clearinghouse	In response to changing workforce skill needs, the U.S. Department of Labor, Employment and Training Administration and industry partners have collaborated to develop and maintain dynamic models of the foundational and technical competencies that are necessary in economically vital industries and sectors of the American economy.	Department of Labor	https://www.careeronestop.org/competencymodel/competency-models/cybersecurity.aspx

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Computer Science for All	This program aims to provide all U.S. students the opportunity to participate in computer science (CS) and computational thinking (CT) education in their schools at the K-12 levels. With this solicitation, the National Science Foundation (NSF) focuses on researcher-practitioner partnerships (RPPs) that foster the research and development needed to bring CS/CT to all schools. Specifically, this solicitation aims to provide high school teachers with the preparation, professional development (PD) and ongoing support that they need to teach rigorous computer science courses, and K-8 teachers with the instructional materials and preparation they need to integrate CS/CT into their teaching.	National Science Foundation	https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=505359
Cooperative Education Program (Co-Op)	Co-ops operate under a rotational program, alternating semesters of full-time work with full-time study from entry into the program until graduation.	National Security Agency	https://www.intelligencecareers.gov/icstudents.html?Agency=NSA
Cryptanalysis and Signals Analysis Summer Program (CASA SP)	Open to undergraduate students majoring in mathematics, computer science, or a major with a strong background in math and computer science. A background in both math and computer science is desired.	National Security Agency	https://www.intelligencecareers.gov/icstudents.html?Agency=NSA
Curriculum Project	An assessment of courses	National Security Agency	http://cis1.towson.edu/~cyber4all/wp-content/uploads/2017/11/YuCai%20NSA%20New%20Orleans%20Michigan-Tech.pptx

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Cyber Defense Competition	<p>The Department of Energy (DOE), capitalizing on the expertise of current national laboratory staff that previously hosted two successful cyber defense competitions to exercise interactive, scenario-based events, where teams engage in cybersecurity activities includes methods, practices, strategy, policy, and ethics. Through the cyber defense competitions, DOE has worked to increase 1) hands-on cyber education to college students and professionals, 2) awareness into the critical infrastructure and cyber security nexus, and 3) basic understanding of cyber security within a real world scenario.</p>	Argonne National Laboratory	https://cyberdefense.anl.gov/
Cyber Grand Challenge	<p>Starting with over 100 teams consisting of some of the top security researchers and hackers in the world, the Defense Advanced Research Projects Agency (DARPA) pit seven teams against each other in the Cyber Grand Challenge final event, held August 4 in Las Vegas. During the competition, each team's Cyber Reasoning System (CRS) automatically identified software flaws, and scanned a purpose-built, air-gapped network to identify affected hosts. For nearly twelve hours teams were scored based on how capably their systems protected hosts, scanned the network for vulnerabilities and maintained the correct function of software.</p>	Department of Defense	https://www.darpa.mil/program/cyber-grand-challenge

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Cyber Private Public Partnership Initiative (P3i)	aims to train army reservists, whether they're just joining or transitioning out of the Army Reserves, to meet the public sector's increasing need for cyber defense personnel. The NSA's grant will provide scholarships to students enrolling in undergraduate and graduate degrees in UTSA's top-ranked, interdisciplinary cybersecurity program.	National Security Agency/Army Reserve	http://www.usar.army.mil/Featured/Private-Public-Partnership/Cyber-P3/
Cyber Shield Alliance	Provides sensitive information not posted to the open Internet and a variety of free online training for law enforcement officials and support staff.	Federal Bureau of Investigation	http://www.iacpcybercenter.org/officers/training/
Cyber Summer Program	Outreach effort to the very best undergraduate and graduate computer science, engineering, mathematicians, network security and information assurance students in the country.	National Security Agency	https://www.intelligencecareers.gov/icstudents.html?Agency=NSA
Cybercareers.gov	A multiuse platform that provides specific cybersecurity information and resources to job seekers, managers, and supervisors. The site includes a list of information technology jobs that are available across agencies, information about current government technology employees, and a mapping tool of Federal jobs across the United States.	Office of Personnel Management	https://www.cybercareers.gov/

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CyberCorps: Scholarship for Service	<p>A unique program designed to increase and strengthen the cadre of federal information assurance professionals that protect the government's critical information infrastructure. This program provides scholarships that may fully fund the typical costs incurred by full-time students while attending a participating institution, including tuition and education and related fees. Additionally, participants receive stipends of \$22,500 for undergraduate students and \$34,000 for graduate students. The scholarships are funded through grants awarded by the National Science Foundation.</p>	National Science Foundation	https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=504991
Cybersecurity Education and Training Assistance Program's (CETAP)	<p>This program promotes cybersecurity education at multiple grade levels, and is intended to do so throughout the United States; supports a coordinated effort to engage students early in their academic careers with a cybersecurity research group; provides a mechanism whereby cybersecurity education is available not only in the form of the formal education of students, but in the training of their teachers; increases the number of U.S. teachers with an interest in, knowledge of, and access to cybersecurity educational materials, increases the number of students affected by cybersecurity knowledge, and develops at an early stage students' interest in the cybersecurity career field.</p>	Department of Homeland Security	https://www.cfda.gov/index?s=program&mode=form&tab=core&id=05063b31ef34183c6e0946f51562b0c9

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Cybersecurity Workforce Development Toolkit (CWDT)	The Cybersecurity Workforce Development Toolkit helps organizations understand their cybersecurity workforce and staffing needs to protect their information, customers, and networks. This Toolkit includes tools such as cybersecurity career path templates and recruitment resources to recruit and retain top cybersecurity talent.	Department of Homeland Security	https://niccs.us-cert.gov/workforce-development/cybersecurity-workforce-development-toolkit
Day Area Video Coalition (BAVC)'s TechSF program	BAVC helps unemployed and underemployed Bay Area Residents get the skills they need to get back to work.	San Francisco Office of Economic and Workforce Development	https://bavc.org/learn/tech-sf
Director's Summer Program (DSP)	A highly competitive program that seeks to reach the nation's most outstanding undergraduate mathematics majors. Each summer, undergraduate students are invited to put their problem-solving skills to test in mathematics, cryptology and communications technology. These problems often involve applications of abstract algebra, geometry, number theory, analysis, probability, statistics, combinatorics, graph theory, algorithms, and computer science.	National Security Agency	https://www.intelligencecareers.gov/icstudents.html?Agency=NSA

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Federal CISO Council	<p>The Federal CISO Council is the principal interagency forum to improve agency efforts related to protecting high value information technology (IT) assets, modernizing and securing IT infrastructure, and designing threat identification best practices. The CISO Council is one element of an interagency support structure dedicated to improving the cybersecurity posture of the United States through the development of IT security policy, strategic hiring and training of cybersecurity professionals, and continued sharing of best practices and promotion of shared services. Lastly, the CISO Council aims to promote collaboration and community building among Federal Agency CISOs for the purposes of openly sharing information, transferring knowledge, and developing a unified approach for addressing Federal IT security challenges and handling prominent.</p>	Office of Management and Budget/Office of Personnel Management	https://www.cio.gov/about/committees-affiliates/chief-information-security-officer-council/
Federal Computer Security Manager's Forum	<p>The Forum is an informal group sponsored by the National Institute of Standards and Technology (NIST) to promote the sharing of information system security information among federal agencies. The Forum hosts the Federal Agency Security Practices website, maintains an extensive e-mail list, and holds bi-monthly meetings to discuss current issues and items of interest to those responsible for protecting non-national security systems.</p>	National Institute of Standards and Technology	http://csrc.nist.gov/groups/SMA/forum/

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Federal Cybersecurity Workforce Strategy	Federal agencies' lack of cybersecurity and IT talent is a major resource constraint that impacts their ability to protect information and assets. Although there are a number of existing Federal initiatives which address this challenge, implementation and awareness of these programs are inconsistent – which also negatively impact the private sector.	Office of Management and Budget/Office of Personnel Management	https://obamawhitehouse.archives.gov/blog/2016/07/12/strengthening-federal-cybersecurity-workforce
Federal Information Systems Security Educator's Association (FISSEA)	FISSEA is an organization run by and for information systems security professionals to assist federal agencies in meeting their information systems security awareness, training, education, and certification responsibilities. FISSEA conducts an annual fee-based conference and free workshops during the year regarding new techniques for developing/conducting training, cost-effective practices, workforce development, and free resources and contacts.	National Institute of Standards and Technology	http://csrc.nist.gov/organizations/fissea/home/index.shtml
FedVTE	Provides a nationwide support system for law enforcement and regulatory agencies involved in the prevention, investigation, and prosecution of economic and high-tech crime.	Department of Homeland Security	https://niccs.us-cert.gov/training/federal-virtual-training-environment-fedvte
GenCyber	A camp that provides hands-on activities in labs, lectures, and field trips; allows students to explore cybersecurity before entering college; vision is to help solve shortfall of skilled cybersecurity professionals. Grants between a few thousand to over \$100,000.	National Security Agency/National Science Foundation	https://www.gen-cyber.com/

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Historically Black Colleges and Universities Cybersecurity Workforce Pipeline Consortium	<p>Brings together 13 HBCUs, two DOE labs, and the Charleston County School District with the goal of creating a sustainable pipeline of students focused on cybersecurity issues.</p> <p>Addresses the challenge of diversifying the pipeline by working with leading minority-serving institutions: As the President stated in Executive Order 13532, "Promoting Excellence, Innovation, and Sustainability at Historically Black Colleges and Universities" in February 2010.</p>	Department of Energy	https://obamawhitehouse.archives.gov/the-press-office/2015/01/15/vice-president-biden-announces-25-million-funding-cybersecurity-educatio'
Information Assurance Scholarship Program	<p>Designed to increase the number of new entrants to DoD who possess key information assurance and IT skill sets; serve as a mechanism to build the nation's IA infrastructure through grant to colleges and universities jointly designated by the NSA and Department of Homeland Defense as CAE-CDE; and serve as a tool to develop and retain well-educated military and DoD civilian personnel who support the Department's critical IT management and infrastructure protection functions.</p>	National Security Agency	http://dodcio.defense.gov/In-the-News/Information-Assurance-Scholarship-Program-IASP/
Information Systems Security Line of Business (ISSLOB)	<p>ISSLoB Security and Awareness Training (SAT) Shared Service Centers (SSCs) provide common suites of information systems security training products and services for the federal government. The ISSLoB SSCs provide a repository of government sponsored or approved training products and sources that will reach all levels of government executives.</p>	Department of Homeland Security	https://www.dhs.gov/information-systems-security-line-business-security-and-awareness-training

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Infragard	<p>InfraGard is a partnership between the FBI and members of the private sector. The InfraGard program provides a vehicle for seamless public-private collaboration with government that expedites the timely exchange of information and promotes mutual learning opportunities relevant to the protection of Critical Infrastructure. With thousands of vetted members nationally, InfraGard's membership includes business executives, entrepreneurs, military and government officials, computer professionals, academia and state and local law enforcement; each dedicated to contributing industry specific insight and advancing national security.</p>	Federal Bureau of Investigation	https://www.infragard.org/
Infragard Cyber Camp	<p>During Cyber Camp, students have the opportunity to learn about various aspects of cyber security. Students will also gain practical skills through instruction by experienced security and information technology (IT) professionals, and hands-on exercises; recommended for high school.</p>	Infragard	<p>National Captial Region- http://www.infragardncr.org/cybercamp North Carolina- https://www.ncinfragard.com/cyber-camp/</p>

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Innovative Technology Experiences for Students and Teachers (ITEST)	ITEST is a research and development program that supports projects to promote PreK-12 student interests and capacities to participate in the STEM and information and communications technology (ICT) workforce of the future. The ITEST program supports research on the design, development, implementation, and selective spread of innovative strategies for engaging students in technology-rich experiences.	National Science Foundation	http://stelar.edc.org/publications/innovative-technology-experiences-students-and-teachers-itest-program-teachers
Intelligence Community - Centers for Academic Excellence (IC-CAE)	Provide grants to competitively chosen universities and colleges to enhance the recruitment and retention of an ethnically and culturally diverse Intelligence Community workforce with capabilities critical to the national security interest of the United States.	Defense Intelligence Agency	http://www.dia.mil/Training/IC-Centers-for-Academic-Excellence/
intelligencecareers.gov	Since competition for talent in science, technology, engineering and mathematics is getting more intense every year, the site provides STEM professionals with a unique look into how their professions advance the intelligence mission. Also highlighted are careers in foreign language, intelligence analysis and related analytical work. Students and professionals in other fields, such as business, human resources and law enforcement, will learn that the IC has important positions for them as well.	Intelligence Community	https://www.intelligencecareers.gov/

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Maryland Apprenticeship and Training Program (MATP) - Division of Workforce Development and Adult Learning	The Apprenticeship and Training unit is responsible for registering and regulating the State-approved apprenticeship programs in Maryland. Whether you are an employer who is looking to improve your company's prospects for profitability and growth or a Maryland citizen looking for a skilled occupation that combines on-the-job training with classroom instruction to attain the skills you need to achieve a successful and gratifying career of your choice, our MATP unit is here to help.	Department of Labor	https://www.dllr.state.md.us/employment/app/r/
National Cryptologic School's College of Cyber	Offers technical courses on intermediate and advanced tools and techniques used in malware analysis, forensics, intrusion analysis, or exploit development and delivery. The curriculum consists of technical, interdisciplinary courses that incorporate elements of computer science, software/hardware, and network disciplines, and build on core concepts introduced in the Computer Science, Cyber, and Networking curricula.	National Security Agency	http://science.dodlive.mil/2014/08/28/the-nsas-school-of-cyber/
National Initiative for Cybersecurity Education (NICE)	The National Initiative for Cybersecurity Education (NICE), led by the National Institute of Standards and Technology (NIST) in the U.S. Department of Commerce, is a partnership between government, academia, and the private sector focused on cybersecurity education, training, and workforce development.	National Institute of Standards and Technology	https://www.nist.gov/itl/applied-cybersecurity/nice/about/interagency-coordinating-council

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National Occupational Framework for Apprenticeship	These National Occupational Frameworks were developed in partnership with employers, sponsors, expert workers, educators, subject matter experts, trade associations, labor organizations and licensing bodies to ensure that they meet the needs of a broad range of companies and organizations and enable industry-wide acceptance of apprenticeship training.	Department of Labor	https://innovativeapprenticeship.org/us-apprenticeships/
NICCS Education and Training Catalog	The NICCS Education and Training Catalog is a central location where cybersecurity professionals across the nation can find over 3,000 cybersecurity-related courses. Anyone can use the interactive map and filters to search for courses offered in their local area so they can add to their skill set, increase their level of expertise, earn a certification, or even transition into a new career.	Department of Homeland Security	https://niccs.us-cert.gov/training/search
NICE Annual Conference	This year's theme, "Challenging the Status Quo: Building a Robust and Sustainable Cybersecurity Ecosystem," was chosen to inspire presentations that aim to shape the way in which the nation identifies, educates, trains and builds a 21st century cutting-edge Cybersecurity Ecosystem.	National Institute of Standards and Technology	https://www.fbcinc.com/e/nice/
NICE Interagency Coordinating Council	The NICE Interagency Coordinating Council (ICC) convenes federal government partners of NICE for consultation, communication, and coordination of policy initiatives and strategic directions related to cybersecurity education, training, and workforce development.	National Institute of Standards and Technology	https://www.nist.gov/itl/applied-cybersecurity/nice/about/interagency-coordinating-council

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NICE K-12 Cybersecurity Education Conference	Thought leaders from education, government, industry, and non-profits will address how K-12 education is uniquely positioned to accelerate learning, increase skills development, identify methods to best nurture a diverse learning community, and provide approaches to guide career development and workforce planning for today's youth.	National Institute of Standards and Technology	https://www.k12cybersecurityconference.org/
NICE Workforce Framework, NIST SP 800-181	The NCWF is a national resource that categorizes and describes cybersecurity work. It serves as a fundamental reference resource to support a workforce capable of meeting an organization's cybersecurity needs. It provides organizations with a common, consistent lexicon that categorizes and describes cybersecurity work.	National Institute of Standards and Technology	https://niccs.us-cert.gov/workforce-development/cyber-security-workforce-framework
Partners in Education	This program is a collaboration between NSA/CSS and local military impacted schools (schools that serve a high concentration of military families). Through PIE, NSA military and civilian personnel provide academic assistance to local students in science, technology, engineering, mathematics, languages, and other skills relative to the NSA/CSS mission.	National Security Agency	https://www.nsa.gov/resources/educators/partners-in-education/

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Pathways Internship Program	<p>The Pathways Internship Program is a paid program designed to provide students enrolled in a wide variety of educational institutions, from high school to graduate level, with opportunities to work in agencies and explore Federal careers while still in school. Students who complete the program may be eligible for conversion to a permanent job in the civil service.</p>	Department of Homeland Security	https://www.dhs.gov/homeland-security-careers/students
Pathways Presidential Management Fellows (PMF) Program	<p>The Presidential Management Fellows (PMF) Program is a flagship, two-year leadership development program at the entry-level for advanced degree candidates. Created more than three decades ago, the PMF program attracts and selects from among the best candidates nationwide and is designed to develop a cadre of potential federal government leaders. Individuals who have completed, within the past two years, a qualifying advanced degree (e.g. master's or professional degree) are eligible.</p>	Office of Personnel Management	https://www.pmf.gov/opportunity/index.aspx

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Pathways Recent Graduates	<p>The Pathways Recent Graduates Program affords developmental experiences in the federal government, intended to promote possible careers in the civil service to individuals who have recently graduated from qualifying education institutions or programs. Participants are mentored throughout the program and develop an Individual Development Plan that includes 40 hours of professional development and training activities. The program lasts for one year; Recent Graduates that complete all program requirements may be converted to a permanent position.</p>	Office of Personnel Management	https://www.usajobs.gov/Help/working-in-government/unique-hiring-paths/students/
PushButton PD Tool	<p>The DHS PushButtonPD™ is a simple, no-cost, self-contained Excel workbook file. Managers, supervisors, and HR specialists can use the tool to rapidly draft a federal employee Position Description (PD) without the need for extensive training or prior knowledge of position classification. It is designed to present language from multiple, mission-critical authoritative sources and standards for duties, tasks, and KSAs (knowledge, skills, and abilities); rapidly capture the hiring official's requirements; and present them in a robust hiring package that can be easily integrated into existing agency HR processes.</p>	Department of Homeland Security	https://niccs.us-cert.gov/workforce-development/dhs-pushbuttonpd-tool

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Regional Alliances and Multistakeholder Partnerships to Stimulate (RAMPS) Cybersecurity Education and Workforce Development	The National Initiative for Cybersecurity Education (NICE) is funding opportunities to build multistakeholder workforce partnerships of employers, schools and institutions of higher education, and other community organizations. These funding opportunities provide assistance to establish RAMPS. Effective partnerships focus on organizing multiple employers with skill shortages in specific cybersecurity work roles to focus on developing the skilled workforce to meet industry needs within the local or regional economy.	National Institute of Standards and Technology	https://www.nist.gov/itl/applied-cybersecurity/nice/regional-alliances-and-multistakeholder-partnerships-stimulate-ramps
Robert Noyce Teacher Scholarship Program	Seeks to encourage talented science, technology, engineering, and mathematics (STEM) majors and professionals to become K-12 mathematics and science (including engineering and computer science) teachers. The program invites creative and innovative proposals that address the critical need for recruiting and preparing highly effective elementary and secondary science and mathematics teachers in high-need local educational agencies.	National Science Foundation	http://app.nsfnoyce.org/

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Science of Security and Privacy	<p>The President’s plan for Federal cybersecurity research and development includes as one of only four thrusts the research to develop a “science of security” that would provide first principles and the fundamental building blocks for security and trustworthiness. It further recognizes that the multi-dimensional nature of the problem will require contributions from biology, economics and other social and behavioral sciences in addition to the traditional disciplines of mathematics, computer science, and electrical engineering. Numerous activities have been initiated across government, academia, and industry to advance the development of such a science. This Science of Security Virtual Organization is established through the collaboration of Federal Agencies to provide a focal point for security science related work and to facilitate the creation of a collaborative community to advance security science.</p>	National Security Agency	https://cps-vo.org/group/SoS/about
Science, Mathematics & Research for Transformation (SMART) Scholarship for Service Program	<p>The Science, Mathematics And Research for Transformation (SMART) Scholarship for Service Program is an opportunity for students pursuing an undergraduate or graduate degree in Science, Technology, Engineering, and Mathematics (STEM) disciplines to receive a full scholarship and be gainfully employed by the Department of Defense (DoD) upon degree completion.</p>	Department of Defense	https://smart.asee.org/

FEDERAL PROGRAM/INITIATIVE	DESCRIPTION	HOST ORGANIZATION	LINK
Secretary's Honors Program (SHP) Cyber Student Volunteer Initiative (CSVI)	The Secretary's Honors Program (SHP) Cyber Student Volunteer Initiative (CSVI) provides undergraduate and graduate students pursuing cybersecurity-related degrees with an opportunity to work with top DHS cybersecurity professionals, while learning about the unique cybersecurity missions of the Department. By offering temporary, hands-on experience to current students, DHS hopes to make a meaningful impact on the education of the Nation's next generation of cybersecurity talent.	Department of Homeland Security	https://www.dhs.gov/homeland-security-careers/secretarys-honors-program
Secure and Trustworthy Cyberspace (SaTC)	The goals of the Secure and Trustworthy Cyberspace (SaTC) program are aligned with the Federal Cybersecurity Research and Development Strategic Plan (RDSP) and the National Privacy Research Strategy (NPRS) to protect and preserve the growing social and economic benefits of cyber systems while ensuring security and privacy.	National Science Foundation	https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=504709&org=CISE&from=home
Signals Intelligence Collection (SIC) Program	Brings college students into the world of signals intelligence for compensated internships during the summers after their freshman, sophomore, and junior years. The program permits students to actively participate in on-going operations to collect, analyze, and process data that is used to help satisfy high priority national intelligence requirements.	National Security Agency	https://www.intelligencecareers.gov/icstudents.html

FEDERAL PROGRAM/INITIATIVE	DESCRIPTION	HOST ORGANIZATION	LINK
STEM Education Partnership (MEPP) Program	The STEM Education Partnership Program (MEPP) is a National Security Agency outreach program to promote Science, Technology, Engineering and Mathematics (STEM) education in kindergarten through twelfth grade. MEPP works with non-profit educational institutions to inspire students to pursue advanced studies of STEM subjects and promote awareness of career opportunities in STEM fields.	National Security Agency	https://www.nsa.gov/resources/educators/stem-education-partnership/
STOKES Educational Scholarship Program	Formerly known as the Undergraduate Training Program, STOKES facilitates the recruitment of individuals-particularly minority high school students-who have demonstrated skills critical to National Security Agency. Stokes is open to high school seniors planning on majoring in computer science or computer/electrical engineering.	National Security Agency	https://www.intelligencecareers.gov/icstudents.html
Stop.Think.Connect. Campaign	A national cybersecurity awareness campaign aimed at raising awareness among the American public, partners with federal agencies and SLTT governments through the Cyber Awareness Coalition. Coalition members collaborate with the campaign on outreach efforts and are provided access to campaign materials, templates, resources, and tips to assist with promoting cybersecurity.	Department of Homeland Security	https://www.stopthinkconnect.org/

FEDERAL PROGRAM/INITIATIVE	DESCRIPTION	HOST ORGANIZATION	LINK
Summer Intern Program for Information Assurance (SIPIA)	12-weeks summer program meant to help accelerate your career in the field of Information Assurance by working for NSA. Hosts high potential students pursuing bachelor's, master's or PhD technical degrees that can contribute to the IA mission. Interns will be involved in projects that enable the cyber mission force through current analysis, expertise, training and tools.	National Security Agency	https://www.intelligencecareers.gov/icstudents.html?Agency=NSA
Summer Intern Program for Science and Technology (SIP/ST)	a full-time, 12-week summer internships program open to college juniors who are concentrating their studies in the disciplines of computer science, computer engineering, electrical engineering, network engineering, software engineering or telecommunications	National Security Agency	https://www.intelligencecareers.gov/icstudents.html?Agency=NSA
Summer Program for Operations Research Technology (SPORT)	12-weeks internship for graduate students enrolled in an MS or PhD program who have experience with applied math, mathematical programming, simulations, computer networking or computer programming Languages. The goal of this program is to offer top graduate students, who have highly developed operations research skills, an opportunity to apply their academic knowledge in the stimulating professional atmosphere of one of the most advanced intelligence settings in the world.	National Security Agency	https://www.intelligencecareers.gov/icstudents.html?Agency=NSA

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Task Force on Optimal PSAP Architecture (TFOPA)	The Task Force on Optimal PSAP Architecture (TFOPA) is a federal advisory committee chartered under the Federal Advisory Committee Act (FACA) to provide recommendations to the Federal Communications Commission (FCC) regarding actions that Public Safety Answering Points (PSAPs) can take to optimize their security, operations, and funding as they migrate to Next Generation 9-1-1.	Federal Communications Commission	https://apps.fcc.gov/edocs_public/attachmatch/DA-16-179A2.pdf
TechHire Partnership Grants	The U.S. Department of Labor awarded nearly \$150 million H-1B TechHire Partnership grants to 39 partnerships providing services in 25 states which will provide employment and training assistance to train workers with the skills required for well-paying, middle- and high-skilled, and high-growth jobs across a diversity of H-1B industries.	Department of Labor	https://www.doleta.gov/techhire/
The Cyber Student Volunteer Initiative (CSVI)	The Cyber Student Volunteer Initiative (CSVI) is designed to give current students an opportunity to work alongside cyber leaders with the U.S. Department of Homeland Security.	Department of Homeland Security	https://www.dhs.gov/homeland-security-careers/cyber-student-volunteer-initiative

FEDERAL PROGRAM/INITIATIVE	DESCRIPTION	HOST ORGANIZATION	LINK
The Cybersecurity Education and Training Assistance Program's (CETAP) Integrated Cybersecurity Education Communities (ICEC)	The Cybersecurity Education and Training Assistance Program's (CETAP) Integrated Cybersecurity Education Communities (ICEC) project targets the U.S. high school student population through professional development of high school teachers and cybersecurity education summer camps. The project encourages innovation in education, increases awareness of cybersecurity roles, and provides teachers tools to teach their students about the availability of related career opportunities. CETAP-ICEC focuses its efforts on training teachers to use project-based learning when integrating cybersecurity content into math, science, and humanities studies.	Department of Homeland Security	http://www.federalgrantswire.com/integrated-cybersecurity-education-communities-icec-expansion-of-a-portable-cybersecurity-education-teacher-focused-model-dhs-13-nppd-127-001.html#.WXU6gdPyt-U
The New York State Department of Labor	The State Department of Labor staff can provide, free of charge, complete details and technical assistance in setting up your own apprentice training program.	Department of Labor	https://labor.ny.gov/apprenticeship/appindex.shtm
Trade Adjustment Assistance Community College and Career Training (TAACCT)	Awarded to Montgomery College and 13 other community colleges within the State of Maryland for a performance period of 3 years. This project will address the challenges of a lack of adequate pool of skilled cyber workers, the shortage of laboratory facilities to support cyber training, a lack of training in flexible modalities, and barriers to learning for underserved populations.	Department of Labor	https://doleta.gov/taacct/

FEDERAL PROGRAM/INITIATIVE	DESCRIPTION	HOST ORGANIZATION	LINK
US Army Reserves Cyber P3i Project	Created to provide cybersecurity education programs to US Army reservists. USAR identified geographic clusters where there are designated CAE-CDEo institutions, a military facility where USAR could create a cybersecurity unit, and adequate cybersecurity job demand to ensure employment of those reservists in the field.	Department of Defense	http://www.usar.army.mil/Featured/Private-Public-Partnership/Cyber-P3/
Usenix ASE	Since 1975, USENIX, the Advanced Computing Systems Association, has brought together the community of engineers, system administrators, scientists, and technicians working on the cutting edge of the computing world. The USENIX conferences have become the essential meeting grounds for the presentation and discussion of the most advanced information on the developments of all aspects of computing systems.	National Science Foundation	https://www.usenix.org/conference/ase17

Non-Federal Programs & Initiatives

NON-FEDERAL PROGRAM/INITIATIVE	DESCRIPTION	HOST ORGANIZATION	LINK
4PrivacyMatters	4PrivacyMatters is a startup whose current R&D incubation focus is in developing intellectual capital at the intersection of AI, Cybersecurity, and the Privacy Of Things compliant within a broader framework that addresses privacy matters. Founder Achutha Raman is also researching data-driven maxims for mediation scenarios associated with transnational cyber conflict.	4PrivacyMatters	http://www.4privacymatters.org/
Able-Disabled Advocacy (San Diego, CA)	A-DA's mission is "to provide vocational skills training and educational advancement for youth, military veterans, and adults with disabilities and to assist them in finding employment and overcoming barriers to personal and financial self-sufficiency." - Since 1975	Able-Disabled Advocacy	http://www.able2work.org/programs/apprenticeships/
Academic Affiliates Council (AAC)	NCCoE uses an innovative collaboration model to draw on a wide range of expertise. The team includes researchers from the University of Maryland, College Park, and the University of Maryland, Baltimore County. It also includes support from universities on the Academic Affiliates Council and key stakeholders from industry and government.	National Cybersecurity Center of Excellence's	https://www.mitre.org/centers/national-cybersecurity-ffrdc/who-we-are

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Accenture Federal Services LLC	Accenture solves clients' toughest challenges by providing unmatched services in strategy, consulting, digital, technology and operations. They partner with more than three-quarters of the Fortune Global 500, driving innovation to improve the way the world works and lives. With expertise across more than 40 industries and all business functions, they deliver transformational outcomes for a demanding new digital world.	Accenture	https://www.accenture.com/us-en/company
Advanced Technical Intelligence Center (ATIC)	ATIC is a university and industry-focused research, education, and training nonprofit corporation within the Dayton Region. It consolidates technical intelligence education and training in the DoD, national agencies, and civilian institutes and industry. ATIC incorporates on-site and distance learning environments and a research lab.	Department of Defense	http://www.iafie.org/page/Education_ATIC/The-Advanced-Technical-Intelligence-Center-ATIC.htm
Alpine Security, LLC	A Service Disabled Veteran Owned Small Business that brings effective cybersecurity training and security assessment solutions to commercial and government clients.	Alpine Security, LLC	https://www.alpinesecurity.com/about
American Apprenticeship Initiative	This project will build a new sustainable regional pipeline specific to advanced manufacturing including nanotechnology, cybersecurity and unmanned vehicle systems. This program will help employees and employers located in the following counties: Broome, Cayuga, Chemung, Chenango, Cortland, Delaware, Herkimer, Jefferson, Lewis, Madison, Oneida, Onondaga, Oswego, Otsego, Schuyler, St. Lawrence, Steuben, Tioga and Tompkins.	Workforce Investment Fund of Herkimer, Madison and Oneida Counties	http://www.working-solutions.org/for-businesses/apprenticeship

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An exploration of the current state of IA education:	The goal of this document is to explore the space of various existing Information Assurance educational standards and guidelines, and how they may serve as a basis for helping to define the field of Information Assurance.	Association for Computing Machinery	http://dl.acm.org/citation.cfm?id=1709457&CFID=776416881&CFTOKEN=69191567
Applied Computer Security Associates (ACSA)	ACSA is a non-profit association of computer security professionals who have a common goal of improving the understanding, theory, and practice of computer security. To this end, ACSA supports a number of activities, all of which serve the goal of improving the computer security field.	Applied Computer Security Associates	https://www.acsac.org/acsa/
Association for Computing Machinery (ACM)	ACM brings together computing educators, researchers, and professionals to inspire dialogue, share resources, and address the field's challenges. As the world's largest computing society, ACM strengthens the profession's collective voice through strong leadership, promotion of the highest standards, and recognition of technical excellence. ACM supports the professional growth of its members by providing opportunities for life-long learning, career development, and professional networking.	Association for Computing Machinery (ACM)	https://www.acm.org/

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AT&T Cybersecurity Services and Solutions	<p>In the United States, AT&T offers TV and wireless nationwide, plus a large high-speed internet footprint. They offer a wide choice of internet speeds to meet customers' needs. With a 100% fiber network, customers in 52 markets can download a 90-minute HD movie in less than 36 seconds, a 30-minute TV episode in 3 seconds and 25 songs in 1 second. They plan to expand these speeds to at least 23 more metro areas, at least 75 metros in total. They also offer pay TV in 11 Latin American countries.</p> <p>They offer solutions that help businesses in every industry serve their customers better. They deliver advanced services to nearly 3.5 million businesses on 6 continents. That includes nearly all of the Fortune 1000 as well as neighborhood businesses across the United States.</p>	AT&T	https://www.business.att.com/enterprise/Portfolio/cybersecurity/

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Automation Federation	<p>the Automation Federation enables its members to more effectively fulfill their missions, advance the science and engineering of automation technologies and applications, and develop the workforce needed to capitalize on the benefits of automation.</p> <p>The Automation Federation was founded by the International Society of Automation (www.isa.org) in 2006. ISA is a nonprofit professional association that sets the standard for those who apply engineering and technology to improve the management, safety, and cybersecurity of modern automation and control systems used across industry and critical infrastructure.</p>	Automation Federation	http://www.automationfederation.org/

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BioHealth Innovation Inc.	<p>In February 2016, the EDA invested \$495,000 in i6 Challenge funds to BioHealth Innovation, Inc., Rockville, Maryland, to fund the expansion of the Venture Commercialization Model (V-COMM) to build technology development and entrepreneurial practices in the areas of Medical Technology, Vaccines, and BioHealth Cybersecurity within the BioHealth Industry (BHI) of Maryland. This project is led by BioHealth Innovation, Inc., a 501(C)3 non-profit public-private partnership serving Central Maryland (covering 10 counties from the Washington, DC suburbs to Baltimore and its suburbs), the expansion of V-COMM enables BHI to conduct a greater number of reviews of technologies, spur the development of new companies, raise capital, and create jobs. This investment is part of a \$990,000 project.</p>	BioHealth Innovation Inc.	http://www.biohealthinnovation.org/biohealth-news/bhi-press-releases/6099-biohealth-innovation-inc-awarded-495k-grant-by-u-s-economic-development-administration-eda
Black Girls Code	<p>A non-profit organization founded in 2011 that focuses on providing technology education for African-American girls. The organization offers programs in computer programming, coding, as well as website, robot, and mobile application-building, with the goal of providing African-American youth with the skills to occupy some of the 1.4 million computing job openings expected to be available in the U.S. in 2020.</p>	Black Girls Code	http://www.blackgirlscode.com/

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Black Hat	<p>Black Hat is the most technical and relevant global information security event series in the world. For more than 18 years, Black Hat has provided attendees with the very latest in information security research, development, and trends in a strictly vendor-neutral environment. These high-profile global events and Trainings are driven by the needs of the security community, striving to bring together the best minds in the industry. Black Hat inspires professionals at all career levels, encouraging growth and collaboration among academia, world-class researchers, and leaders in the public and private sectors.</p>	UBM Technology	http://www.blackhat.com/
Careerwise	<p>CareerWise is a non-profit organization focused on developing a robust apprenticeship program in Colorado that addresses the needs of businesses and students. Students completing the apprenticeship will gain real-world skills and credentials that provide them with options to enter the workplace in a high-paying job or continue their education. Using the Swiss Apprenticeship System as a model for inspiration, CareerWise is determined to unite businesses and educators to provide a business-led, student-centered program that addresses real-world needs.</p>	CareerWise Colorado	http://www.careerwisecolorado.org/

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Center for Long-Term Cybersecurity	With a generous starting grant from the Hewlett Foundation, the CLTC was established in 2015 as a research and collaboration hub at the University of California, Berkeley. Housed in the School of Information (I School), the Center will create an effective dialogue among industry, academia, policy, and practitioners, with an aim to foster research programs, technologies, and recommendations. CLTC's work is founded on a future-oriented conceptualization of cybersecurity—what it could imply and mean for human beings, machines, and the societies that will depend on both.	UC Berkeley	https://cltc.berkeley.edu/about-us/
Central New Mexico Community College (Albuquerque, NM) - NM Information Technology Apprenticeship Program (NMITAP)	Central New Mexico Community College provides the classroom training required for apprenticeships. Apprentices selected for this program typically work in your related career area and are affiliated with a registered training agency. After completion of this program, the participant may be awarded a CNM certificate in addition to being able to sit for a journeyman licensing exam.	Central New Mexico Community College	https://www.cnm.edu/programs-of-study/all-programs-a-z/apprenticeships
CERT/ Software Engineering Institute	The CERT Division is part of the Software Engineering Institute, which is based at Carnegie Mellon University. They are the world's leading trusted authority dedicated to improving the security and resilience of computer systems and networks and are a national asset in the field of cybersecurity.	Carnegie Mellon University	https://learningnetwork.cisco.com/community/it-careers/cybersecurity-training-and-certifications

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Circadence	<p>With over 20 years' experience, 34 patents and a history of cutting-edge software development, Circadence solves complex customer problems using robust, industry-leading solutions.</p> <p>Circadence is a recognized leader in the Federal cybersecurity community. Powered by a culture of innovation, intellectual property and the demands of an evolving cyber market, Circadence is using its current cyber range solution and next generation cybersecurity training platform to address this critical national security challenge and tremendous business opportunity.</p>	Circadence	https://www.circadence.com
CISCO Learning Network	<p>The Cisco Learning Network is a social learning community focused on the IT industry. Our mission at the Cisco Learning Network is to provide learning tools, training resources, and industry guidance to anyone interested in building an IT career through Cisco certifications. The certification preparation materials offered on the Cisco Learning Network do not constitute a complete self-study program but are supplemental materials to enhance core learning programs. With more than 800,000 members registered globally, the Cisco Learning Network is a truly international learning experience intended to help support lifelong learning and sustainable education for its members.</p>	CISCO	https://learningnetwork.cisco.com/community/it-careers/cybersecurity-training-and-certifications

NON-FEDERAL PROGRAM/INITIATIVE	DESCRIPTION	HOST ORGANIZATION	LINK
CISCO NetRiders Competitions	<p>An interactive networking skills contest from May to October that motivates students to pursue future education and training in the technology field. During the competition, students take a timed theoretical exam, a Packet Tracer exam, and participate in a network simulation activity — hands-on challenges designed to put their knowledge of Networking Academy curriculum to the test.</p>	CISCO	http://www.academynetriders.com/index.php
City Colleges of Chicago Cybersecurity Bootcamp	<p>Prepare students for highly skilled jobs in one of the nation's fastest growing industries. A city-federal investment will power an intensive, state of the art pilot program that will train students in cyber security best practices to prepare them to secure critical computer networks in the public and private sectors.</p> <p>The new cyber security training initiative makes CCC the first and only community colleges system in the nation to adopt a high-quality training module from the U.S. military.</p> <p>The new immersive cyber security boot camp this spring, modeled after the intensive, six-month course prototyped with government personnel at Fort McNair, Washington, D.C. By forming a partnership with DoD to identify best practices, CCC will be training civilians and transitioning service members with active duty personnel on its campuses.</p>	City Colleges of Chicago	http://www.ccc.edu/news/Pages/CCC-Cyber-Security-Training.aspx

NON-FEDERAL PROGRAM/INITIATIVE	DESCRIPTION	HOST ORGANIZATION	LINK
Coastline Cybersecurity Apprenticeship Program	Learn cybersecurity techniques by taking classes while receiving hands-on training with a local employer. The apprenticeship program offers courses in separate tracks for both cybersecurity and Cisco networking. All courses are fully online with support for hands-on learning in the labs at our Garden Grove campus.	Coastline Community College	https://ccap-coastline.org/
Comic-Based Evaluation and Education (Comic-BEE)	Comic-BEE aims to help close this education and assessment gap by providing educators and employers a powerful tool to rapidly develop meaningful, targeted lessons that address specific topics in an interactive way. Comic-BEE is a web-based application that integrates the creation of lesson plans for specific instructional goals with the process of creating a choose your own adventure comic — a graphic, branching story where readers make choices on behalf of a character and the story changes based on the choices made.	SecureDecisions	http://securedecisions.com/secure-decisions-to-develop-comic-based-cyber-security-education-tool/

NON-FEDERAL PROGRAM/INITIATIVE	DESCRIPTION	HOST ORGANIZATION	LINK
Community College Cyber Summit (3CS)	<p>The Community College Cyber Summit (3CS) is the only national conference that focuses on bringing community colleges up to par with the best cybersecurity resources, curricula and technologies. Offering various tracks, 3CS addresses the needs of those interested in becoming involved in cybersecurity for the first time, those already in cybersecurity but wanting to increase their knowledge, and those wishing to address cybersecurity needs across the national critical infrastructure in sectors such as energy, emergency services, water systems, transportation, and banking services. The 4th annual conference takes place June 28-30 at Prince George's Community College and National Harbor, Maryland. To learn more, visit my3CS.org.</p>	National CyberWatch Center	https://www.nationalcyberwatch.org/event/community-college-cyber-summit-3cs-2/
CompTIA	<p>Founded in 1982, CompTIA brought together the IT channel in order to create an open dialogue between IT vendors and partners. They were officially established as the Association of Better Computer Dealers (ABCD). The association's earliest benefits included a membership directory and vendor chats. Two years later, ABCD held its first major conference, and out of this came the decision to establish a full-time staff and permanent headquarters.</p>	CompTIA	https://www.comptia.org/

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Cover 6 Solutions	<p>Cover6 Solutions, LLC is a Virginia-based Veteran-Owned Small Business that delivers trusted Information Security solutions and training. The Cover6 staff includes certified professionals with vast knowledge of Cybersecurity strategies, security policy creation and enforcement, penetration testing and vulnerability testing. Through a large following of over 5,000 cybersecurity professionals, Cover6 is also a respected source for education and training. Cover6 is committed to providing commercial and government industry partners the services and knowledge of security strategies and techniques that balance technology, people, and processes to ensure the protection of information.</p>	Cover 6 Solutions	https://www.cover6solutions.com/
Cybati	<p>Provider of cybersecurity education and research for critical infrastructure and control systems.</p>	Cybati	https://cybati.org/
Cyber Degrees	<p>Includes a comprehensive directory of colleges and universities offering cyber security degrees, as well as a wealth of information on career paths within the cyber security field, security clearances, the range of professional security certifications available, free online courses in security topics and more.</p>	Cyber Degrees	http://www.cyberdegrees.org/listings/

NON-FEDERAL PROGRAM/INITIATIVE	DESCRIPTION	HOST ORGANIZATION	LINK
Cyber Innovation Center	<p>The Cyber Innovation Center (CIC), located in Bossier City, Louisiana, is the anchor of the 3,000 acre National Cyber Research Park and serves as the catalyst for the development and expansion of a knowledge-based workforce throughout the region. As a 501c3 not-for-profit corporation, the CIC fosters collaboration among its partners and accelerates technology, research, and development. One of its primary missions is to develop a sustainable knowledge-based workforce that can support the growing needs of government, industry, and academia.</p>	Cyber Innovation Center	https://cyberinnovationcenter.org
Cyber Pathways Across Maryland	<p>This project will address the challenges of a lack of adequate pool of skilled cyber workers, the shortage of laboratory facilities to support cyber training, a lack of training in flexible modalities, and barriers to learning for underserved populations. Maryland is a national center of cybersecurity with over 130,000 IT jobs-49% above the national average-yet many workers find these careers difficult to enter. The grant creates the Cyber Technology Pathways Across Maryland (CPAM) Consortium consisting of 14 of the state's community colleges to spearhead the expansion of career pathways to address this workforce need--deepen our work to close the skills gap and connect more residents to high-quality employment.</p>	Cyber Technology Pathways Across Maryland	http://www.cyberpathwaysacrossmd.com/

NON-FEDERAL PROGRAM/INITIATIVE	DESCRIPTION	HOST ORGANIZATION	LINK
Cyber Patriot	CyberPatriot the National Youth Cyber Education Program created by the Air Force Association (AFA) to inspire K-12 students toward careers in cybersecurity or other science, technology, engineering, and mathematics (STEM) disciplines critical to our nation's future.	Air Force Association	https://www.uscyberpatriot.org/
Cyber Security Education	<p>CybersecurityEducation.org is an online directory of cyber security education and careers. We strive to be the finest resource available allowing prospective students to:</p> <p>Search for schools by location, degree and/or subject area, Compare and research schools, Request free information from schools, and Explore education options and career paths.</p>	All Star Directories, Inc.	http://www.cybersecurityeducation.org/
Cyber Start	CyberStart is a forward-thinking skills program designed to supply specialist cyber security education to young people across the US. Using a suite of online challenges, tools and games it aims to inspire the next generation of cyber security professionals while identifying the best and most talented young Americans.	SANS	https://www.sans.org/CyberStartUS

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Cyber Teacher Association	CTA is a trade association. Its members include K-12 teachers, college/university faculty, and administrators from diverse disciplines and backgrounds. CTA empowers its members by creating a robust network of educators to share ideas and innovation. In addition, members will be given access to multidisciplinary, project-driven curricula and innovative resources for the classroom. Successful implementation of these programs creates a robust cyber interstate – an academic pathway that provides multiple “on/off-ramps” for students to gain valuable skills that will prepare them for diverse, ever growing cyber career field.	Cyber Teacher Association	http://cyberteachers.org/
Cyber World Institute	CWI provides best in class comprehensive skills-based information security training programs via it's strategic partnership with the Michigan Cyber Range.	Cyberworld Institute	https://www.cyberworldinstitute.com/

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CyberBit Range	<p>Cyberbit Range is a hyper-realistic simulation platform enabling service providers, governments and consulting firms to set up and manage cyber security training centers. The platform enables cyber security professionals to participate in hands-on training in a real-world environment. The Range also serves as a testbed for assessing security tools and architecture in a safe and controllable environment.</p> <p>As the world's leading training platform, Cyberbit Range enables both cyber security staff and company executives to practice real-world incident management scenarios and significantly improve their performance when an actual security incident takes place. The Range accelerates qualification, reduces certification time, and produces staff which is more competent and up to date.</p>	Cyberbit	https://www.cyberbit.com/solutions/cyber-range/

NON-FEDERAL PROGRAM/INITIATIVE	DESCRIPTION	HOST ORGANIZATION	LINK
CyberCompEx	<p>CyberCompEx provides the tools for these Americans to develop the essential skills and to apply these skills to the workforce needs of government and critical infrastructure organizations in order to improve the cybersecurity posture of the networks and systems on which the U.S. defense and economy rely. This platform serves to connect the workforce with employers in the cybersecurity industry. CyberCompEx is managed by U.S. Cyber Challenge (USCC), a program of the Center for Internet Security (CIS), and in partnership with Monster Government Solutions. CyberCompEx is supported by the Science and Technology Directorate of the Department of Homeland Security.</p>	Center for Internet Security	https://www.cybercompex.org/
Cyberhub	<p>A virtual, nimble online community dedicated to developing the future workforce of ethical cybersecurity experts in California. The website "is a collaborative forum and action site for all those entities to work together.</p>	SynED	https://www.ca-cyberhub.org/

NON-FEDERAL PROGRAM/INITIATIVE	DESCRIPTION	HOST ORGANIZATION	LINK
CyberSeek	<p>The site uses data from Burning Glass, the Bureau of Labor Statistics, and certification providers to provide an interactive map where users can drill down on the demand for cybersecurity talent in states and more than 300 metropolitan statistical areas, including the supply of available workers and certifications in demand.</p> <p>Career pathways, based on real-life career patterns. The Career Pathway incorporates job categories from the NICE Cybersecurity Workforce Framework, which provides a common language to describe cybersecurity work.</p>	CompTIA	http://cyberseek.org/
CyberSTEM camp	CyberSTEM camp is a one-week commuter summer program at the University of Maryland, College Park for middle school (incoming 7th and 8th grade) girls who are interested in the growing field of cybersecurity. This 5 day experience provides hands-on activities focused on STEM and cybersecurity topics. Attendees will learn and apply basic concepts of programming, forensics, cryptography, and program management from a series of gaming, modeling, and simulation activities, which explore the interconnections of science, math, technology, and computers.	University of Maryland	http://cyber.umd.edu/education/cyber-stem
CyberVista	Provides personalized training programs that provide organizations with the people, knowledge and skills required to defend their most critical assets.	Graham Holdings	https://www.cybervista.net/

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Day of Cyber	An online cybersecurity career exploration and mentorship platform. The virtual and interactive experience is designed to raise career awareness and help build a pipeline of future cyber professionals by enabling students to test drive and live a day in the life of six NSA cyber professionals.	LifeJourney	https://nsadayofcyber.com/
DefCon	one of the world's largest hacker conventions, held annually in Las Vegas, Nevada, with the first DEF CON taking place in June 1993. Many of the attendees at DEF CON include computer security professionals, journalists, lawyers, federal government employees, security researchers, students, and hackers with a general interest in software, computer architecture, phone phreaking, hardware modification, and anything else that can be "hacked."	DEF CON Communications	https://www.defcon.org/
EC-Council	The EC-Council is best known for its professional certifications for the IT security field. It offers numerous certifications in a variety of fields related to IT security, including disaster recovery, secure programming, e-Business and general IT security knowledge. It also operates a series of IT Security conferences and the EC-Council University.	EC-Council	https://www.eccouncil.org/programs

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EnergySec	The Energy Sector Security Consortium, Inc. (EnergySec) is a United States 501(c)(3) non-profit corporation formed to support energy sector organizations with the security of their critical technology infrastructures. Through our membership program, we support collaborative initiatives and projects that help enhance the cybersecurity resiliency of these organizations.	Energy Sector Security Consortium, Inc	http://www.energysec.org/
Executive Women's Forum	The Executive Women's Forum is the largest member organization serving emerging leaders as well as the most prominent and influential female executives in the Information Security, Risk Management and Privacy industries.	Alta Associates	http://www.ewf-usa.com/
Florida Center for Cybersecurity	the 2013 Florida Legislature called on the state's Board of Governors to submit a plan for the creation of the Florida Center for Cybersecurity (FC2) -- a shared resource for Florida's stakeholders in education, government, defense and industry. Principally located at the University of South Florida, the center was officially created in 2014.	University of South Florida	http://thefc2.org/
GIAC Certifications	The mission of GIAC is to provide assurance to employers their people and prospective hires can actually do the job. To accomplish this mission, GIAC goes beyond theory and terminology and tests the pragmatics of Audit, Security, Operations, Management and Software Security tasks.	Global Information Assurance Certification	https://www.giac.org/certifications

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Girls Who Code	A nonprofit organization which aims to support and increase the number of women in computer science. The organization runs summer programs which teach computing and programming skills to high school girls.	Girls Who Code	https://girlswhocode.com/
Global Knowledge	Provides IT and Business training courses worldwide through training centers, private facilities, and the Internet.	Global Knowledge Training LLC	https://www.globalknowledge.com/us-en/
Guided Pathways to Success in STEM (GPSTEM) - Massasoit Community College	The model focuses on reducing the time to completion of certificates and degree programs, resulting in more students entering employment in the Commonwealth and/or transferring to baccalaureate education to add to their credentials.	Massasoit Community College	http://masscc.org/gpstem
HackEd	HackEd is a 6 week, intensive hands-on-keyboard cybersecurity training program. HackEd has become very competitive, with applicants vying for just 10-15 spots in each cohort. Their goal is to graduate professionals who are trained and ready to make an immediate impact in SOC/NOC Administration, Vulnerability Assessment, Forensics, Incident Response and junior Penetration Testing roles. Many candidates are suited for client-facing consultant or program manager roles.	HackEd	https://hackeducate.com/

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Hagerstown Community College Grant	<p>Partnership with the Johns Hopkins University to offer research opportunities and hands-on training to students studying cybersecurity at HCC; \$713,996 grant</p> <p>“The partnership with the Johns Hopkins University will add greatly to our capabilities in cybersecurity, providing opportunities for our students to interact with JHU’s world-class cybersecurity research faculty members associated with the Information Security Institute. It will also further strengthen the curriculum and opportunities for our STEM Technical Middle College students in the cybersecurity pathway.”</p>	Hagerstown Community College	http://www.hagerstowncc.edu/news-events/hcc-receives-grant-national-science-foundation-partner-jhu
Harper Community College Apprenticeship Program	<p>Harper College partners with large, medium, and small employers in a variety of industries in Registered Apprenticeship programs. These employers will hire you, pay you a salary with benefits, plus pay for your education. Harper's Registered Apprenticeship programs effectively meet the needs of employers, job seekers or career changers. Students with Harper College credit must have a minimum 2.0 GPA to be eligible for these programs.</p>	Harper College	http://goforward.harpercollege.edu/academic/apprenticeships/
Historically Black Colleges and Universities Cybersecurity Workforce Pipeline Consortium	<p>Brings together 13 HBCUs, two DOE labs, and the Charleston County School District with the goal of creating a sustainable pipeline of students focused on cybersecurity issues.</p>	HBUs	https://obamawhitehouse.archives.gov/the-press-office/2015/01/15/vice-president-biden-announces-25-million-funding-cybersecurity-educatio

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IA Education in 2- and 4-year institutions	The 2011 ITiCSE working group on information assurance (IA) education examined undergraduate curricula at the two- and four-year levels, both within and outside the United States (US).	Association for Computing Machinery	http://dl.acm.org/citation.cfm?id=2078860&CFID=776416881&CFTOKEN=69191567
IAPP	<p>The International Association of Privacy Professionals (IAPP) is a resource for professionals who want to develop and advance their careers by helping their organizations successfully manage these risks and protect their data. In fact, we're the world's largest and most comprehensive global information privacy community.</p> <p>The IAPP is the only place that brings together the people, tools and global information management practices you need to thrive in today's rapidly evolving information economy.</p>	International Association of Privacy Professionals	https://iapp.org/
IBM Academic Initiative: Cyber Security Innovation Program	The Innovation Program is designed to help facilitate collaboration with educators around the globe to teach students cyber security skills needed to be competitive in a rapidly changing work environment. With this program, IBM combines its leadership in developing and innovating security products, services and solutions for clients with its long-standing relationship with the academic and research community.	IBM	http://www-03.ibm.com/press/us/en/pressrelease/42479.wss

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ICS-ISAC	The Industrial Control System Information Sharing and Analysis Center (ICS-ISAC) is a non-profit, public/private Knowledge Sharing Center established to help facilities develop situational awareness in support of local, national and international security. At the ICS-ISAC facility operators, integrators, vendors, researchers and the organizations they support work together to share the means and methods necessary to maintain safe and stable communities.	Industrial Control System Information Sharing and Analysis Center	http://ics-isac.org/blog/
iDTech Camp – Cryptography and Cyber Security	Discover the history of encryption, which dates all the way back to the time of Caesar, yet is more relevant now than ever. Code your own encrypted message creator before sending secrets back and forth between your classmates, staying one step ahead of would-be cyber attacks. Develop impressive cryptographic abilities, then learn how to encrypt data with programs and computers and see how they relate to modern cybersecurity.	iD Tech	https://www.idtech.com/teens/tech-camps/courses/cryptography-cyber-security/?gclid=CjwKEAjw1a3KBRCY9cfsmdmWgQ0SJAATUZ8bsRQx8TpuFVoLNgEJmQhstSM9HkMMo1cfIkIUMHheSxoCPEfw_wcB
ifip Information Security Education Working Group	IFIP is the International Federation for Information Processing. This working group, which forms part of Technical Committee 11, focuses on Information Security Education. WG 11.8 is an international group of people from academia, military, government and private organizations who volunteer their time and effort into increasing knowledge in the very broad field of information security education.	International Federation for Information Processing	https://www.ifiptc11.org/wg118-events/wise11

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InfoSec Institute	Goal was to build a business by offering the best possible training experience for students. Provides hands on training in a wide range of security specific classes.	InfoSec Institute	https://www.infosecinstitute.com/
Institute for Information Infrastructure Protection (I3P)	The Institute for Information Infrastructure Protection (I3P) is a consortium of leading universities, national laboratories and nonprofit institutions dedicated to strengthening the cyber infrastructure of the United States. Since its founding at Dartmouth College in 2002, the I3P has been a cornerstone in the coordination of cyber security research and development. GW became host of the I3P on October 1, 2015 and manages the consortium in collaboration with SRI International.	George Washington University	http://www.thei3p.org/

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International Consortium of Minority Cybersecurity Professionals	The ICMCP was launched in 2014 to help bridge the ‘great cyber divide’ that results from the ongoing under-representation of minorities in the fast-growing field of cyber security. The ICMCP will tackle this ‘divide’ with scholarship opportunities, technical training programs, innovative outreach, mentoring and networking programs targeting minority cyber security professionals worldwide and by promoting academic and technical excellence in our tradecraft. Our management team consists of the board of directors, a larger advisory board and officers of ICMCP working closely with the executive director. In addition, our regional chapters will be instrumental in advising our executive director and promulgating our mission globally.	International Consortium of Minority Cybersecurity Professionals	https://icmcp.org/
iQ4	iQ4 creates a new approach to solving problems and collaboration. It was developed in response to the void of an effective tool for colleagues to work together on problem solving initiatives.	iQ4	http://www.iq4.com/about-iq4/index.php
ISACA	As an independent, nonprofit, global association, ISACA engages in the development, adoption and use of globally accepted, industry-leading knowledge and practices for information systems. Previously known as the Information Systems Audit and Control Association, ISACA now goes by its acronym only, to reflect the broad range of IT governance professionals it serves.	ISACA	http://www.isaca.org/

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ISC2	(ISC) ² offers cybersecurity training and education programs based on Common Body of Knowledge (CBK), a compendium of security topics. The official training seminars, textbooks, and study guides help you review and refresh your knowledge and help identify areas you need to study for an (ISC) ² certification exam.	ISC(2)	https://www.isc2.org/
ISSA	The Information Systems Security Association (ISSA) [®] is a not-for-profit, international organization of information security professionals and practitioners. It provides educational forums, publications, and peer interaction opportunities that enhance the knowledge, skill, and professional growth of its members.	Information Systems Security Association	http://www.issa.org/
itSM Solutions LLC	itSM Solutions LLC is an accredited content development company specializing in the creation of print, digital book and self paced video training solutions for Cybersecurity, Information Technology (IT), Programming, IT Service Management, IT Project Management and Business Management professionals. itSM's career pathway training programs lead to a professional diploma, certification or degree and have been adopted by the who's who of industry including HPE, Microsoft, Disney, Cisco, IRS, Navy, Lowes, Staples, Genzyme, Boeing, Intel, Molina Healthcare and many others.	AXELOS Limited	https://www.itmsolutions.com/

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Joint Task Force on Cybersecurity Education	The JTF efforts are within the scope of the Bright Information and Communications Technology (ICT) Initiative. The JTF grew out of the foundational efforts of the Cyber Education Project (CEP). The purpose of the JTF on Cybersecurity Education is to develop comprehensive model curricular recommendations for undergraduate program in cybersecurity education that will support future program development, and associated educational efforts. Prior ACM-lead JTFs that have worked to produce model curricula recommendations for undergraduate degree programs.	Association for Computing Machinery (ACM), IEEE Computer Society (IEEE CS), Association for Information Systems Special Interest Group on Security (AIS SIGSEC), and International Federation for Information Processing Technical Committee on Information Security Education (IFIP WG 11.8)	https://www.csec2017.org/
Learning Tree	Leading provider of individual, team, and organizational-wide IT training and management training to business and government organizations worldwide. Over 2.4 million professionals have enhanced their skills through the extensive library.	Learning Tree International, Inc.	https://www.learningtree.com/training-directory/cyber-security-training/
LifeJourney	LifeJourney is an online experience for schools that empowers students to test-drive future STEM careers and learn directly from top industry professionals. Our mission is to provide students in schools across the nation the opportunity to learn about STEM careers, develop new skills, and understand industry challenges with the goal of helping them find their own passion.	LifeJourney	https://www.lifejourney.us/

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MidWest Cyber Center (MC2)/ Cybersecurity Analyst Registered Apprenticeship	This Registered Apprenticeship is a unique, flexible training system that combines job related technical instruction with structured on-the-job learning experiences and online coursework. Apprentices start working from day one with incremental wage increases as they become more proficient on the job.	Midwest Cyber Center (MC ²)	https://midwestcybercenter.org/educate-apprenticeship/
MITRE Cyber Academy	In support of STEM outreach, MITRE and our partners are hosting the seventh annual national Capture the Flag (CTF) competition. This CTF competition aims to encourage and promote interest in cybersecurity. United States-based High school and undergraduate college students will have the opportunity to compete in cybersecurity challenges to gain real-life experience and win national coverage to make a huge impact on our cyber talent pipelines.	MITRE Corporation	http://mitrecyberacademy.org/competitions/
Molecular Sciences Software Institute (MoSSI)	The Molecular Sciences Software Institute (MoSSI) will become a focus of scientific research, education and scientific collaboration for the worldwide community of computational molecular scientists. The MoSSI aims to reach these goals by engaging the computational molecular science community in multiple ways to remove barriers between innovations that often occur in small single-researcher groups and the implementation of these ideas in software that is used in the production of science by the entire community.	The Molecular Sciences Software Institute	http://molssi.org/

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National Academy Study on Professionalizing the Nation's Cybersecurity Workforce	This report examines workforce requirements for cybersecurity and the segments and job functions in which professionalization is most needed; the role of assessment tools, certification, licensing, and other means for assessing and enhancing professionalization; and emerging approaches, such as performance-based measures.	National Academy of Sciences	https://www.nap.edu/catalog/18446/professionalizing-the-nations-cybersecurity-workforce-criteria-for-decision-making
National Association of State Chief Information Officers (NASCIO)	Founded in 1969, the National Association of State Chief Information Officers (NASCIO) is a nonprofit, 501(c)3 association representing state chief information officers and information technology executives and managers from the states, territories, and the District of Columbia. The primary state members are senior officials from state government who have executive-level and statewide responsibility for information technology leadership. State officials who are involved in agency level information technology management may participate as associate members. Representatives from federal, municipal, international government and non-profit organizations may also participate as members. Private-sector firms join as corporate members and participate in the Corporate Leadership Council.	National Association of State Chief Information Officers NASCIO	https://www.nascio.org/

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National Collegiate Cyber Defense Competition	Provides institutions with an information assurance or computer security curriculum a controlled, competitive environment to assess their student's depth of understanding and operational competency in managing the challenges inherent in protecting a corporate network infrastructure and business information systems.	Center for Infrastructure Assurance and Security at the University of Texas at San Antonio	http://www.nationalccdc.org/
National Coordinating Council for Career and Technical Student Organizations	The National Coordinating Council for Career and Technical Student Organizations (NCC-CTSO) is a coalition of national career and technical student organizations (CTSOs) serving career and technical education students and teachers in one or more of the 16 Career Clusters® identified in The National Career Clusters® Framework.	Career and Technical Student Organizations	http://www.ctsos.org/
National Cyber League	Founded in May 2011 to provide an ongoing virtual training ground for participants to develop, practice, and validate their cybersecurity knowledge and skills using next-generation high-fidelity simulation environments.	NCL	https://www.nationalcyberleague.org/

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<p>National Forum for Public Private Collaboration</p>	<p>Vision: Leading the advancement of cyber resilient service management through collaborative innovation, securing and strengthening critical infrastructure across every government and industry sector worldwide.</p> <p>Forum Mission: To enhance and maintain Critical Infrastructure Resilience against all Cyber Risks. We are not a standards organization. We help participants take advantage of existing standards.</p> <p>Objective: To serve as the trusted global Forum to facilitate open dialogue, critical insight, and thought exchange enabling stakeholders in the delivery of flexible and adoptable cyber resilience solutions that support organization mission and goals. The Forum's collaborative activities enable private and public organizations to share and validate lessons learned, set strategy to improve the delivery of cyber secure and resilient services, thereby enhancing the ability to deliver their mission. Deliverables include the continual improvement of the Foundation for Public Private Collaboration containing lessons learned, best practices, standards and frameworks that organizations find helpful to operationalize cyber resilient service management.</p>	<p>National Forum for Public Private Collaboration</p>	<p>https://nfppc.org/</p>

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National Integrated Cyber Education Research Center (NICERC)	NICERC develops innovative cyber-based curricula for use by K-12 teachers across the country. The curricula developed by NICERC is free to any K-12 educator within the United States and comprises the Cyber Interstate – a robust library of cyber-based curricula that provides opportunities for students to become aware of cyber issues, engage in cyber education, and enter cyber career fields.	Cyber Innovation Center	https://nicerc.org/about/
Native Girls Code	Focused on STEAM (Science, Technology, Engineering, Art & Math) focused curriculum, with an emphasis on computer coding, media and information technology; Expands traditional ecological knowledge, connects current technologies with indigenous technologies, fun field trips, team building and leadership skills; Females 12-18.	Seattle Native Circle	http://thenativecircle.org/2016/06/youthsummer-native-girls-code-and-arts-cultural-summer-workshop-for-native-youth/
New Horizons	With over 7,000 Guarantee-To-Run (GTR) application, technical, and business skill courses, New Horizons is the largest independent training company in the world.	NH Learning Solutions	https://nhlearningsolutions.com/ResourceCenter/NewCourses/tabid/3191/Default.aspx
New Mexico Information Technology Apprenticeship Program (NMITAP)	On-the-job learning and job related technical instruction will be offered to 300 new and incumbent workers in 5 career paths in the Albuquerque area. The project will produce the first RACC Registered Apprenticeships in the state and is designed to be scalable statewide through a partnership and infrastructure developed with the DOL TAACCCT-funded SUN PATH consortium of community colleges working in IT and Health	CNM Ingenuity	https://nmitap.org/

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NICE Challenge	The NICE Challenge Project is operated by California State University, San Bernardino with funding from the NSA and the National Institute of Standards and Technology (NIST). The program creates realistic scenarios with virtual hands-on challenges to help teach and assess not only students' cyber skills, but also brings real workforce experiences to them. "The NICE Challenge Project provides students an opportunity to experience the workforce before entering it. This helps students identify potential gaps in their knowledge, skills, and abilities and to address them".	California State University San Bernardino	https://nice-challenge.com/
Novalabs	NOVA Labs is a membership-driven all-volunteer makerspace based in Reston, Virginia that was founded in 2011 with the purpose of empowering everyone to Rediscover the Joy of Making Things!	WGBH Educational Foundation	http://www.nova-labs.org/blog/
NPower, Inc. (Brooklyn, NY)	NPower's Technology Service Corps program builds brighter futures for veterans through free technology and professional skills training. We offer free hands-on tech training, professional skills development, mentoring, apprenticeships and job placement services helping to fill the 50% of STEM jobs (science, technology, engineering, math) that don't require a four-year college degree.	NPower, Inc.	http://www.npower.org/UploadedDocuments/TSC%20Assets/North%20Texas/NP-TSC-Student-Intern-Dallas-v5-Readers-NoBleed.pdf

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PDX Cyber Camp	<p>The camp’s goal is to provide motivated high school students with a hands-on, introductory experience to cybersecurity principles, including hands-on implementation of cybersecurity policies and practices in Windows and Ubuntu operating systems. These are core skills applicable in any cybersecurity career, as well as providing students with an “on-ramp” to further high-school educational cybersecurity activities such as the “capture the flag” competitions.</p>	Software Diligence Services	http://www.software Diligence.com/pdxcybercamp/
Pearson Vue	<p>Pearson IT Certification is the leader in IT certification learning solutions, with a long tradition of delivering proven learning tools and educational training materials that have helped certification exam candidates succeed. Learn from world-renowned authors such as David Prowse, Wendell Odom, Kevin Wallace, Brien Posey, Sander van Vugt, and Thomas Erl and a suite of products and solutions that address the learning, preparation, and practice needs of a new generation of certification candidate. Pearson IT Certification is your source for the highest-quality learning solutions.</p>	Pearson Education	http://www.pearsonitcertification.com/promotions/it-certification-video-training-study-for-your-cisco-140506
Pennsylvania State University Applied Research Laboratory	<p>As a University Center of Excellence in naval science, systems engineering and technologies, with preeminence in undersea missions and related areas, the Applied Research Laboratory provides solutions to problems in national security, economic competitiveness, and quality of life.</p>	PennState	https://www.arl.psu.edu/about.php

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Regional Innovation Strategies (RIS) Program	Expansion of its Venture Commercialization Model (V-COMM) to drive technology development and develop entrepreneurial practices in the areas of medical technology, vaccines, and bioHealth cybersecurity within the biohealth industry of Maryland.	BioHealth Innovation	http://www.biohealthinnovation.org/biohealth-news/bhi-press-releases/6099-biohealth-innovation-inc-awarded-495k-grant-by-u-s-economic-development-administration-eda
Robert Noyce Teacher Scholarship Program	Seeks to encourage talented science, technology, engineering, and mathematics (STEM) majors and professionals to become K-12 mathematics and science (including engineering and computer science) teachers. The program invites creative and innovative proposals that address the critical need for recruiting and preparing highly effective elementary and secondary science and mathematics teachers in high-need local educational agencies.	National Science Foundation	http://app.nsfnoyce.org/
SANS	SANS is the most trusted and by far the largest source for information security training and security certification in the world. It also develops, maintains, and makes available at no cost, the largest collection of research documents about various aspects of information security, and it operates the Internet's early warning system - the Internet Storm Center. Its programs now reach more than 165,000 security professionals around the world. A range of individuals from auditors and network administrators, to chief information security officers are sharing the lessons they learn and are jointly finding solutions to the challenges they face.	SANS	https://www.sans.org/about

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Scholarships for Women Studying Information Security (SWSIS)	SWSIS is a partnership of Applied Computer Security Associates (ACSA) and CRA-W, with sponsorship from ACSA, Hewlett-Packard Enterprise (HPE) and Symantec. ACSA has been providing these scholarships since 2011. With the addition of Hewlett Packard Enterprise's multi-year financial commitment to this program starting with the 2014-15 academic year, and Symantec's addition in 2017, ACSA was able to increase the number of scholarships, in turn helping to increase the number of women in the field.	Applied Computer Security Associates (ACSA) and CRA-W	http://cra.org/cra-w/scholarships-and-awards/scholarships/swsis/
Science of Security and Privacy	In 2016, the Science of Security (SoS) initiative increased in size and scope as members of academia, industry, and government continued to research and collaborate under the sponsorship of the National Security Agency (NSA) Research Directorate. The SoS initiative focused on producing scientifically supported cybersecurity advancement in the establishment of cybersecurity as a science. By replacing ad hoc and common practice approaches to security with scientifically supported best practice methods established through rigorous research, SoS is developing strategic rather than tactical methods of approaching cybersecurity. These strategic results are needed to transform cybersecurity from a cost-disadvantaged, reactionary field to one that is efficient and proactive in both attack and defense.	Cyber-Physical Systems Virtual Organization	https://cps-vo.org/sos/annualreport2016

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Secure Innovation	For over a decade, Security Innovation has been securing the world's most prolific and trusted software in cars, laptops, ATMs, breathalyzers, anti-virus programs, and more. Organizations around the globe trust our security experts to not only keep their organizations secure, but their consumers as well.	Security Innovation, Inc.	https://www.securityinnovation.com/
SecureSet	SecureSet is building an end-to-end community focused on fulfilling the promise of cybersecurity.	SecureSet	https://seureset.com/
Security University	Security University is the leading provider of Qualified Hands-On Cybersecurity Education, Information Assurance Training and Certifications for IT and Security Professionals in the world. The mission of Security University is striving to provide our students with the highest quality Cybersecurity educational available through our Information Security and Information Assurance Training and Certifications for IT Security Professionals Worldwide.	Security University	http://www.securityuniversity.net/index.php
Silicon Valley Technical Apprenticeship Pathway	SVTAP's (Silicon Valley Technical Apprenticeship Pathway) mission is to transform student experiences through high-quality, employers sponsored hands-on training program leading to employment or advancement with our sponsoring employer-partner.	Mission College	http://missioncollege.edu/community/comm_ed/apprenticeships.html

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Skills Common	<p>Contains free and open learning materials and program support materials for job-driven workforce development. The Open Educational Resources (OER) are produced by community colleges across the nation and can be found, reused, revised, retained, redistributed and remixed by individuals, institutions, and industry.</p> <p>SkillsCommons.org is designed and managed by the California State University and its MERLOT program for the Department of Labor's TAACCCT program under a 4 year cooperative agreement. The California State University/MERLOT team works with other TAACCCT partners to support the TAACCCT grantees in the creation and contribution of quality OER that are stored in the SkillsCommons online library.</p>	The California State University/MERLOT	http://skillscommons.org
STEMiversity	STEMiversity is a non-profit organization headquartered in Milledgeville, Georgia on the grounds of the historic Central State Hospital Campus. Established to provide state-of-the-art, hands-on STEM training to underrepresented students in middle school through college, as well as, to professionals. The training facility includes classroom and lab work stations. Instruction is delivered by professionals with academic and field experience.	STEMiversity	http://www.stemiversity.org/

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Symantec Cyber Career Connection (SC3)	<p>The program provides underrepresented young adults and veterans with targeted education, training and certifications that position them to fill in-demand cyber security jobs and enter long-term careers. At the core, the SC3 curriculum focuses on both technical and soft skills including specialized training in cyber security principles, software and computer programs, methods and tools, as well as business foundations, resume and interview training. Following classroom training, students are placed in on-the-job training that afford them the opportunity to apply what they have learned in a business setting. After completing this phase, program graduates have opportunities to interview with Symantec’s network of customers and partners for full time positions and build their long-term careers.</p>	Symantec	https://www.symantec.com/about/corporate-responsibility/your-information/cyber-career-connection
TechFoundry	<p>Tech Foundry is on a mission to build the most dynamic and fluid IT workforce development and training programs ever created. Driven by specific employer demands, they combine hands-on skill focused technical training with professional development, which aids them in the overarching duty to elevate an under-served, at-risk population into tomorrow’s IT workforce.</p>	Tech Foundry	http://www.thetechfoundry.org/

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Tenable	<p>Tenable™ is the Cyber Exposure company. Over 23,000 organizations of all sizes around the globe rely on Tenable to manage and measure their modern attack surface to accurately understand and reduce cyber risk. As the creator of Nessus®, Tenable built its platform from the ground up to deeply understand assets, networks and vulnerabilities, extending this knowledge and expertise into Tenable.io™ to deliver the world’s first platform to provide live visibility into any asset on any computing platform. Tenable customers include more than 50 percent of the Fortune 500, large government agencies and mid-sized organizations across the private and public sectors.</p>	Tenable	http://www.tenable.com/
The National Physical Science Consortium	<p>An organization of leading universities, national laboratories, and corporation that aims to increase the number of qualified U.S. citizen Ph.D.s in the physical sciences and related engineering fields. It emphasizes recruitent of a diverse applicant pool of women and historically underrepresented minorities.</p>	National Security Agency	http://www.npsc.org/

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Tidewater	<p>Tidewater Community College’s Apprenticeship Institute partners with Hampton Roads employers to develop tailored apprenticeship programs that result in your desired workforce outcome.</p> <p>At no cost to the employer, apprenticeship consultants are available to guide companies through the registered apprenticeship development process from initial concept to full recognition by the Virginia Department of Labor and Industry and/or the U.S. Department of Labor.</p>	Tidewater Community College	https://www.tcc.edu/tcc-news/cybersecurity-apprenticeship
Train Academy of Computer Education (ACE)	<p>TrainACE is the established and award-winning training organization that provides excellent customer experiences, unbeatable prices and high-quality training. They have a long-standing history of customer satisfaction as evidenced by our online reviews, and pride ourselves on being able to provide top-quality education at an amazing value.</p>	TrainACE	http://www.trainace.com/courses/ccent/
Transmosis	<p>Transmosis is an organization founded by Silicon Valley Technology Entrepreneurs dedicated to the research and application of technology to strengthen the American workforce. Transmosis is a nationally recognized Workforce Intermediary focused on enabling companies to build a pipeline of skilled labor by helping individuals address skill gaps through state and federal training dollars.</p>	Transmosis, Inc.	http://transmosis.com/

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Tranzed	Tranzed’s apprenticeships are based on a proven model, filling the education void not met by high schools, nor by higher education, despite our pushing young people to get college degrees. Tranzed is patterned after 3aaa in the UK in which 100,000 employers have jobs offered, and supported by the TranZed Alliance and The Children’s Guild. The jobs are there...high quality but unfilled. The workforce is there...motivated but untrained. In the past, no bridge existed between the two.	Tranzed Alliance	http://www.tranzed.org/tranzed-apprenticeship-services/
UMBC Training Centers	UMBC Training Centers is a premier provider of professional and technical training for individuals, businesses, non-profit organizations and government agencies. UMBC Training Centers is a part of the University of Maryland, Baltimore County (UMBC) and is organized as a not-for-profit organization owned by UMBC.	University of Maryland, Baltimore County	https://www.umbctraining.com/Home
University of the Virgin Islands Consortium Enabling Cybersecurity Opportunities & Research (CECOR)	The University of the Virgin Islands was awarded a five-year, \$1.3 million grant from the U.S. Department of Energy’s (DOE) National Nuclear Security Administration (NNSA), as part of a White House strategy to strengthen cybersecurity expertise in America. The UVI CECOR program’s main objective is to develop future cybersecurity experts with the support of the Consortium’s K-20 education pipeline within the Virgin Islands.	University of the Virgin Islands	http://cset.nsu.edu/programs/k20cybersecurity/aboutus.php

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US Cyber Challenge Camp	USCC Summer Camps feature one week of specialized cybersecurity training that includes workshops, a job fair, and a culminating “Capture the Flag” competition. The workshops are lead by college faculty, top SANS Institute instructors, and cybersecurity experts from the community. The workshops and presentations focus on a variety of topics ranging from intrusion detection, penetration testing and forensics. Participants can also participate in a job fair that provides them the opportunity to meet with USCC sponsors and discuss potential employment. The weeklong program ends with a competitive “Capture the Flag” competition and an awards ceremony attended by notables in the cybersecurity industry and government.	Center for Internet Security	https://www.uscyberchallenge.org/cyber-camps/
Wake Technological Community College’s Project SECURE (Supporting and Enhancing CyberSecurity through Upwardly-mobile Retraining and Education)	Thanks to the largest grant Wake Tech has ever received, qualified students can prepare for in-demand tech jobs, and all coursework, books, registration and testing fees will be covered. The NC Works Career Center will provide job placement support, and local employer partners including SAS, IBM and HCL Technologies are eager to hire trained talent.	Wake Technological Community College	https://www.waketech.edu/programs-courses/non-credit/enhance-your-career/career-pathways/financial-resources/tech-hire

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Washington Technology Industry Association (WTIA) - Apprenti instuction	Apprenti is the only tech apprenticeship accredited by the State of Washington and a first of its kind for the industry. Apprenti will recruit, train, and place at least 600 new tech workers during the pilot. This program is focused on recruiting underrepresented groups including women, minorities and veterans, helping bridge the skills and diversity gap and providing trained pathways into the state's high-wage tech sector.	Apptenti	https://www.washingtontechnology.org/ and https://apprenticareers.org/
Women in Cybersecurity	The WiCyS was launched in 2013 for a collaborative project between Tennessee Tech, University of Memphis (Dr. Judith Simon) and Jackson State Community College (Dr. Tom Pigg and Ms. Lisa Matlock). Since then, with support from various industry, government and academic partners, WiCyS has become a continuing effort to recruit, retain and advance women in cybersecurity. It brings together women (students/faculty/researchers/professionals) in cybersecurity from academia, research and industry for sharing of knowledge/experience, networking and mentoring.	Tennessee Tech University	https://www.csc.tntech.edu/wicys/about/
Women in Security and Privacy	Advancing women to lead the future of provacy and security.	Women in Security and Privacy	www.wisporg.com
Women's Society of Cyberjutsu	The Women's Society of Cyberjutsu (WSC) is a non-profit, 501c(3) organization passionate about helping and empowering women to succeed in the cybersecurity field.	Women's Society of Cyberjutsu	www.womenscyberjutsu.org

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World Conference on Information Security Education (WISE)	WISE is an international group of people from academia, military, government and private organizations who volunteer their time and effort into increasing knowledge in the very broad field of information security education.	International Federation for Information Processing	https://www.ifiptc11.org/wg118-events/wise11