

Cyber Vigilance: The Virginia Way

First state in the nation to...

- ✓ Adopt National Institute of Standards and Technology Cyber Framework
- ✓ Declare itself an Information Sharing and Assessment Organization (ISAO)
- ✓ Require enhanced security on debit or credit card transactions
- ✓ Enact landmark digital identity legislation, now used as the model by other states
- ✓ Register apprenticeships for cyber security jobs (first in Virginia history)
- ✓ Establish a pay-for-performance workforce training program
- ✓ Sign an MOU with the Government of Victoria (Australia) enabling innovation through research and development and the generation of a pipeline of future technologies; promoting sharing of best practices; and enhancing cybersecurity policy
- ✓ Host a Cyber Physical Systems Summit to build awareness of the growing challenges associated with securing autonomous systems, critical infrastructure, and the Internet of Things.

Cyber Policy Leadership

Executive Order #8 Launched Cyber Virginia and the Cyber Security Commission

Executive Directive #5 Mandates a clear path to secure consumer transactions using authentication technology, such as "chip and pin"

Executive Directive #6 Improved cyber protocols, expanded cyber related risk management activities and conducted inventory of the Commonwealth's critical and sensitive systems

HB1946/SB919 Sealed administrative subpoenas for electronic communications and social networking data

SB1121 Defined IT responsibilities of agency directors

HB1562/SB814 Electronic identity management standards; liability

SB1307 Clarified language for search warrants for seizure, examination of computers, networks, and other electronic devices

SB1109 Secured FOIA exemptions for meetings and discussions which include sensitive information regarding cyber security vulnerabilities

SB1129 Secured FOIA exemptions for plans, information, or responses to terrorism regarding cyber security threats and vulnerabilities

HB924 Allowed providers to verify the authenticity of reports or records with an affidavit from the custodian of the records

2015

2016

CYBER VIRGINIA CYBER VETERANS INITIATIVE

"We will continue to work with our partners and the private sector to build innovative pathways for job training and career development for veterans in Virginia."

GOVERNOR MCAULIFFE

Learn more at
cybervets.virginia.gov

CYBER VIRGINIA CYBER SECURITY JOBS

17,000

Open Cyber Jobs in Virginia

\$88,000

Average Cyber
Starting Salary in Virginia

View online jobs postings at
cyberjobs.virginia.gov



As chair of the National Governors Association, Governor McAuliffe has made it his priority to develop strategies for strengthening cyber security practices as they relate to state IT networks, health care, education, public safety, energy, transportation, critical infrastructure, economic development and workforce.

<https://www.nga.org/MeetTheThreat/>

CYBER JOBS: VIRGINIA CYBER FIRMS ARE HIRING!
Virginia has the most cyber security companies per capita in the nation.

Building the Cyber Ecosystem

MACH37: Innovative accelerator for emerging cyber security firms. To date Mach37 has launched 35 leading edge companies in Virginia; www.mach37.com

Virginia Cyber Security Partnership: Established by Governor McAuliffe; researches technologies to safeguard citizens and agencies from cyber attacks against smart vehicles

Cyber Portal: Public website provides reputable information on cyber standards and best practices for citizens, businesses, and government organizations; cyberva.virginia.gov

Cyber Jobs: Connecting Virginia cyber professionals with Virginia cyber jobs; cyberjobs.virginia.gov

Cyber security enrollment at Virginia Community Colleges is up 44% over spring 2016 and 668% since the beginning of the McAuliffe Administration

Cyber Attacks Thwarted In the Commonwealth

70,861,627

Attack attempts (4 per second)

679,363,667

Spam messages blocked

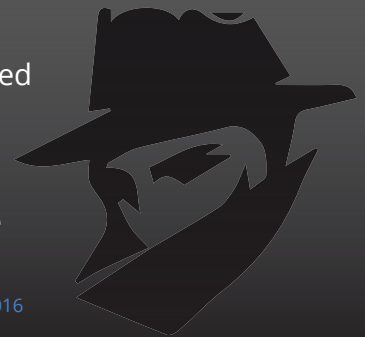
61,731

Pieces of malware blocked

198

Attack attempts became cyber security incidents

Data collected January - September 2016



Virginia is Training its Workforce Now

Innovative cyber training to speed worker readiness for the New Virginia Economy:

- **Cyber Boot Camps:** Cyber Education training for high school teachers
- **Conference on Cyber and Education:** Discussion and education on the importance of training for cyber careers
- **Cyber Veterans Initiative:** an innovative initiative to provide veterans with access to cyber security training opportunities and resources to help veterans enter the Virginia cyber security workforce; cybervets.virginia.gov
- **Cyber Security Higher Education in Virginia:** Many universities and colleges around the state are meeting the workforce needs by enrolling students in cyber and IT pathways. New programs are developed every year; cyberva.virginia.gov/colleges/
- **Cyber Range:** Secure platform built for training, research, and collaboration
- **NSA Day of Cyber:** Participating students will take part in rigorous, real-life virtual cyber scenarios, discover the skills and tools used by NSA cyber professionals, and explore the vast number of careers in cyber security
- **Cyber Apprenticeships:** Registered apprenticeship programs through Virginia Department of Labor and Industry to connect cyber companies with candidates looking for cyber careers

Cyber Centers of Academic Excellence

Through a rigorous certification process, the U.S. National Security Agency and Department of Homeland Security certify post-secondary schools that excel in cyber defense training as “**Cyber Defense, Centers of Academic Excellence.**”

George Mason University

*Hampton University**

James Madison University

Longwood University

Marymount University

Norfolk State University

*Virginia Polytechnic Institute**

Radford University

Northern Virginia Community College

Lord Fairfax Community College

Tidewater Community College

* Denotes multiple Cyber Centers of Academic Excellence

FOR MORE INFORMATION

visit <http://cyberva.virginia.gov> or call **804-786-9579**