



## **Cyber Intern Programs**

# **DEFEND TODAY, SECURE TOMORROW**

JANUARY 2020

# WE... DEFEND. RESPOND. ENFORCE. PREVENT. PROTECT.

The Cybersecurity and Infrastructure Security Agency (CISA) is the Nation's risk advisor, working with partners to defend against today's threats and collaborating to build more secure and resilient infrastructure for the future.

The threats we face—digital and physical, man-made, technological, and natural—are more complex, and the threat actors more diverse, than at any point in our history. CISA is at the heart of mobilizing a collective defense as we lead the Nation's efforts to understand and manage risk to our critical infrastructure.

#### IT TAKES A GREAT TEAM TO PROTECT A GREAT NATION

At CISA, the ability to protect our Nation's resiliency starts with those ready to grow their cybersecurity careers on a team in which innovation and agility are mission critical. Join us! CISA is currently recruiting students and recent graduates who are interested in the following cyber areas:

- Cyber Incident Response
- Digital Forensics and Forensics Analysis
- Policy and Governance
- Software Assurance
- Intelligence and Investigation
- Networks and Systems Engineering
- Cyber Risk and Strategic Analysis
- Vulnerability Detection and Assessment
- Threat Vulnerability Analysis and Research
- Cyber Education,
   Awareness and Outreach

#### A DAY IN THE LIFE OF A CISA CYBER INTERN

CISA's cyber interns will grow their skills and enhance their career potential as they are integrated onto teams working closely with cyber professionals on mission-focused projects, while learning in a fast-paced, technology-evolving environment. As an intern you can look forward to a robust offering of activities and events such as exposure to cybersecurity activities outside your immediate assignments, hearing program officials discuss major CISA and DHS initiatives to keep our Nation's systems secure, and meeting intern alumni who are now employees. You'll also have the opportunity to tour our labs and watch floor, participate in informal brown bags with senior management, and attend exciting local conferences and forums to hear from experts and newsmakers in other executive agencies, Congress, industry, academia, and think tanks.



At CISA, you will be working at the forefront of the cybersecurity challenges facing our Nation and you will have access to the most cutting-edge technology.

## OUR CYBER INTERNS HAVE WORKED ON EXCITING PROJECTS SUCH AS:

- Developed a DNS playbook for threathunting tactics.
- Analyzed and developed social media strategy for cyber team.
- Built first sector-specific report highlighting Cyber Hygiene vulnerability data.
- Briefed functional team on DNS over HTTPS impacting "incident response" and "threat hunting" capabilities.
- Created operational Splunk dashboards for use by Network Analysis teams.
- Developed Splunk queries for use during IR/Threat Hunting engagement.
- Analyzed cybersecurity publication team products to identify gaps in updating relevant mitigation information.
- Collaborated across teams with developers and engineers on the Forensic Analysis
   Repository (FARM) team to improve Malware capability.
- Automated malware analysis for dynamic and static analysis tools and integration of future extensibility.
- Coordinated with a FARM team on HERWARE 2.0 in support of the Malware federation in AWS (CSP) to enhance Malware analyst information sharing capability.
- Built a virtual environment that replicated adversary and victim infrastructure and executed attacks against the virtual victim infrastructure for the purposes of studying the features of the attack and the virtual footprint it leaves behind.
- Authored System Design Documentation (SDD) capturing key attributes to support next generation system engineering and designs associated with HERWARD implementation.

### SELECTED EVENTS FOR CYBER INTERNS

| Event  | What you'll see/hear/learn   |
|--|--|
| CISA<br>Assessments<br>Tour  | <ul> <li>&gt; Vulnerability scanning and testing</li> <li>&gt; Penetration testing</li> <li>&gt; Web application scanning and testing</li> <li>&gt; Wireless discovery and identification</li> </ul>   |
| Automated<br>Indicator<br>Sharing (AIS)                              | <ul> <li>What AIS is and why it's important</li> <li>How AIS works</li> <li>What STIX and TAXII are</li> </ul>   |
| Continuous<br>Diagnostics<br>& Mitigation<br>(CDM) Overview          | How CISA helps agencies manage risk by examining:  > WHAT is on their network > WHO is on their network > WHAT IS HAPPENING on their network   |
| CISA Watch<br>Floor Tour   | <ul> <li>EINSTEIN Intrusion Detection         <ul> <li>Prevention</li> </ul> </li> <li>CDM Agency Dashboards</li> <li>Space Weather</li> <li>Map of incidents across the United States</li> <li>Multi-State Information Sharing &amp; Analysis Center (MS-ISAC)</li> </ul> |
| National<br>Cybersecurity<br>Protection<br>System (NCPS)<br>Overview | Integrated "system of systems" that operates across the dot-gov networks to:  > Detect and prevent intrusions > Support analytics and information sharing  |

> How critical infrastructure

is defined, and why that

> How DHS works with state and

voting systems

designation is so significant

local governments to secure their

> The range of services that DHS

offers to election stakeholders

**Election Task** 

Force Talk

### **JOIN OUR TEAM**

There are many paths for students and recent graduates to pursue an opportunity with CISA, and to help protect the homeland from cyber threats. An internship with CISA will provide you with hands-on opportunities to challenge and build your technical skills. As a federal intern, you will join a team of public servants who use their cybersecurity acumen every day to adapt and develop innovative ways to protect and enhance the resilience of the Nation's physical and cyber infrastructure.

#### ■ Pathways Interns & Recent Graduates

Paid opportunities for enrolled (high school to graduate level) and recently graduated students to work at CISA to enhance their skills and career potential. Opportunities are posted on USAJOBS.gov; keyword search for "Cybersecurity and Infrastructure Security Agency."

#### Presidential Management Fellows (PMF)

The Federal Government's premier leadership development program for advanced degree candidates. Applications are accepted once per year. Program eligibility and application information is available at www.pmf.gov.

#### CyberCorps<sup>®</sup> Scholarship for Service (SFS)

Provides scholarships to students in cyber-related degree programs in exchange for a commitment to employment with government organizations. More information is available at www.sfs.opm.gov.

#### **MISSION**

CISA partners with industry and government to understand and manage risk to our Nation's critical infrastructure.

#### VISION

Secure and resilient infrastructure for the American people.

#### **PERKS**

Note: Some benefits are not available for time-limited, summer, or volunteer interns.



Exciting, challenging, and innovative work that includes goal-oriented projects, networking opportunities, recognition, and teamwork and camaraderie.



Working collaboratively with private industry, law enforcement, and top-tier researchers.



Flexible work schedules, situational telework, and casual work environments.



Competitive salaries that include annual leave, sick leave, and paid federal holidays.



Comprehensive benefits options, including medical, dental, vision, life and long-term care insurance, flexible spending accounts (FSA), and the Thrift Savings Plan (TSP).



Access to an Employee Assistance Plan (EAP).



Educational and development opportunities such as access to the FedVTE training portal, mentoring programs, leadership programs, and higher education fairs.



Commuter transit monthly subsidy.



Federal employees may qualify for a cybersecurity skill incentive program that pays employees for relevant, approved cyber security certifications and covers the cost of the certification exams.

#### JOIN OUR TEAM, AND GROW YOUR CAREER WITH CISA

- Please send questions to: StudentCareers@cisa.dhs.gov
- Learn More: Visit www.cisa.gov
- Follow Us:
  - in Cybersecurity and Infrastructure Security Agency



**Equal Employment Opportunity (EEO)** 

CISA is an equal opportunity employer. Please visit www.dhs.gov/eeo for information about EEO as a fundamental right of all employees and applicants for employment. U.S. Citizenship is required.