Virtual Institutes for Cyber and Electromagnetic Spectrum Research and Employ (VICEROY™)

Pioneering Mission-Focused Cyber-Spectrum Education for the DoD Workforce

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ASD(CT), Integrated Sensing and Cyber
Office of the Undersecretary of Defense for Research and Engineering

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VICEROY Vision, Mission, and Approach

Vision

Recognized by DoD as the leading <u>mission-focused</u> experiential cyber-spectrum operations education and internship pipeline producing job-ready leaders in military, civilian, and industrial base sectors.

Mission

<u>Establish academic cyber institutes</u> at institutions of higher learning, to <u>develop foundational expertise in critical cyber operational skills</u> for future military and civilian leaders of the Armed Forces and the Department of Defense, including such leaders of the reserve components.

Approach

Augment traditional college curricula by providing <u>hands-on, experiential learning and internship opportunities uniquely tailored to match the critical cyber-spectrum workforce demands</u> of the Armed Services, Department of Defense, and our Defense Industrial Base partners.

Congressional Requirements

- Develop Early Cyber Interest
- Practical Instruction/ Experience
- More Cyber Instructors
- Strategic Foreign Languages
- Mathematical Cryptography Foundations
- Data Science

Key Objectives

- Increase Diversity
- Enhance the Pipeline of Cyber-Spectrum Leaders
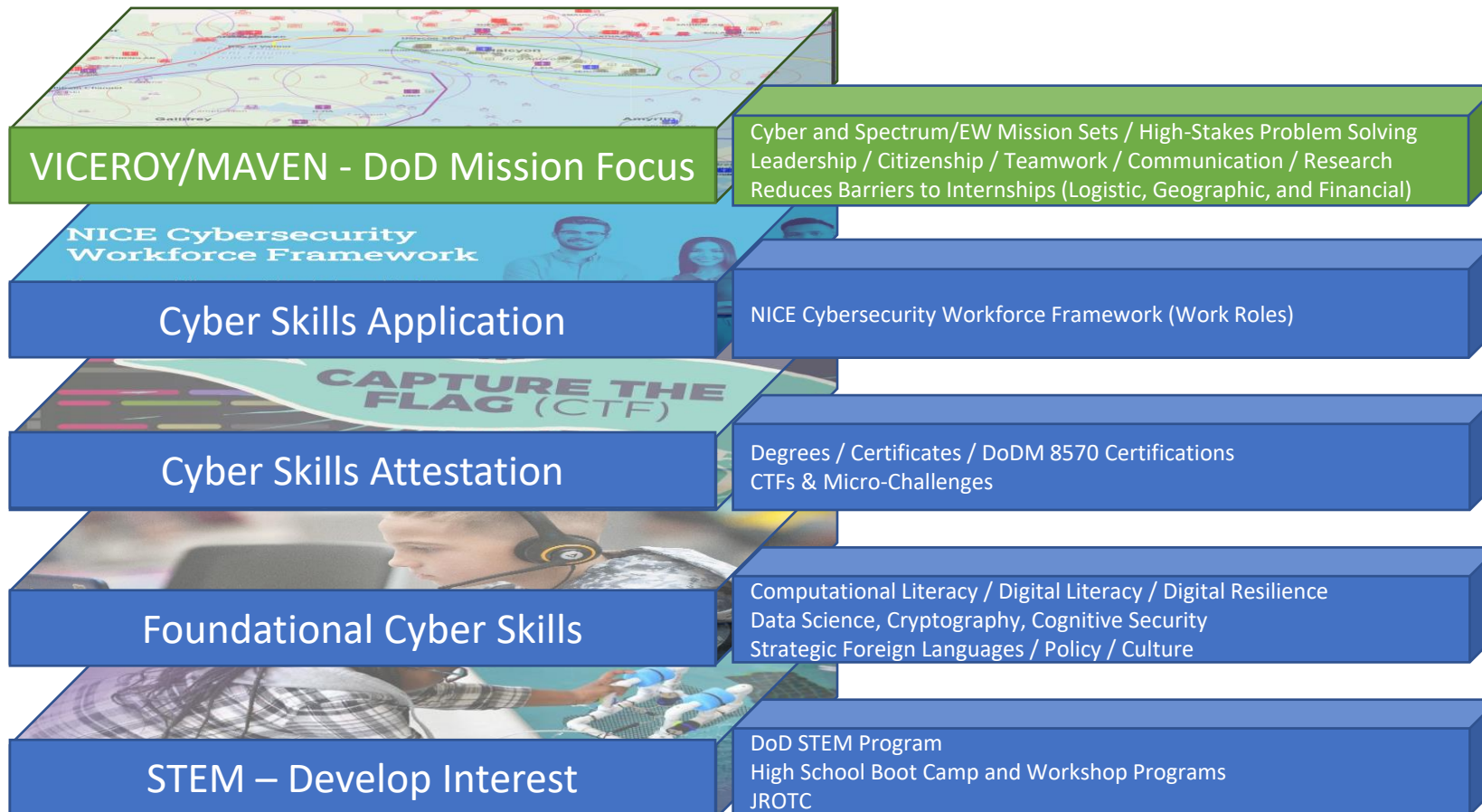- Lead in Technology Areas of Critical Importance to NDS

How is VICEROY Different?

Leveraging and building cyber and EMS programs to prepare students to support DoD missions

Existing Scholarship Programs: ROTC, CySP, SMART, DCTC, etc.

VICEROY/MAVEN - DoD Mission Focus
- Cyber and Spectrum/EW Mission Sets / High-Stakes Problem Solving
- Leadership / Citizenship / Teamwork / Communication / Research
- Reduces Barriers to Internships (Logistic, Geographic, and Financial)

Cyber Skills Application
- NICE Cybersecurity Workforce Framework (Work Roles)

Cyber Skills Attestation
- Degrees / Certificates / DoDM 8570 Certifications
- CTFs & Micro-Challenges

Foundational Cyber Skills
- Computational Literacy / Digital Literacy / Digital Resilience
- Data Science, Cryptography, Cognitive Security
- Strategic Foreign Languages / Policy / Culture

STEM – Develop Interest
- DoD STEM Program
- High School Boot Camp and Workshop Programs
- JROTC

(Top green panel)
- DoD and National Security Problem Sets
- Mission-focused Education and Experiential Learning
- Cyber and Spectrum Curriculum
- Strategic Foreign Languages, Data Science/Crypto
- Degrees, Concentrations, and Industry Certifications
- Competitions and Skills Assessment

(Bottom green panel)
- Intro to DoD/Service-Specific Missions & Culture
- Cyber and Electromagnetic Spectrum (EMS) emphasis
- Hands-on Cyber and EMS Exercises;
- Blue Book® Mission Vulnerability Assessments
- IEEE Conference-style Paper
- Leadership, Citizenship, Teamwork

VICEROY leverages and aligns foundation of existing cyber programs and scholarships for mission success

Mapping the DCWS to VICEROY Activities

VICEROY-Unique Activities Denoted in GREEN

Education Pathway

Secondary Schools	Undergrad & Graduate Education	Summer Experiential Internship	Follow-Up DoD Internships	DoD Employment

VICEROY Activities

Develop early student interest in challenging DoD and National Security problems sets

Enhance the pipeline of **cyber and spectrum students** at the secondary school level

Harness summer camps, JROTC, and **dual-enrollment**

DoD Mission Focus - Augments traditional college curricula and certifications with hands-on, research-based, operationally-focused experiential learning opportunities for ROTC and civilians

Increases the number of cyber and spectrum instructors at secondary and collegiate levels

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MAVEN 8-week internship hones student competencies in **DoD leadership and culture, teamwork**, and oral and written **communications**

Financial assistance through stipends to overcome obstacles, **increase retention, and enhance geographic mobility**

Provide exciting internship experiences hosted by engaging and supportive mentors, leading to permanent employment within DoD

Travel and housing stipends to promote geographical mobility and Quality of Life to promote student satisfaction and success

---

Internship Network helps match students to employers for follow-on internships and permanent jobs

Bridge Hiring Program provides temporary hiring mechanism to ensure graduating student is retained while they are awaiting completion of final OPM hiring processes

DCWS Pillars

IDENTIFICATION & RECRUITMENT	RECRUITMENT & DEVELOPMENT	RECRUITMENT & DEVELOPMENT	DEVELOPMENT AND RETENTION	RETENTION

2023 VICEROY MAVEN Summer Internship

- **Pedigree and Focus**
  - Leverages 20+ years of experience from running the Advanced Course in Engineering Cyber Security Bootcamp (ACE)
  - Leadership, community service, writing, public speaking, research, career day, capstone, bluing trips, and graduation dinner components

- **When: 12 June - 4 August 2023 in Rome, NY**
  - Standard 8-week program, with 10-week option available
  - 43 first-year interns / 6 graduate assistants (average intern GPA 3.57)

- **What's New**
  - Air Force / Space Force mission and electromagnetic spectrum (EMS) emphasis
  - Blue Book® cyber vulnerability assessment of a mission system
  - Hands-on cyber and EMS exercises; IEEE conference-style paper

- **FY24 Plans - Expanding to Army and Navy in FY24**
  - Engaging at Service HQ and organizational element levels

VICEROY MAVEN
PLAYBOOK
A Guide to Hosting Your Own MAVEN Program

MAVEN Curriculum Elements

Category	Description
1. Service and DoD Careers	DoD stories of service, career fair
2. Domains/Missions	Immerse in mission-mindset through mission and mission system lectures, Blue Books®, and capstone event
3. Mission Systems	Satellites, UAS, Cyber-enabled Munitions, SCADA, mIoT
4. Core Cyber	OS and Network Fundamentals, CIAAAA, OCO, DCO, AI/ML and cyber
5. Core EMS	Signal generation, transmit/receive, offensive and defensive techniques
6. Leadership and Teamwork	Writing, public speaking, Blue Book®, and research teams
7. Assessment	Writing and speaking rubrics, peer assessment, pre- and post-test

National Competition

Purpose

- Generate early-semester excitement in cyber/spectrum high-stakes problem solving
- Elevate student awareness and pursuit of VICEROY
- Create sense of community and pride among VICEROY post-secondary institutions

When

- October 26-29, 2023

Format

- Online virtual competition
- Run by AFRL and GI Blue Edge Team

Teams

- 20 teams registered for the competition
- Each team must have at least one VICEROY student
- Recommend 3-5 students per team

VICEROY FALL CYBER COMPETITION OCTOBER 26-29, 2023

STOP THE DOC BEFORE THE DOC GOES BOOM

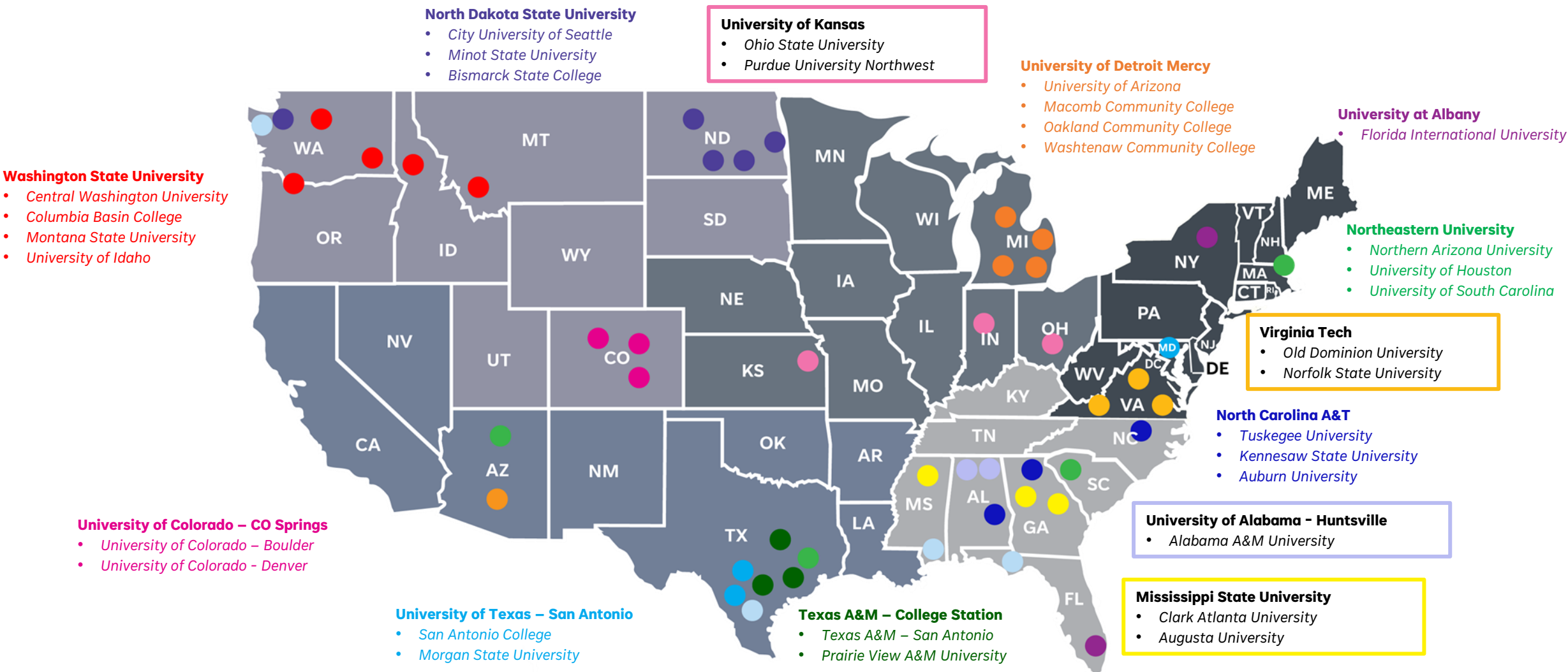YOUR MISSION IS SIMPLE: ANALYZE THE SOURCE CODE, GAIN ACCESS TO THE WEAPON, AND PREVENT IT FROM DETONATING.

SCAN TO JOIN THE CHALLENGE AND BECOME A CYBER SUPERHERO.

FY23 VICEROY Regional VIs and Partners
Slate Blue - Operational Internship Sites with MOAs: Keyport, JBSA, Keesler, and Eglin

North Dakota State University
- *City University of Seattle*
- *Minot State University*
- *Bismarck State College*

University of Kansas
- Ohio State University
- Purdue University Northwest

University of Detroit Mercy
- *University of Arizona*
- *Macomb Community College*
- *Oakland Community College*
- *Washtenaw Community College*

University at Albany
- *Florida International University*

Washington State University
- *Central Washington University*
- *Columbia Basin College*
- *Montana State University*
- *University of Idaho*

Northeastern University
- *Northern Arizona University*
- *University of Houston*
- *University of South Carolina*

Virginia Tech
- Old Dominion University
- Norfolk State University

North Carolina A&T
- *Tuskegee University*
- *Kennesaw State University*
- *Auburn University*

University of Colorado – CO Springs
- *University of Colorado – Boulder*
- *University of Colorado - Denver*

University of Alabama - Huntsville
- *Alabama A&M University*

University of Texas – San Antonio
- *San Antonio College*
- *Morgan State University*

Texas A&M – College Station
- *Texas A&M – San Antonio*
- *Prairie View A&M University*

Mississippi State University
- Clark Atlanta University
- Augusta University

By the numbers…
Subset of our 30-month Accomplishments

VICEROY

FAST FACTS

In 2022, America Faced **~ 700,000** Open Cybersecurity Positions*

Over **$19** Million Awarded to Universities Through VICEROY

112 ROTC Students

20 DoD Mentors

13 New Undergraduate Courses

48 2023 MAVEN Interns
15 2023 DoD Interns
Apr. 25, 2023

56 Department of Defense-Driven Research Projects

1 Master's Degree Program

498 Students in the VICEROY pipeline

42 Universities Part of a Consortium
As of June 2023

62 Students from an HBCU/MSI

142 Women
122 Students of Color

VICEROY Will Grow from Air and Space Force and Expand Into Army and Navy

*whitehouse.gov –July 19, 2022

2021-2023 data

Programs of Study
- 13 New Undergrad Courses
- 9 Seminars

Academics
- Multitude of Cyber Certification Track Courses Developed and Awarded

18 DoD Participant Employers
- AF – Keesler, Fairchild, Eglin, JBSA, AFRL
- Army – Ft. Gordon, GVSC
- Navy – NUWC Keyport

VICEROY MAVEN Flag Bearers at the 2023 Honor America Days at Ft. Stanwix, Rome NY

Thank You!

VICEROY Landing Page: https://adobe.ly/3pwEGaV

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TAB 1 – VICEROY Backup Information

Wrap-up

- DoD faces challenges in recruiting top cyber and spectrum student talent
    - Students lack knowledge of uniquely challenging DoD problem sets and career rewards
    - Most post-secondary program curricula fail to prepare graduates for DoD mission success
    - Numerous talent pipeline barriers discourage students from pursuing DoD internships/employment

- USD(R&E) addressing these challenges through VICEROY program
    - Authorized by Section 1640 of the NDAA for 2019; Appropriations over FY20-23 totaling $40M

- VICEROY success to date:
    - 13 Virtual Institutes; 45 Academic institutions; Locations in all major U.S. regions
    - 498 VICEROY Students (112 ROTC, 122 female, 112 minority)
    - 55 DoD-relevant student projects; 13 new courses; 1 new M.S. in Cybersecurity Engineering
    - 18 Participating employers; 4 major internship centers via 3 MOAs and 1 EPA
    - MAVEN – Our premiere summer experiential internship (48 participants summer 2023)

OSD Engaging Services/Components to Develop Long-Term Sustainable Execution Plan

SECTION 1640. PROGRAM TO ESTABLISH CYBER INSTITUTES AT INSTITUTIONS OF HIGHER LEARNING   (2 of 2)

- ***SELECTED INSTITUTIONS OF HIGHER LEARNING****.*
  - *(1) IN GENERAL.—The Secretary of Defense shall select institutions of higher learning for purposes of the program established under subsection (a) from among institutions of higher learning that have a Reserve Officers' Training Corps program.*
  - *(2) CONSIDERATION OF SENIOR MILITARY COLLEGES.—In selecting institutions of higher learning under paragraph (1), the Secretary shall consider the senior military colleges with Reserve Officers' Training Corps programs.*
- ***ELEMENTS. Each institute established under the program authorized by subsection (a) shall include the following:***
  - *(1) Programs to provide future military and civilian leaders of the Armed Forces or the Department of Defense who possess **cyber operational expertise** from beginning through advanced skill levels. Such programs shall include **instruction and practical experiences** that lead to recognized certifications and degrees in the cyber field.*
  - *(2) Programs of targeted **strategic foreign language proficiency** training for such future leaders that— (A) are designed to significantly enhance critical cyber operational capabilities; and (B) are tailored to current and anticipated readiness requirements.*
  - *(3) Programs related to **mathematical foundations of cryptography** and courses in cryptographic theory and practice designed to complement and reinforce cyber education along with the strategic language programs critical to cyber operations.*
  - *(4) Programs related to **data science and courses in data science theory** and practice designed to complement and reinforce cyber education along with the strategic language programs critical to cyber operations.*
  - *(5) Programs designed to **develop early interest and cyber talent** through summer programs, dual enrollment opportunities for cyber, strategic language, data science, and cryptography related courses.*
  - *(6) Training and education programs to expand the **pool of qualified cyber instructors** necessary to support cyber education in regional school systems.*
- ***PARTNERSHIPS WITH DEPARTMENT OF DEFENSE AND THE ARMED FORCES.*** *Any institute established under the program authorized by subsection (a) may enter into a partnership with one or more components of the Armed Forces, active or reserve, or any agency of the Department of Defense to facilitate the development of critical cyber skills for students who may pursue a military career.*
- ***PARTNERSHIPS.*** *Any institute established under the program authorized by subsection (a) may enter into a partnership with one or more local educational agencies to facilitate the development of critical cyber skills.*
- ***SENIOR MILITARYCOLLEGES DEFINED.*** *The term ''senior military colleges'' has the meaning given such term in section 2111a(f) of title 10, United States Code.*

VICEROY Organizational Relationships

NDAA 2019 Section 1640 Authorization → FY20 - FY23 Appropriation

USD(R&E) Authorization and Funding to create VICEROY

Program Manager Chester "CJ" Maciag

DoD Performing Organization
Administers Partnership Intermediary Agreement for Technology Transition, and establishes norms for Legal, Public Affairs, Contracts, etc.

Air Force Research Lab

Program Manager Sonja Glumich

Partnership Intermediary Organization
501c(3) to administer the VICEROY program
Awards contracts, monitors and reports on performers, administers internship program

Griffiss Institute

Project Management

VICEROY Performer Organizations
Create and execute local academic programs to meet the intent of Section 1640 and the Special Notice

University of Detroit Mercy · Mississippi State University · Washington State University · University at Albany · Northeastern University · Virginia Tech · Texas A&M University · The University of Kansas · North Dakota State University · UTSA The University of Texas at San Antonio · University of Colorado · The University of Alabama in Huntsville · North Carolina Agricultural and Technical State University

Program Partner Structure (MAVEN Expansion)
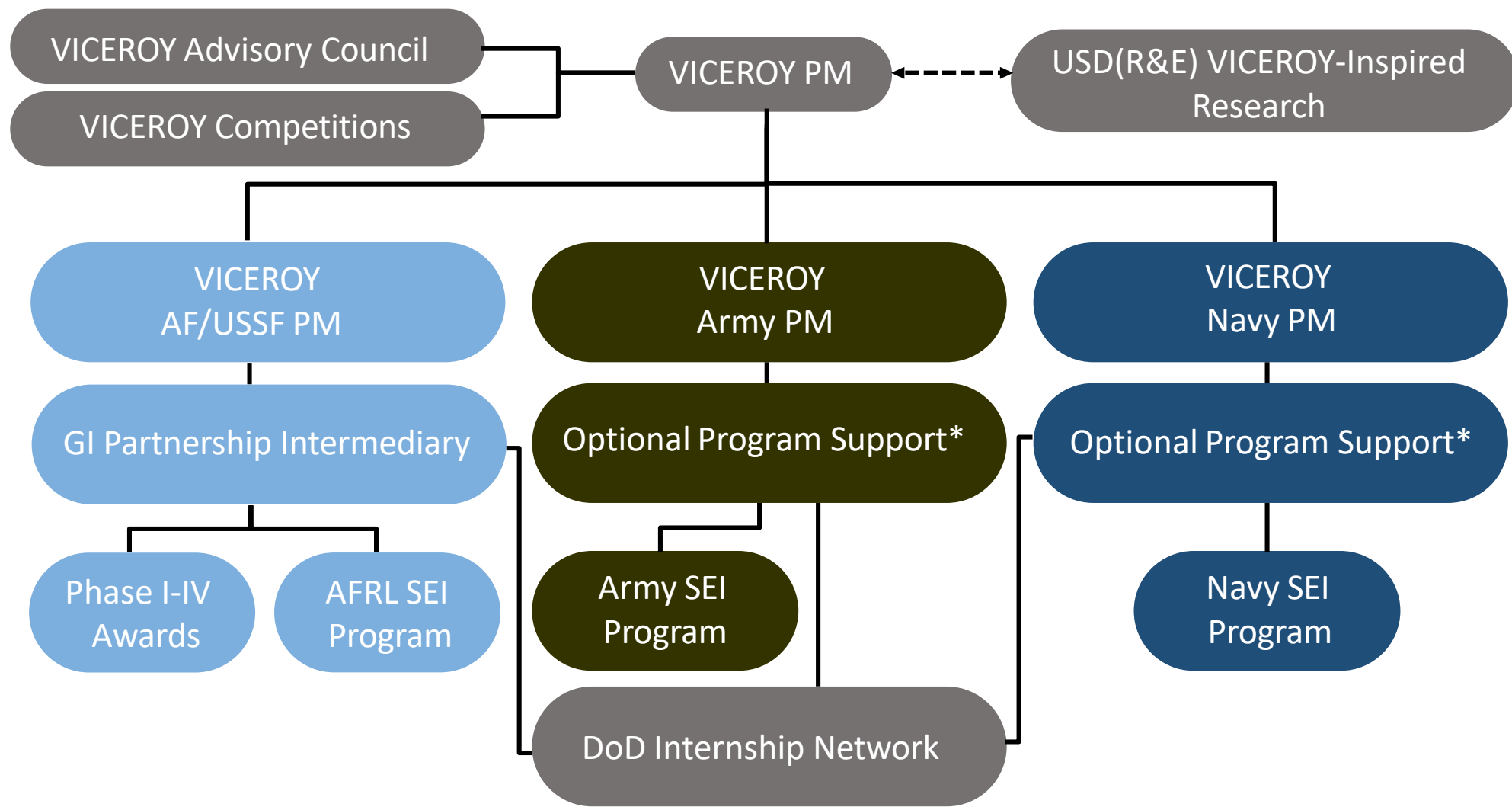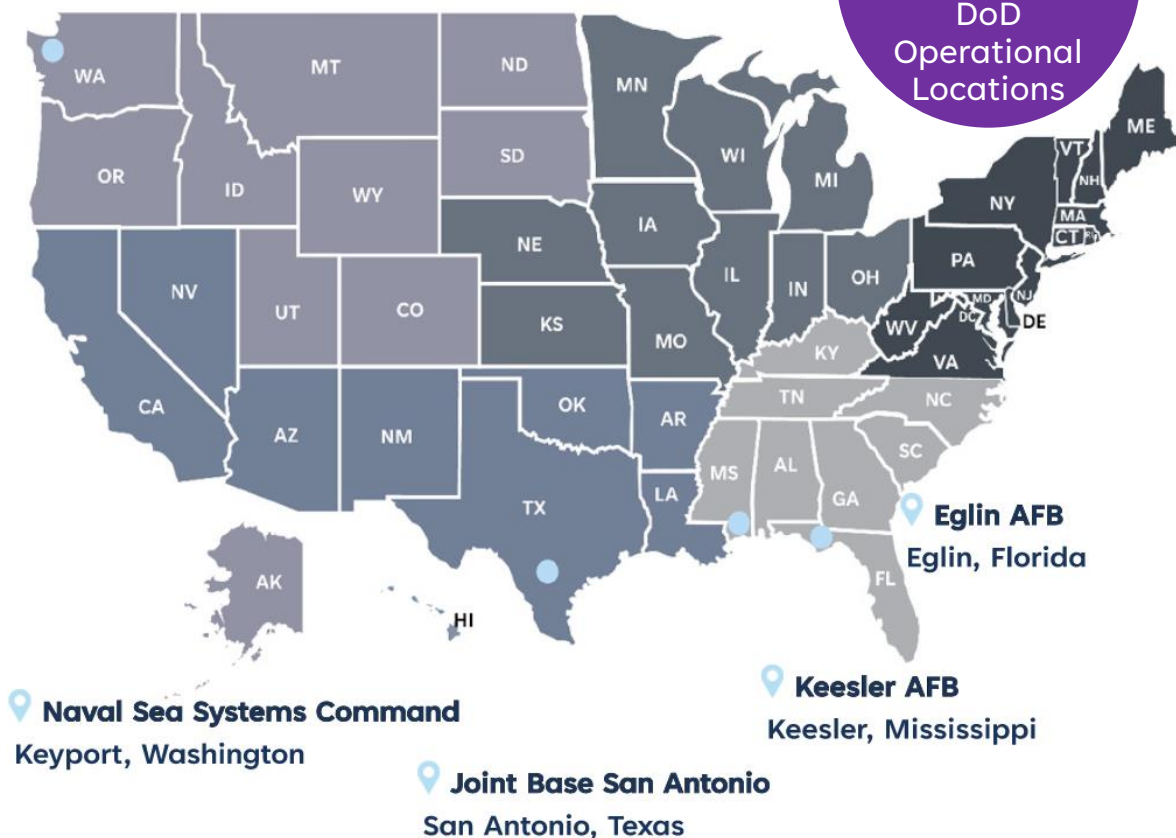
VICEROY – Future Plans

- Fall 2023 – Conduct national VICEROY mission-focused competition

- Fall 2023 – Partner with scholarship, retention, and excepted service programs
  - Engaging DCTC[1] Program through Virginia Tech and U of Arizona (already VICEROY consortium members)

- Spring 2024 – Expand number of internship host sites
  - Interest from NIWC-PAC, NRL, and STRATCOM, among others

- Summer 2024 - Expand MAVEN internship program to Army and Navy
  - Interest from NIWC-PAC, and ARL-Adelphi

- Ongoing – Identify VICEROY sustainment funding beyond FY24
  - Conducting discussions with Services and installations to identify cost-sharing strategy

1 – DCTC: Defense Civilian Training Corps

Follow-up Summer Internship Host Site Locations
(Post-MAVEN, or alternative to MAVEN)

34 Second Year Internships at DoD Operational Locations

Eglin AFB
Eglin, Florida

Keesler AFB
Keesler, Mississippi

Naval Sea Systems Command
Keyport, Washington

Joint Base San Antonio
San Antonio, Texas

MOA

U.S. AIR FORCE

Eglin, Florida

"The 96th Test Wing executes developmental test and evaluation enabling the warfighter to put weapons on target in all battlespace media while also providing support for all other Team Eglin missions as the installation host wing. Eglin deploys combat ready forces while delivering full spectrum support to the DoD's second largest test and training complex. Today, Eglin tests and evaluates non-nuclear munitions, electronic combat systems and navigation/guidance systems."

Click to learn more.

MOA

JOINT BASE SAN ANTONIO
PARTNERSHIP IN EXCELLENCE

San Antonio, Texas

"The Air Force is the lead agency for Joint Base San Antonio, comprising three primary locations at JBSA-Fort Sam Houston, JBSA-Lackland and JBSA-Randolph plus 8 other operating locations and more than 200 mission partners. JBSA services more DOD students than any other installation, more active runways than any other installation, houses the DOD's largest hospital and only level one trauma center, supports more than 250,000 personnel."

Click to learn more.

MOA

U.S. AIR FORCE

Keesler, Mississippi

"Keesler trains more than 28,000 students annually with an average daily student load of more than 2,700. The 81st TRW is a lead Joint Training Installation, instructing not only Air Force, but Army, Navy, Marine Corps, Coast Guard and civilian federal agency personnel. Keesler's mission is enduring. We provide a wide array of capabilities in over 160 career field specialty training courses from 8 operating locations in the continental United States. Our mission is not only to technically train warfighters, but to develop and inspire them."

Click to learn more.

EPA

NAVSEA NAVAL SEA SYSTEMS COMMAND
Naval Sea Logistics Center

Keyport, Washington

"Keyport provides technical leadership, engineering expertise, and unique facility complexes that serve to ensure sustainment of undersea warfare (USW) superiority for the United States. As one of two divisions of the Naval Undersea Warfare Center, Keyport's mission is focused on developing and applying advanced technical capabilities to test, evaluate, field, and maintain undersea warfare systems and related defense assets. These advanced technical capabilities directly support the full spectrum of Navy undersea programs."

Click to learn more.

VICEROY Support to Interns –
Breaking Down Barriers to Summer Employment

Housing

- Housing for First Year Interns is provided nearby Griffiss Institute
- Housing for Follow-up DoD Host Site Interns is provided nearby each DoD host site

Pay

- Graduate Assistants are paid $29/hr
- Follow-up DoD Host Site Interns are paid $24/hr
- First Year Interns are paid $22/hr

01

02

03

04

Travel

- Interns that live greater than 50 miles from their placement site will receive travel reimbursement up to $1500 for airfare or mileage
- Daily transportation is provided to/from Griffiss Institute for interns in Rome, NY

Quality of Life

- All travel and housing is facilitated by Griffiss Institute
- Interns can meet one another digitally before start dates to build rapport
- We ensure interns have a quality environment where they can thrive

VICEROY Virtual Institutes

- Faculty-led, multi-institution, multi-year research endeavors that specifically target cyber and electromagnetic spectrum operations (EMSO) challenges of interest to the DoD

- Develop new or augment existing cyber coursework leading to specializations, degrees, or industry certifications

- Provide scholarships and stipends for student participation

- Sponsor cyber research projects of interest to the DoD for VICEROY students

- Hold cyber seminars, workshops, and competitions

- Report progress and share lessons learned at the annual VICEROY Symposium

Mapping the DCWS to VICEROY Activities

Leveraged Scholarship Programs at Bottom

Education Pathway

| Secondary Schools | Undergrad & Graduate Education | Summer Experiential Internship | Follow-Up DoD Internships | DoD Employment |

VICEROY Activities

- NSA-sponsored GenCyber K-12 program
- DEI-sponsored K-12 programs
- VICEROY Outreach Programs
- JROTC Programs

13 Consortiums / 44 Academic Institutions

- UNIVERSITY AT ALBANY, STATE UNIVERSITY OF NEW YORK
- VIRGINIA TECH
- UNIVERSITY OF DETROIT MERCY
- Northeastern University
- MISSISSIPPI STATE UNIVERSITY
- WASHINGTON STATE UNIVERSITY
- KU THE UNIVERSITY OF KANSAS
- THE UNIVERSITY OF ALABAMA IN HUNTSVILLE
- TEXAS A&M UNIVERSITY
- University of Colorado | Boulder | Colorado Springs | Denver | Anschutz Medical Campus
- NORTH CAROLINA AGRICULTURAL AND TECHNICAL STATE UNIVERSITY
- NDSU NORTH DAKOTA STATE UNIVERSITY
- UTSA The University of Texas at San Antonio

- VICEROY MAVEN
- VICEROY Operational Internship
- VICEROY Research Internship
- DoD Internship Programs

- DoD Civilian Employment
- Commissioned Officer
- Retained Civilian or Officer
- Graduate School Program (PALACE ACQUIRE)
- Defense Industrial Base

Leveraged Scholarship Programs

- ROTC
- DCTC
- DoD CYSP
- SMART and SFS

# TAB 2 – MAVEN
Student Background

MAVEN Internship Capstone

- **Mission Relevance:** Based closely on AF and USSF Unit Cyber Warfare Training culminating operational capstone challenge (CONCORD DAWN)

- **Concord Dawn Capstone**: Transmit the coordinates of a High Value Target to a UAV to enable target strike

- **Future VICEROY-Wide Activities:**
  - National VICEROY 44-school competition in Fall 2023
  - Custom capstone tailored to the new MAVEN curriculum
  - Alternate capstones focused on ground, surface, undersea, and space domains of Service partners

Partnership with AFRL/RI's *Blue Edge* competition development team
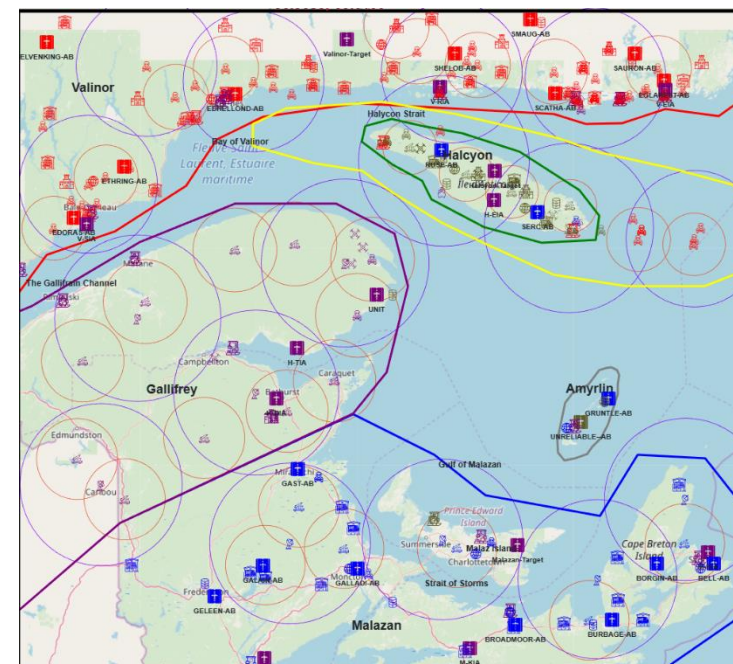
What our VICEROY Interns are Saying...

"As a graduate of the 2022 VICEROY program, I was honored to have experienced the internship in its inaugural year.
The mentorship and hands-on experience I received has proven invaluable as I continue my studies in the Computer Science field."

Jacob Lebovich
1st Year – VICEROY, Intern - 2022
2nd Year – VICEROY, GA - 2023

"Previously, my interests lay within artificial intelligence and data science, but VICEROY cultivated my passion for cybersecurity. I got to craft technical reports, learn new programmatic concepts, and perform research under a mentor. This program gave me lessons in leadership, an expansive network, and various core experiences."

Aailya Jakir
1st Year – VICEROY - 2022
2nd Year – ACE - 2023

"This internship, facilitated by VICEROY, has allowed me to not only demonstrate my knowledge and skills but also make a significant impact. Additionally, I have been offered an amazing chance to be a part of a select few to instruct and shape future cyber warriors for the Air Force, which I'm truly excited about."

Justin Pettiss
1st Year – VICEROY - 2023
Keesler Air Force Base
336 TRS/TRR

"I have thoroughly enjoyed the VICEROY summer internship. Wavelength is at a pivotal moment of innovation for creating Air Force software. It has been an awesome experience and I'm grateful to have been a part of this program. I hope many others get to pursue this opportunity as it has been a wonderful exposure. "

Morgan Hardy
1st Year – VICEROY - 2023
Joint Base San Antonio
WAVELENGTH

"The first year of VICEROY I saw as a transition from academia to the workforce, and this summer is the application of those skills we learned last summer in a real work environment. Overall, I feel this summer has adequately prepared me for future employment opportunities and I highly recommend this experience to those with interest in radar and the DoD."

Morgan Jones
1st Year – VICEROY - 2022
2nd Year – VICEROY - 2023
Eglin Air Force Base- 350TH

"My experience with Wavelength as a software development intern has been mind-opening, exciting, while being challenging. I work in a group of three, so we were able to learn and discover a lot from each other. Teamwork is an aspect that I enjoy doing during this internship, as we get along with each other well."

Timothy Truong
1st Year – VICEROY - 2023
Joint Base San Antonio
WAVELENGTH

"My experience this Summer as a VICEROY Intern for The Naval Undersea Warfare Center Division Keyport, has been incredible. I have fostered many connections in my short time at Keyport and I am eager to continue supplying the government with my growing cybersecurity knowledge."

Benjamin Price
1st Year – VICEROY - 2023
Naval Undersea Warfare Center Division Keyport

"During my VICEROY summer internship, I have had the ability to network and learn with my peers. Ultimately, I have garnered a valuable experience and have taken an important first step toward a future in the DoD."

Ryan Silvus
1st Year – VICEROY - 2023
Joint Base San Antonio
WAVELENGTH

My name is Turner Woodward, and I'm a student of the University of Detroit Mercy pursuing a degree in Computer Engineering with a minor in Computer Science. I am an ambitious life-long learner, and I spend most of my free time programming, gardening, or making CAD models to 3D print. The MAVEN program has challenged me to constantly improve my skills and build me into a CYBER professional, and I truly believe I would not be who I am today if not for the support from my fellow MAVENs. I feel this internship has been a transformative experience and my first steps to a long career in the DoD, and I am very thankful for the opportunity to visit the Pentagon.

1st
Turner Woodward
1st Year VICEROY, Intern - 2023

University of Detroit Mercy
Computer Engineering

My name is Guinevere Fish. I am studying computer science and will be a junior at Washington State University in the fall. I am involved in the cybersecurity club at WSU, the CyberCougs. The opportunity to participate in this internship has not only given me skills that I can bring back to utilize in the club at school but has also given me a look into what working in cybersecurity in the government might look like.

2nd
Guinevere Fish
1st Year VICEROY, Intern - 2023

Washington State University
Computer Science

I arrived at Viceroy midway through a career change. I earned a BA in English at Kalamazoo College, and an MA in Japanese at University of Wisconsin before moving to the University of Washington, where I focused on early modern Japanese literature and intellectual history. While working for a Japanese IT firm as a lead bilingual test engineer, I decided to shore up my foundations and began coursework for an AS in physics at Oakland Community College. OCC entered the VICEROY consortium just as I completed the degree, and, with their support, enabled me to think beyond the automotive industry. In the fall, I will begin the MS Vehicle Cyber Engineering program at the University of Detroit, Mercy.

3rd
Benjamin Rosenberg
1st Year VICEROY, Intern - 2023

Oakland Community College
Computer Information Sciences

VICEROY AFRL

Hi, my name is Yasmin Chambers. I am a rising senior at Mississippi State University, majoring in computer engineering with a minor in mathematics. I am in the U.S. Army Reserves, and recently contracted into the AROTC program at MSU. I enjoy fitness, nature, reading, and hackathons! The VICEROY program has given me the necessary tools to create my own solutions and further elevate the technologies that are present. I have gained diversified insight and seen the wide scope of cybersecurity and electromagnetic spectrum systems. I plan to use this knowledge to strengthen the military's cyber intelligence and use new technology to advance our armed forces' defense. I look forward to networking and experiencing the Pentagon.

4th
Yasmin Chambers
1st Year VICEROY, Intern - 2023

Mississippi State University
Computer Engineering

Hello, I'm Alex, a rising junior at Washington State University. At Washington State, I study Computer Science and participate in cybersecurity competitions with my team, the CyberCougs. Being able to come to the east coast, and work at the Air Force Research Lab in New York has been an amazing opportunity. Working with other interns to perform research has been fulfilling, and learning more about cybersecurity through the MAVEN program has been educational as well. I'm honored and excited to come to the Pentagon to learn more. Thank you!

5th
Alexander Hagood
1st Year VICEROY, Intern - 2023

Washington State University
Computer Science

My name is Elijah Gartrell, a rising Junior at Old Dominion University majoring in Cybersecurity with a double minor in French & International Relations. Currently residing in Northern Virginia, I enjoy family time, sports, and music. This summer at VICEROY, I worked on the Virtual Reality Information Flow Analysis project with mentor Sonja Glumich. This project was amazing and truly a great opportunity.

6th
Elijah Gartrell
1st Year VICEROY, Intern - 2023

Old Dominion University
Cyber Security