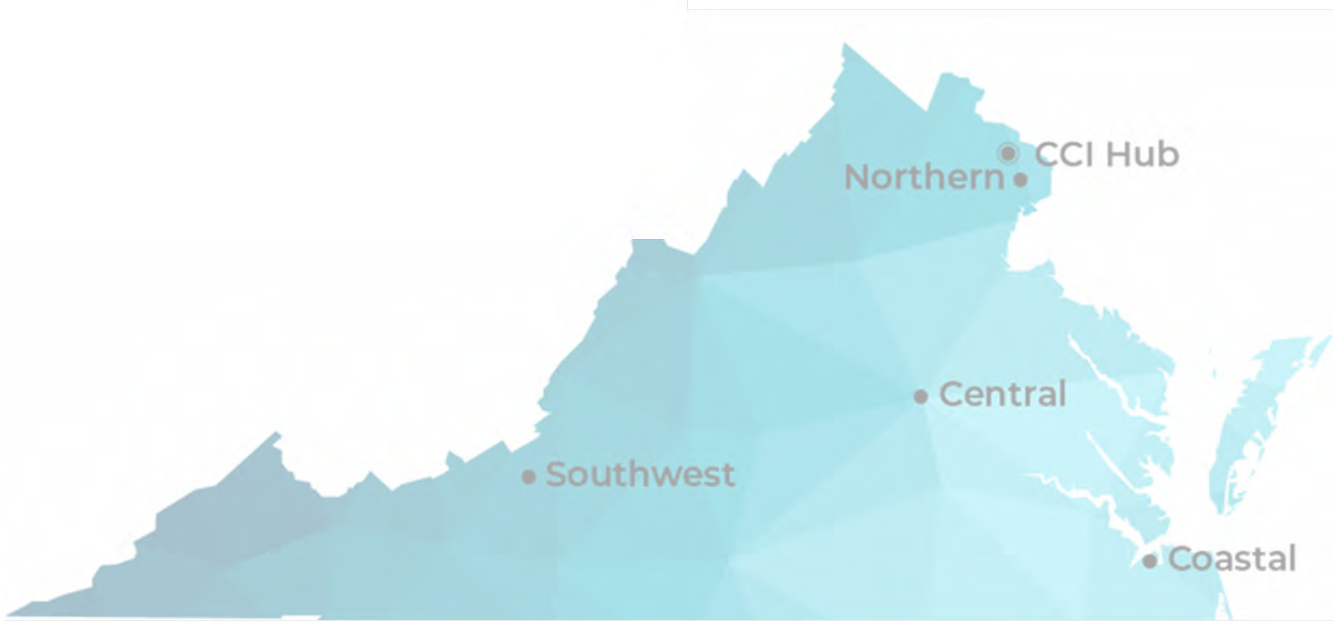
Commonwealth Cyber Initiative
COASTAL VIRGINIA

Coastal Virginia Center for Cyber Innovation (COVA CCI)

Annual Report July 2024 – June 2025



Research | Innovation | Workforce Development

July 31, 2025

Daniel Takabi – Director
John Costanzo – Chief Administrative Officer

Old Dominion University Norfolk, Virginia 23529

FIVE YEARS OF CCI

Commonwealth Cyber Initiative
COASTAL VIRGINIA

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Message from Dr. Daniel Takabi, COVA CCI Director

The Coastal Virginia Center for Cyber Innovation (COVA CCI) was created to stimulate cybersecurity research, connect researchers with businesses, and provide experiential learning offerings to students in our region. As the regional node of the Commonwealth Cyber Initiative (CCI), COVA CCI's impact has exceeded expectations. From supporting 12 research faculty, supporting the William & Mary Cyber Policy and Law Group, funding 24 grants, and providing internships, undergraduate research support, and innovation training to more than four hundred students, COVA CCI has become part of our region's economic and innovation engine. The real impact goes beyond the numbers. Connections both with and between our partners are stronger than ever.

This annual report showcases the remarkable achievements of COVA CCI. Since I assumed COVA CCI's Director role last year, we have built on the past accomplishments and expanded its significant impact in our region. I am proud of all that we have done– from the research to the innovation and workforce development activities.

While we reflect on the accomplishments outlined in this report, let's also look to the future of COVA CCI. If past accomplishments are any indication, our future is bright!

Executive Summary

Reporting Period: July 2024 – June 2025
Director: Dr. Daniel Takabi | Chief Administrative Officer: John Costanzo

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The Coastal Virginia Center for Cyber Innovation (COVA CCI), southeastern Virginia's regional node of the Commonwealth Cyber Initiative (CCI), continues to serve as a leader in cybersecurity research, workforce development, innovation, and industry partnerships across Southeastern Virginia. With a mission to advance cybersecurity, artificial intelligence (AI), and 5G, COVA CCI is creating a collaborative, talent-rich ecosystem to support Virginia's digital economy.

Strategic Focus and Regional Network

COVA CCI has built a strong regional network comprising over 100 researchers and faculty from 10 higher education institutions and more than 20 business and government partners. Partner organizations include CISCO, Deloitte, Sentara Healthcare, Huntington Ingalls Shipbuilding, the U.S. Navy, the City of Virginia Beach, and the City of Suffolk. In FY25, the center continued to emphasize cybersecurity research, AI integration, and the commercialization of cybersecurity solutions.

Research Achievements

COVA CCI supports multiple lines of effort in cybersecurity research, including work in AI and Machine Learning, Next G, Maritime and Supply Chain Cybersecurity, and others. We collaborate with a diverse range of researchers from various universities and public and private organizations.

- **External Grants**: COVA CCI researchers secured over $11.8 million in grant funding from federal, state, and private entities.
- **Internal Research**: Seven research projects were funded under the FY25 COVA CCI Cybersecurity Research Program, totaling $406,667. These projects explored areas like AI-enhanced anomaly detection, LLM security, and privacy in autonomous systems.
- **CCI & NOVA Node Collaboration**: Nine additional projects were funded for a combined $739,948.
- **Research Faculty**: COVA CCI supported 12 research scientists and 1 IT engineer across institutions, with new hires expanding capabilities in AI, maritime security, and quantum computing.
- **Shared Computing**: Continued development of the COVA SHARE collaborative research environment supported ongoing inter-institutional work.

Workforce Development and Experiential Learning

A cornerstone of COVA CCI's mission is to prepare the next generation of cybersecurity professionals through hands-on experience and research training. In FY25, 116 students participated in its programs:

- **Cybersecurity Undergraduate Research Program**: 24 students from 7 institutions engaged in publishable research projects. Since its inception, 136 students have completed the program.
- **Innovate Cyber Challenge**: 41 students from 6 universities tackled real-world cyber challenges using design thinking. The program has now served 226 students.
- **Internships**: 18 interns supported over 60 community STEM outreach events through ODU's Center for Educational Innovation & Opportunity (CEIO), reaching more than 560 students and families.
- **Cybersecurity Clinic**: 33 students worked with 10 clients, including the City of Suffolk and local businesses, offering no-cost cybersecurity services. Since its 2024 launch, the clinic has engaged 41 students and 12 organizations.

Innovation and Economic Impact
COVA CCI emphasizes applied innovation and commercialization:

- Supported new ventures such as RAEMAP LLC, which developed real-time cognitive monitoring tools.
- Supported student entrepreneurs in developing cybersecurity-related products or services.
- Published a special edition of the *Journal of Information Warfare* highlighting student and faculty cybersecurity research.

An RTI economic impact analysis using 2023 figures confirmed COVA CCI's annual economic output is approximately $17.5 million, supporting around 90 jobs and generating up to $700,000 in state and local tax revenue.

Student Leadership and Outreach
COVA CCI supports and elevates student voices through the Coastal Virginia Cybersecurity Student Association (CVCSA), which:

- Hosted CyberForge 2025, drawing over 130 participants to its CTF and conference.
- Initiated the statewide Virginia Cybersecurity Students (VCyS) network, creating four regional student hubs for innovation and engagement.

Additionally, COVA CCI co-hosted events with William & Mary's Center for Legal & Court Technology, including a global symposium on Generative AI and a monthly legal cybersecurity newsletter.

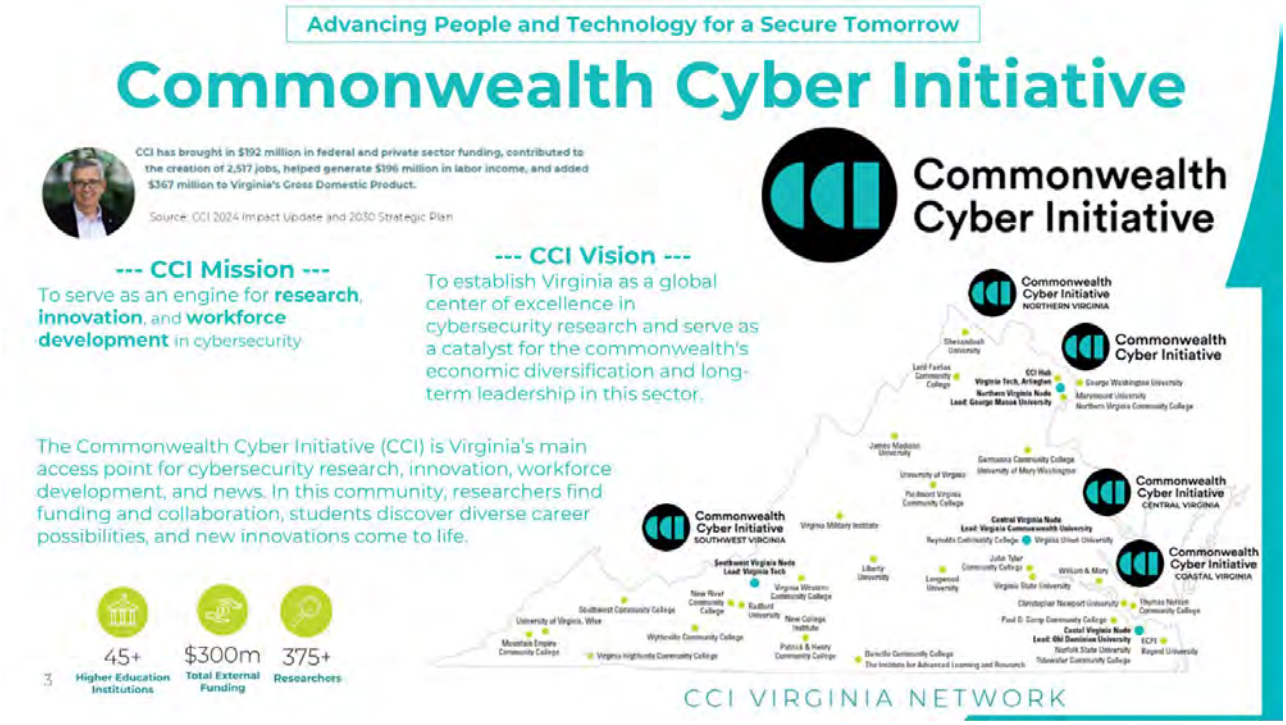
Looking Ahead
COVA CCI is poised for continued impact and growth. With an expanding network, a maturing innovation pipeline, and demonstrated economic and educational value, COVA CCI remains a cornerstone of Coastal Virginia's cybersecurity strategy.

Chapter 1: COVA CCI Introduction

About COVA CCI

Virginia's Commonwealth Cyber Initiative (CCI) aims to develop a Commonwealth-wide ecosystem of innovation in cybersecurity, with a focus on trust and security. Certified as one of the four Commonwealth Cyber Initiative (CCI) nodes, the Coastal Virginia Center for Cyber Innovation (COVA) seeks to: conduct fundamental research in cybersecurity, artificial intelligence, and 5G, supporting CCI's mission to position Virginia as a global leader in secure CPS and the digital economy; promote and accelerate the commercialization of cybersecurity innovations to grow and diversify Virginia's cyber economy; expand and diversify the cybersecurity talent pipeline through investments in research and commercialization efforts; and build a collaborative network among educational institutions, businesses, and local, state, and federal agencies within the region, as well as with other CCI nodes.

COVA CCI has built a network of faculty and researchers representing the region's community colleges and universities. These educational partners include Christopher Newport University, Norfolk State University, Old Dominion University, William & Mary, Regent University, Virginia Wesleyan University, ECPI University, Eastern Shore Community College, Paul D. Camp Community College, Tidewater Community College, and Virginia Peninsula Community College. COVA CCI is also collaborating with industry and government partners such as CISCO, Deloitte, G2Ops, Huntington Ingalls Shipbuilding, KBRWyle, MITRE, MI Technical Solutions, Peregrine Technical Solutions, Sentara Healthcare, Valor Cybersecurity, U.S. Navy, and 360IT.



Chapter 2: Research Programs

a. External Research Grants Attracted to Support the Work of CCI

The Commonwealth Cyber Initiative completed an economic impact study using FY 2023 data, and it determined CCI obtained $7.50 in research funding from sources outside Virginia for every $1.00 spent on CCI research activities. Over the past five years, CCI researchers received more than $300 million in research funding.

Source: [2024 Impact Update and 2030 Strategic Plan]

b. **External Research Projects.** During FY 2025, researchers affiliated with COVA CCI received $11,786,185 in external grant funding from various public and private organizations. Fourteen (14) grants came from federal agencies, and seven (7) grants were from state and/or private partners.

Institution	# Grants	Amount
ODU	14	$10,443465
WM	7	$1,342,720
Total	**21**	**$11,786,185**
Funding Source	# Grants	Amount
Federal	14	$5,248,770
State/Private	7	$6,537,415
Total	**21**	**$11,786,185**

See the table below for the list of funded projects.

Project Name	PI/Co-PI	Institution	Funding Amount	Funding Agency
Hampton Roads Regional Apprenticeship Hub	Barbara Blake	ODU	$1,200,000	HRWC
CyberCorps SFS Supplemental Funding	Brian Payne	ODU	$75,000	NSF
Collaborative Research: SHF: Medium: End-to-End Resilience in Autonomous Driving Systems: Strategic Vulnerability Assessment and Mitigation	Evgenia Smirni Homa Alemzadeh Lishan Yang	WM	$926,737	NSF
Advancing Health Equity: Integrating LLM Technology into Homeless Telehealth Services for Chronic Disease Education	Faryaneh Poursardar Tina Gustin	ODU	$150,000	NSF
DoD Cyber Scholarship Program	Daniel Takabi	ODU	$193,751	NSA
The 3D Cybersecurity Pipeline: Bridging Schools, Higher Education, and Industry	Chris Carter	ODU	$200,000	NIST/NICE
Developing AI in Cybersecurity Competency Through Competitions	Daniel Takabi	ODU	$349,606	NSA
Student Training in Quantum Computing	Qun Li	WM	$10,000	Ion Q
5G RDT&E Testbed for Radar Co-existence and Non-Kinetic Effects	Sachin Shetty	ODU	$4,886,415	HII
WRT-1085: TRUSTED ARTIFICIAL INTELLIGENCE (AI) SYSTEMS ENGINEERING (SE) CHALLENGE	Sachin Shetty	ODU	$21,000	SERC
AI Powered UAS Maritime Operations	Sachin Shetty	ODU	$25,000	ODU
Collaborative Research: PACSP TOOLS: EPICS: Explainable AI Driven Individual Photo-Identification and Tracking for Cost-effective Conservation Study	Yi He	WM	$269,740	NSF
CRII: III: Pursuing Interpretability in Utilitarian Online Learning Models	Yi He	WM	$175,000	NSF
Travel: NSF Student Travel Support for the 2024 IEEE International Conference on Data Mining (IEEE ICDM 2024)	Yi He	WM	$25,000	NSF
AI-powered Underwater Optical Survey for Benthic Biomass and Sediments Assessment	Yi He	WM	$30,000	NSF (IUCRC)
CRII: III: Dynamic Prompting and Pruning for Measuring and Controlling Memorization in Text-Attributed Graphs	Yanfu Zhang	WM	$174,983	NSF
Dynamic spectrum management (DMS) in Future G	Sachin Shetty	ODU	$2,168,334	NSWC
Center of Excellence in AI/ML (5h year)	Sachin Shetty	ODU	$350,000	DoD
HRCF Re-Direct	Rafael Diaz	ODU	$350,000	ODU IRAD
Marketing Cyber Bridge Project	Rafael Diaz	ODU	$45,000	Northeastern University
SFS Supplemental	Daniel Takabi	ODU	$429,359	ODU

Research Spotlight: End-to-End Resilience in Autonomous Driving Systems: Strategic Vulnerability Assessment and Mitigation

Lishan Yang, GMU Homa Alemzadeh, UVA Smirni Evgenia, W&M

Dr. Evgenia Smirni, W&M, and her two colleagues, Lishan Yang, GMU, and Homa Alemzadeh, UVA, were awarded an NSF collaborative research project in July 2024, entitled End-to-End Resilience in Autonomous Driving Systems: Strategic Vulnerability Assessment and Mitigation. The total amount awarded for this project is $926,737 for three years.

Dr. Smirni said this award was due in part to a previous project funded by COVA CCI in 2022 titled Toward Trustworthiness in Autonomous Vehicles

This three-year project will combine model-based and data-driven approaches for end-to-end strategic resilience assessment and multi-level selective resilience enhancement in autonomous vehicles through a holistic focus on temporal and spatial aspects of vulnerabilities within the software and hardware components. Based on the spatial and temporal vulnerability assessment, the project will explore mitigation techniques through efficient selection protection to enhance the resilience of autonomous driving systems based on the knowledge of spatial and temporal criticality of vulnerabilities to address the challenges of real-time requirements and resource constraints in AVs.

Visit the COVA CCI Website to learn more about their research - https://covacci.org/research/research-spotlight/

Summary of Research Grants and Programs Awarded

COVA CCI is providing research funding for several initiatives. This support has proven to be instrumental in enhancing research efforts through collaboration with fellow researchers across the CCI network.

Research Programs	Funding
FY 2025 COVA CCI Cybersecurity Research Projects	$406,667
FY 2024 COVA CCI Cybersecurity Research Funding	$250,000
Research Scientists	$1,135,900
Cybersecurity Undergraduate Research Program	$31,200

a. **FY 2025 COVA CCI Cybersecurity Research Program.** COVA CCI supported seven research projects with funding in FY 2025 for $406,667. These projects were selected from the CCI Call for Proposals – Cybersecurity for AI and AI in Cybersecurity. Visit the COVA CCI Research website for more information regarding these funded projects - https://covacci.org/research/cybersecurity-research/.

COVA CCI Funded Research Projects – FY 2025

CCI Call for Proposals	Project Title	PI	Amount
Cybersecurity for AI and AI for Cybersecurity	Towards a Knowledge-Guided Foundation Model for Long-Tail Anomaly Detection in Network Traffic	G. Zhou (WM)	$66,667
Cybersecurity for AI and AI for Cybersecurity	Secure and Privacy-Preserving Decentralized AI through Model Refine and Fully Homomorphic Encryption	Q. Wang (ODU)	$70,000
Cybersecurity for AI and AI for Cybersecurity	Cyber-Attack Resilient Distributed and Explainable AI with Zero Trust Architecture	R. Diaz (ODU)	$50,000
Cybersecurity for AI and AI for Cybersecurity	Toward Integrated Security and Privacy Solutions for Multi-Modal AI	L. Li (ODU)	$60,000
Cybersecurity for AI and AI for Cybersecurity	Leveraging Large Language Models for Enhanced Software Security Analysis and Malware Detection	Y. Xiong (WM)	$50,000
Cybersecurity for AI and AI for Cybersecurity	Study of Adversarial Attack Strategies on Autonomous Vehicles equipped with LiDAR Sensors	A. Phadke (CNU)	$50,000
Cybersecurity for AI and AI for Cybersecurity	Enhancing the Security of Large Language Models Against Persuasion-Based Jailbreak Attacks in Multi-Turn Dialogues.	J. Rafiei	$60,000

b. **FY 2024 COVA CCI Cybersecurity Research Program.** In FY 2024, COVA CCI funded four research projects, totaling $250,000. These projects were chosen from two CCI Calls for Proposals: Supply Chain in Cybersecurity Research and Addressing Inclusion and Accessibility in Cybersecurity.

CCI Call for Proposals	Project Title	PI	Co-PI	Amount
Addressing Inclusion and Accessibility in Cybersecurity	Tackling Dark Pattern-Induced Online Deception of People with Visual Disabilities	Vikas Ashok (ODU)	Faryaneh Poursardar (ODU)	$50,000

Supply Chain in Cybersecurity Research	Enhancing Security of Software Supply chain - A Focus on AI/ML	Mohammad GhasemiGol (ODU)	Daniel Takabi (ODU)	$100,000
Supply Chain in Cybersecurity Research	A Paradigm Shift: Innovating Supply Chain Security for AI- Assisted Devices	Rui Ning (ODU)	Peng Jiang (ODU) Yuhung Li (ODU) Xinwei Deng (VT)	$50,000
Supply Chain in Cybersecurity Research	Advancing Supply Chain Security through Quantum Computing: A Framework for Rapid Optimization maritime and supply chain companies	Qun Li (W&M)		$50,000

c. **FY 2025 CCI Funded Research Programs.** COVA CCI was awarded six (6) projects from CCI and three (3) from CCI NOVA during FY 2025, totaling $739,948.

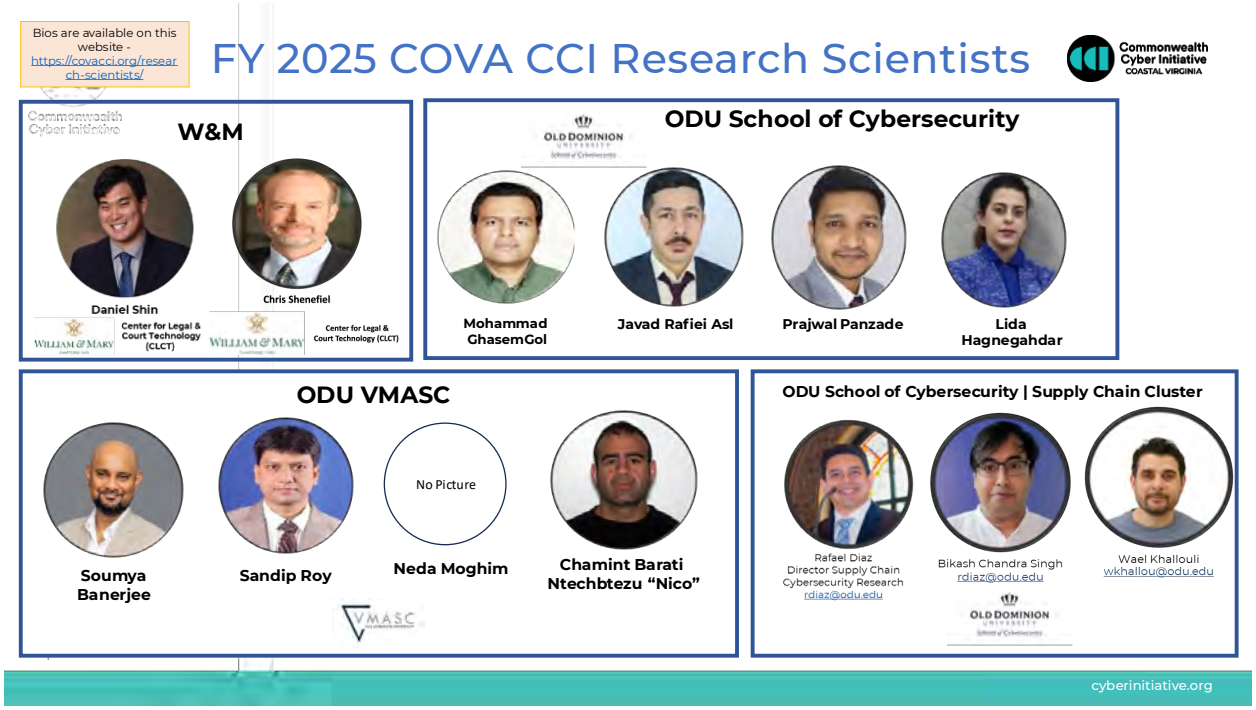
FY 2025 CCI Research Projects	Awards	Total Funding awarded to COVA CCI
CCI Cyber Clinic (WM)	1	$15,000
CCI Cyber for AI and AI for Cyber	3	$300,000
CCI Experiential Learning Program	2	$199,948
CCI Totals	**6**	**$514,948**
FY 2025 CCI NOVA Research Projects	**Awards**	**Total Funding awarded to COVA CCI**
2025 CATAPULT (Cyber Acceleration, Translation, and Advanced Prototyping for University Linked Technology	3	$225,000
CCI NOVA Totals	3	**$225,000**
Total Funding from CCI and CCI NOVA	**9**	**$739,948**

d. **FY 2024 CCI Funded Research Programs.** COVA CCI was awarded fourteen projects from CCI and three from CCI NOVA during FY 2024, totaling $1,059,599.

FY 2024 CCI Research Projects	Awards	Total Funding awarded to COVA CCI
CCI Fellow (Ross Gore - ODU/VMASC)	1	$50,000
Supply Chain in Cybersecurity Research	5	$350,000

Cyber as a Service	1	$5,000
Experiential Learning Programs	4	$384,099
Addressing Inclusion and Accessibility in Cybersecurity	2	$100,000
Virginia Cybersecurity Students (VCyS) Association	1	$20,500
CCI Totals	**14**	**$909,599**
FY 2024 CCI NOVA Research Projects	**Awards**	**Total Funding awarded to COVA CCI**
2024 CATAPULT (Cyber Acceleration, Translation, and Advanced Prototyping for University Linked Technology	3	$150,000
CCI NOVA Totals	**3**	**$150,000**
Total Funding from CCI and CCI NOVA	**17**	**$1,059,599**

e. **Research Faculty.**



COVA CCI continues to support research scientists at William & Mary and Old Dominion University (School of Cybersecurity and Virginia Modeling, Analysis, and Simulation Center), as well as one ITS engineer from ODU. Biographies for these research scientists are available on the COVA CCI website under People, Research Scientists. During FY 2025, six new research scientists were hired: Nico Barati, Sandip Roy, Soumya Banerjee, Javad Asl, Prajwal Panzade, and Wael Khallouli.

The supported research scientists and the ITS Engineer are.

- Chris Shenefiel, William & Mary (Retired January 2025)
- Daniel Shin, William & Mary
- Mohammad GhasemiGol, ODU School of Cybersecurity
- Lida Haghnegahdar, ODU School of Cybersecurity
- Javad Asl, ODU School of Cybersecurity
- Prajwal Panzade, ODU School of Cybersecurity
- Neda Moghim, ODU VMASC
- Nico Barat, ODU VMASC
- Sandip Roy, ODU VMASC
- Soumya Banerjee, ODU VMASC
- Yogesh Sur, ODU. ITS engineer to support COVA SHARE.

f. **CCI Supply Chain Cybersecurity Cluster.** In addition to these research scientists, COVA CCI provided funding for three professors/research professors as part of a cluster hire with George Mason. The ODU cluster will focus on supply chain and maritime cybersecurity and will work with GMU faculty to pursue large government projects related to these research areas.

- Rafael Diaz, ODU, Director Supply Chain Cybersecurity Research
- Bikash Chandra Singh, ODU Research Assistant Professor
- Wael Khallouli, ODU Research Assistant Professor

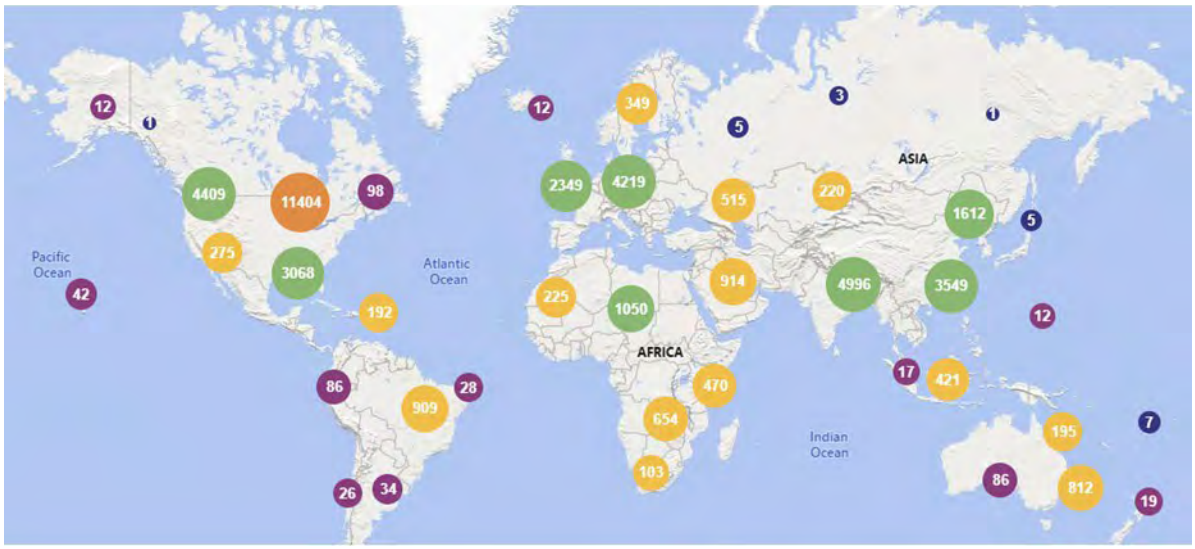
g. **COVA Shared Research Environment (COVA SHARE)**

COVA CCI continues to invest in our shared collaborative research computing environment, known as COVA SHARE, to support the growing cybersecurity programs, academic and research collaboration opportunities, and industry partnerships.

Visit the COVA CCI/Research/COVA SHARE website for additional information on COVA SHARE and watch a short overview YouTube video – What is COVA Share? – to learn more about this resource.

h. **Cybersecurity Undergraduate Research Program**. COVA CCI supported the Cybersecurity Undergraduate Research Program in Fall 2024 and Spring 2025. A total of 24 students from Camp Community College, Christopher Newport University, Norfolk State University, Old Dominion University, Tidewater Community College, Virginia Peninsula Community College, and William & Mary completed the program during the year. This program leverages the strength of research-intensive institutions to support active research participation by undergraduate students around cybersecurity. The students' research can be found on the COVA CCI/Innovation/Undergraduate Research website.

The student's papers are uploaded into the ODU Digital Library, which allows them to be viewed and cited. As of June 9, 2025, these papers were viewed over 43,581 times.



Source: [ODU Digital Commons, Cybersecurity Undergraduate Research, Dashboard](#).

Student Spotlight: Kayrene Woods, Old Dominion University, Cybersecurity, Undergraduate Cybersecurity Research Program

Kayrene Woods participated in the Fall 2024 cohort of the Undergraduate Cybersecurity Research Program, where she wrote her paper, **Data Security in the Apple Ecosystem: A Comprehensive Evaluation**. She was one of 10 Old Dominion University students selected to present their research to the ODU Board of Visitors.

She said, "***The undergraduate research program allowed me to explore a different side of research that I never knew existed. I've become a published author whose work can be accessed and cited by others in the field. This achievement has opened doors to reach other academics for insight and has provided valuable connections with professionals I admire. Additionally, it has positioned me alongside amazing industry leaders."***

Kayrene went on to say, ***"The Undergraduate Research Program helped me overcome my self-doubts, proving that I can contribute meaningfully to research and solution development. With the foundation I've built through this program, I am excited for my future opportunities to contribute further to the field and continue building meaningful professional relationships."***

Chapter 3: Workforce Development and Experiential Learning Programs

COVA CCI supports several programs in innovation, workforce development, and student experiential learning. These include the Innovate Cyber Challenge, Internships, and the Cybersecurity Clinic

Program	Funding
Innovate Cyber Challenge	$75,000
Cybersecurity Clinic	$200,000
Internships	$20,000

Student Spotlight: Muhammad "Moe" Mavins

Cybersecurity Major, Class of 2025 – Old Dominion University

"These programs helped me build both technical skills and professional confidence. I feel prepared to hit the ground running after graduation."

Muhammad "Moe" Mavins is one of the few students who participated in all three of COVA CCI's student experiential learning programs over the past year: the Cybersecurity Clinic, Innovate Cyber, and the Cybersecurity Undergraduate Research Program. His involvement in these programs became a transformative experience and a crucial part of his growth as a cybersecurity professional.

Each program brought unique value to his growth as a cybersecurity student and his future cybersecurity career.

Cybersecurity Clinic.
"The Cyber Clinic gave me hands-on experience working with real clients," Moe shared. ***"It exposed me to the practical side of cybersecurity, especially in areas like vulnerability assessments and secure communication."*** In addition to technical skills, the clinic helped Moe build professionalism. ***"It taught me the importance of clear, client-facing communication in tech environments,"*** he added.

Innovate Cyber
Through Innovate Cyber, Moe learned to think beyond the technical. ***"That program opened my eyes to the broader challenges in the field,"*** he said. ***"I developed leadership and project management skills, and learned how important it is to collaborate across disciplines to solve real-world problems."***

Cybersecurity Undergraduate Research Program
His Cybersecurity Undergraduate Research experience provided Moe the opportunity to dive deeper into human-centered cybersecurity topics. ***"I***

focused on phishing and social engineering, which helped me think critically and communicate complex ideas more clearly," he explained. ***"That analytical mindset is something I'll carry into any role I take on."***

Reflecting on his journey, Moe says the combined experience of all three programs gave him a strong foundation:
"These programs helped me build both technical skills and professional confidence. I feel prepared to hit the ground running after graduation."

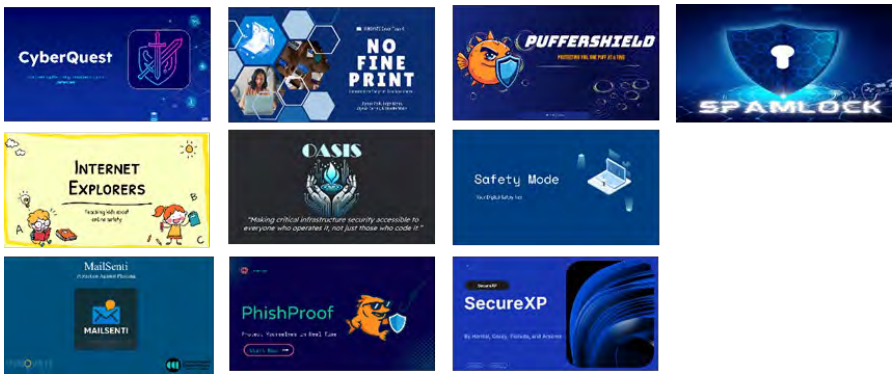
a. **Innovate Cyber Challenge.**

COVA CCI completed another cohort of its Innovate Cyber Challenge in spring 2025 with a total of 41 students from six universities & colleges. These included Christopher Newport University, Northern Virginia Community College, Old Dominion University, the University of Virginia, Virginia Tech, and William & Mary.

This program groups students into teams, and each team is assigned a cybersecurity problem/challenge. Over the semester, the teams use design thinking to produce unique solutions for the problem and present their final product during a Showcase event in April 2025. This year's challenge asked - How might we make cybersecurity more understandable, approachable, and encourage best practices around cybersecurity?

The teams participating in this year's cohort are.

CyberQuest
Internet Explorers
MailSenti
No Fine Print
OASIS
PhishProof
PufferShield
Safety Mode
SecureXP
SpamLock



Visit the COVA CCI/Innovation/Innovate Cyber Challenge webpage to view these and previous years' projects.

Student Spotlight: Ryan Murphy, George Mason University, Innovate Cyber designer

As part of the COVA CCI INNOVATE Cyber Challenge, ten teams participated in a semester-long design thinking course with a focus on Cybersecurity entrepreneurial problem solving. This diverse collaboration across Virginia universities allowed students to approach the problem from multiple perspectives. Ryan Murphy, GMU, was one

of these students, and he provided his thoughts about participating in this program.

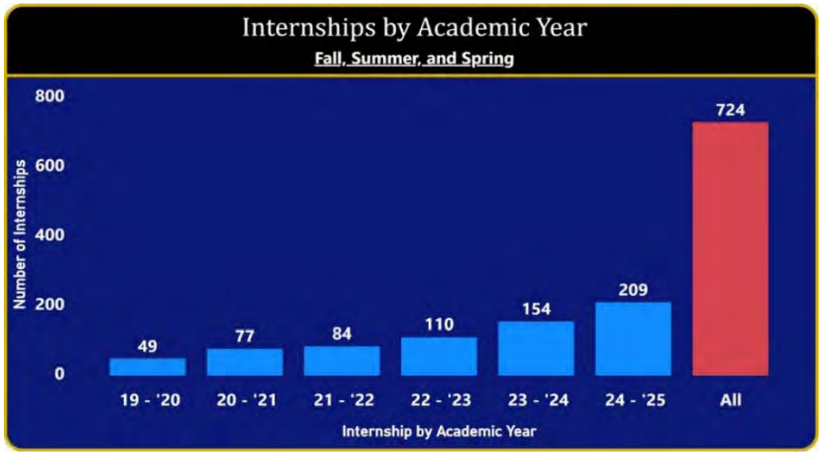
Ryan said, ***My team's solution addresses a critical gap in cybersecurity: making infrastructure security accessible to the operational staff who maintain these essential systems daily, and not just IT specialists. Our product, OASIS (Open Access Software and Infrastructure Security), provides gamified, adaptive learning that transforms infrastructure workers into security cognizant assets as they stand on the front line protecting their communities from malicious cyber threats.***

I greatly look forward to continuing my study of how to protect our nation's critical infrastructure through demonstrably impactful offerings.

b. **COVA CCI Internships**

Cybersecurity Workforce Development - Internships. One goal of CCI and COVA CCI is to grow the cybersecurity workforce in the Commonwealth. COVA CCI is working with university researchers and business partners to achieve this goal.

Old Dominion University, with support from COVA CCI, analyzed the School of Cybersecurity internship program. The School of Cybersecurity requires its Bachelor of Science students to complete an internship as part of the cybersecurity curriculum. This is accomplished by completing CYSE 368, Internship Course. After gathering and analyzing the data for the students who completed CYSE 368 since 2019, it was determined that 724 students completed an internship experience.



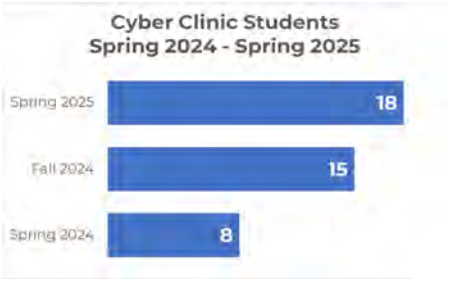
Internships with CEIO. COVA CCI supported eighteen (18) interns for ODU's Center for Educational Innovation & Opportunity (CEIO) iLab. These students assisted CEIO by engaging with the diverse programming offered at the iLab and in executing hands-on STEM activities, such as field trips, family/community events, and outreach initiatives, by preparing materials, setting up equipment, and facilitating activities. Beyond event support, the interns contributed to the iLab's organizational tasks, including maintaining equipment, supporting program planning, and creating

marketing materials. Their involvement extended to collaborating with community partners and providing valuable administrative assistance, allowing the iLab to offer a wide range of enriching experiences for both youth and educators. Through their work, the interns gain practical experience in program delivery, technical skills, and project management, while making significant contributions to the iLab's success.

During FY 2025, these 18 interns supported over 60 outreach events, including school field trips and community/family programs, connecting with over 560 students and members of the community.

Semester	# Interns
Summer 2024	4
Fall 2024	7
Spring 2025	7
Total	18

c. **COVA CCI Cybersecurity Clinic**



Starting with a pilot cohort in the Spring 2024 semester, COVA CCI supported a Cybersecurity Clinic with eight (8) students from Old Dominion University, and two micro-businesses – a non-profit religious ministry and a government contractor. We partnered with Valor Cybersecurity, a local cybersecurity business, which provided training and subject-matter expertise to the students as they prepared to assess the client businesses. This program has continued to expand each semester. In fall 2024, we supported 15 students and four businesses, including the City of Suffolk, and in spring 2025, we supported 18 students and six companies.

This clinic offers free cybersecurity-as-a-service to small businesses, non-profits, local government offices, agencies and boards as well as other organizations. Selected students to evaluate these organization's cybersecurity readiness and risk posture. The goal of this clinic is to raise cybersecurity awareness and to provide services such as services education and risk management strategies to client organizations within Hampton Roads. It also offers students an experiential learning opportunity as cybersecurity interns/consultants. Specifically, this clinic targets those client organizations that lack a strong cyber presence and who can benefit from gaining cybersecurity knowledge through cybersecurity awareness initiatives and services.

This is a 15-week program offered during the fall and spring academic semesters. During the program, students receive training on various cybersecurity modules, enabling them to interview client organizations beginning in the middle portion of the program. The students work in teams under the guidance of ODU faculty. The team provides service to the client in one or more areas of cybersecurity, including network defense, policies and procedures, cybersecurity training for employees, cyber risk assessments, and/or cybersecurity best practices.

As of April 2025, ODU is a member of the Consortium of Cyber Clinics. The Consortium of Cybersecurity Clinics is an international network of university-based cybersecurity clinics and allies working to advance cybersecurity education for the public good.

Old Dominion University wrote a story about the Cyber Clinic on December 4, 2024 – *"Cyber Clinic Supports Experiential Learning and Hampton Roads Businesses."*

Dr. Daniel Takabi, ODU Director of the School of Cybersecurity and COVA CCI Director

> *"Experiential learning opportunities like this are what will help these students develop as cybersecurity professionals who will make an impact in their professions and communities long after they graduate from Old Dominion University," said Daniel Takabi, Ph.D., director of the School of Cybersecurity and COVA CCI. "The cybersecurity clinic is a mutually beneficial partnership between the University and small businesses in Hampton Roads, and I am excited to see that our students, faculty and small business partners are learning and developing cybersecurity practices together."*

Business Testimonials.

CM Technology Inc.

The Cyber Clinic team that assessed CM Technology Inc. conducted a thorough assessment and helped CM Technology Inc. identify areas for improvement to ensure better cybersecurity compliance. Our Cyber Clinic team exceeded our expectations by participating in the Cyber Clinic. Once the clinic was completed, CM Technology Inc. gained a better understanding of where we need to be with cybersecurity compliance. We are actively working on implementing changes to improve our organization's cybersecurity using the results of the clinic engagement and the clinic's services contributed to increased organizational awareness of cybersecurity challenges and best practices. Thank you to the staff at COVA CCI for organizing this program. It was a wonderful experience.

TRS Productions

I am incredibly grateful to the ODU Cybersecurity Clinic for their outstanding support and guidance. As founder of TRS Productions, I had the privilege of working closely with my fantastic team. Their personalized assessment of our cybersecurity processes was thorough and insightful, featuring multiple touchpoints that ensured we received tailored advice. The

comprehensive report of findings was invaluable, providing clear suggestions for improvements and actionable steps we can take to enhance our cybersecurity measures. One of the most exciting outcomes was the development of a training program that we can implement in our business immediately. It's often overlooked how closely intertwined the arts and cybersecurity are, but this experience has shown me just how essential robust cybersecurity practices are in our industry. Thank you, ODU Cybersecurity Clinic, for this opportunity to elevate our security and safeguard our creative endeavors!

Student testimonial regarding their experience with the Cybersecurity Clinic.

Student Spotlight: Carla Belfiore, Old Dominion University, Cybersecurity, Cybersecurity Clinic Intern – Spring 2025

"The Cyber Clinic internship completely transformed how I approach cybersecurity."

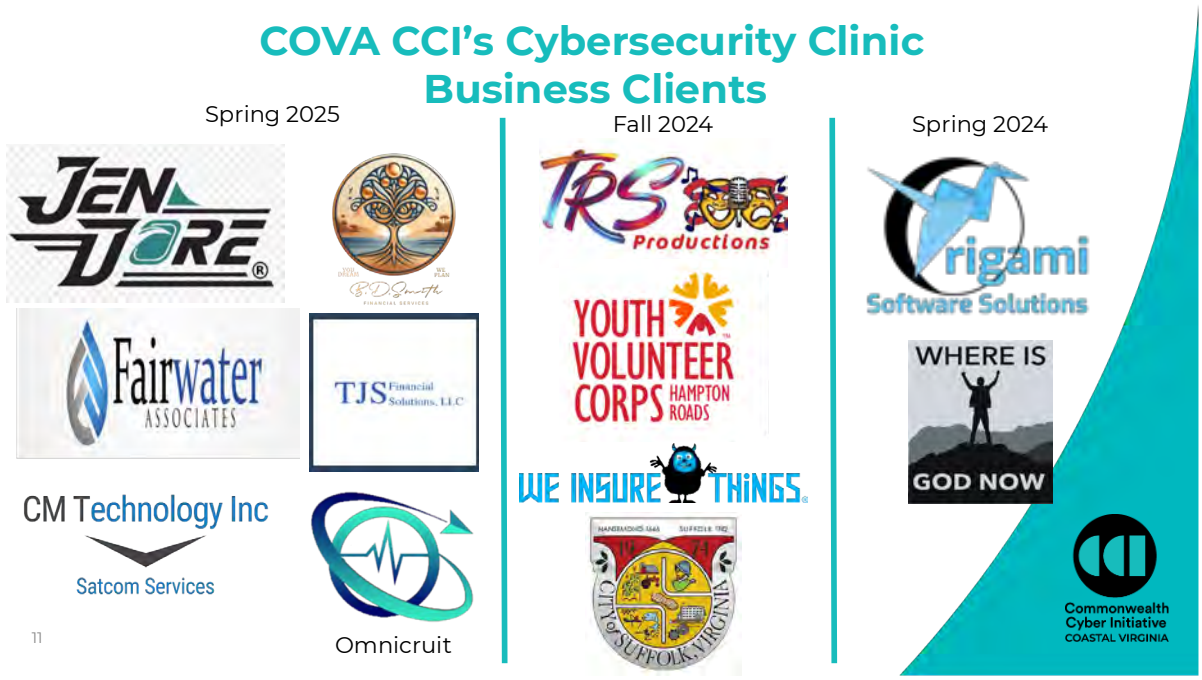
During Spring 2025, Carla Belfiore (B.S. Cybersecurity), participated in the ODU/COVA CCI Cybersecurity Clinic internship at Old Dominion University, a hands-on, real-world program designed to connect classroom knowledge with professional practice. Unlike traditional internships, the clinic provided a multifaceted experience that combined technical training, professional development, and client-facing consulting work.

From the start, Carla and her cohort were immersed in an environment that emphasized not just cybersecurity skills but also important soft skills like communication, professionalism, and empathy. ***"We didn't just work with tools—we worked with people,"*** she shared.

She credits workshops, team collaboration, guest speakers, and the chance to consult directly with local businesses like CM Technology Inc. as key to building her confidence and skills. By applying frameworks such as the NIST Cybersecurity Framework and the VALOR Top 10 Security Checklist, she learned to assess security postures and provide thoughtful, client-friendly recommendations.

"Dr. John Baaki's design thinking sessions helped me understand how to solve problems from the client's perspective," she said. ***"It pushed me to empathize, ideate, and create solutions that truly meet their needs."***

Guided by mentors like Professor Teresa Duvall, Mr. John Costanzo, and Mr. Greg Tomchick, Carla finished the program with stronger technical, analytical, and interpersonal skills. ***"This experience has helped me grow into a more capable and compassionate cybersecurity professional. It's shaped not just my future career path, but how I see the entire field."***



d. Workforce Development Programs (By the numbers)

Student Workforce Development. Since its founding in 2020, COVA CCI has supported **665** students through various programs. These students worked as research assistants on research projects and participated in the undergraduate research and Innovate Cyber programs. All students gained valuable workforce skills that they will carry into their future careers.

During FY 2025, a total of **116** students participated in COVA CCI Programs in Fall 2024 and Spring 2025, including Undergraduate Cybersecurity Research, Innovate Cyber Challenge, CIEO Internships, and the Cybersecurity Clinic.

COVA CCI Workforce Development Programs for Fall 2024 and Spring 2025

School	Total by Institution	UG Research	Innovate Cyber	CIEO Interns	Cyber Clinic
CNU	9	5	4		
Camp CC	1	1			
GMU	1		1		
NSU	2	2			
NOVA CC	1		1		
ODU	75	9	15	18	33
Virginia Peninsula CC	1	1			
VT	14		14		
UVA	1		1		

W&M	11	6	5		
Total	116	24	41	18	33

Virginia Works Statistics. Using the metrics developed by Virginia Works to track workforce development within the Commonwealth of Virginia, COVA CCI reports the following information for the four workforce development programs.

COVA CCI Workforce Development Program Metrics (Virginia Works)					
Experiential Learning Programs	Under-graduate Research	Innovate Cyber	Cyber Clinic	CIEO Internships	COVA CCI Total
Number of People Trained	24	41	33	18	116
Total Number of Job Placements	24	41	33	18	116
Total Program Cost	$34,700	$66,350	$123,650	$23,350	$243,050
Program Cost per Participant	$1,446	$1,618	$3,747	$1,297	$2,065
Job Retention Rate	100%	100%	100%	100%	100%

COVA CCI Workforce Development Program Metrics (Virginia Works)	
Career Preparedness Program	Cyber Forge
Number of People Trained	130
Total Number of Job Placements	130
Total Program Cost	$20,350
Program Cost per Participant	$157
Job Retention Rate	100%

Definitions of Workforce Development Metrics.

Metric	Definitions
Number of People Trained	# of students who participated in the program.
Total Number of Job Placements	# of students who completed the program and returned to their university to continue their course of study.
Total Program Cost	Cost of program includes direct costs (student stipends, faculty stipends) + indirect costs (PM % of time)
Program Cost per Participant	Total Program Cost / # of participants
Job Retention Rate	Track # of students still attending their course of study 6 months after the program: # Participates / Number Job Placements

Undergraduate Research Program – A total of **136** students from seven institutions have participated in this program since Spring 2020, with 24 students completing the program during Fall 2024 and Spring 2025 semesters.

School	Total	Spring 2025	Fall 2024	Spring 2024	Fall 2023	Spring 2023	Fall 2022	Spring 2022	Fall 2021	Fall 2020	Spring 2020
CNU	19	2	3		2	1	5			3	3
Camp CC	1		1								
NSU	13	2		3			5	3			
ODU	71	4	5	7	11	11	5	6	12	5	5
Regent	1										1
TCC	3			1				1			1
VPCC	2	1						1			
W&M	26	4	2	3	3	4	5	2	3		
Total	136	13	11	14	16	16	20	13	15	8	10

Innovate Cyber Program – A total of **226** students from 17 institutions have participated in this program since Spring 2020, with 41 students completing the program during the Spring 2025 semester.

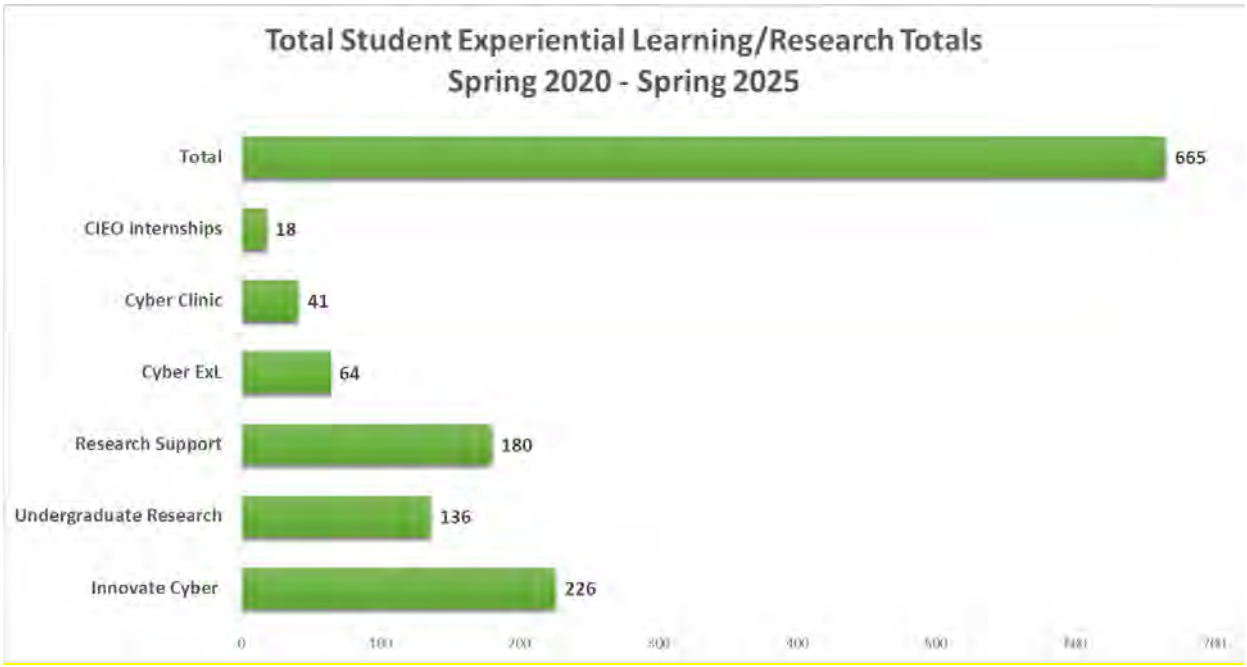
School	Total by Institution	Spring 2025	Spring 2024	Spring 2023	Spring 2022	Fall 2020	Spring 2020
CNU	30	4	10	2	2	5	7
ECPI	3						3
GMU	25	1	4	1	19		
Laurel Ridge CC	3			3			
NSU	8				5	1	2
NOVA CC	5	1	1		3		
ODU	95	15	18	31	12	10	9
Camp CC	3				2	1	
Va Peninsula CC	4				4		
Tidewater CC	9			1	3	3	2
VCU	1				1		
VMI	3			3			
VSU	2		2				
VT	19	14	4		1		
Va Western CC	2		1		1		
UVA	3	1	2				
W&M	11	5	1	4			1
Total	226	41	43	45	53	20	24

Cybersecurity Clinic – A total of **41** students completed the Cybersecurity Clinic since the Spring 2024 semester, with 33 completing the program in fall 2024 and spring 2025.

School	Total per Institution	Spring 2025	Fall 2024	Spring 2024
ODU	41	18	15	8
Total	**41**	**18**	**15**	**8**

Research Assistants – **180** students from multiple institutions at the post-doctoral, Graduate, and Undergraduate levels. These students are supporting CCI/COVA CCI research projects/activities across multiple semesters/years.

Number of research assistants from January 2021 through June 2025	
Category	Total per Education Level
PhD/Post Doc	34
GRA	97
UG	49
Total	**180**



Chapter 4: Innovation

a. Startup/Spinoff Companies. A key indicator of achieving the goal of growing the cybersecurity business ecosystem in Virginia is the ability to create new cybersecurity businesses from work associated with CCI. COVA CCI is working with entrepreneurial centers located within our region to support the work researchers and students are doing to develop potential business ideas.

RAEMAP LLC. The Real-Time Advanced Eye Movements Analysis Pipeline (RAEMAP) is a software platform for real-time eye-tracking and cognitive state monitoring. By leveraging mobile edge computing, it ensures low-latency analysis of analyst attention and mental fatigue, thereby reducing human error and strengthening cyber defense. RAEMAP is optimized for mission-critical environments, including defense operations, AR/VR training, and human-autonomy teaming.

Sampath Jayarathna, Ph.D., Old Dominion University, Computer Research Scientist, Autonomous Integrated Systems Branch, NASA Langley Research Center, Hampton, VA

b. Innovation Spotlight: Jackson Walker, Christopher Newport University (Class of 2024), BS in Cybersecurity, Computer and Information Systems Security

"It was great to see the range of cybersecurity initiatives the CCI supports through the Project-Based Learning program and how it brings together students, researchers, and industry mentors around meaningful, hands-on work like developing web-based CTF challenges, building cloud infrastructure for SOC training labs, exploring wireless vulnerabilities in real-world devices, and examining the intersection of AI security and effective cyber communication."
Jackson Walker, CCI Symposium, April 2025

Background. Jackson Walker participated in the CCI Project-Based Learning Program with Microsoft using the Flipper Zero. The Flipper Zero is a small handheld electronic device that can capture and replay many over-the-air signals. It has been used to hack remote controls, garage doors, and other electronic devices. During this program, the selected students worked with their mentor to find ways to leverage the capabilities of the Flipper Zero and to determine if more safeguards are needed to protect the public.

After experimenting with the Flipper Zero, including jamming car key fobs and

deploying rogue access points, Jackson recognized the need for a unified system to monitor and analyze the wide range of protocols the device can interact with. That insight led to the development of a full-stack Azure telemetry solution for collecting and monitoring wireless IoT lab devices across BLE, Wi-Fi, and Sub-GHz protocols. The system converts raw packet data into structured, queryable insights using IoT Hub, Stream Analytics, Blob Storage, Cosmos DB, and Azure Data Explorer.

To improve real-time visibility, he implemented BLE spam detection and integrated live alerts into Azure Sentinel, enabling automated threat monitoring across the lab environment.

To complement the telemetry system and give network engineers a new perspective, he developed a custom 3D visualization tool that simulates networks in three-dimensional space and allows real-time observation of device behavior, providing deeper insight into wireless interactions and potential anomalies. He continues to develop this tool, which he calls “NetScry.”

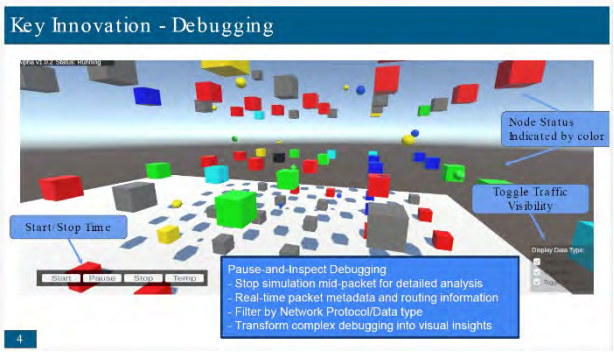
Project Summary – NetScry: Transforming Network Visualization and Security Management.

NetScry was born from Jackson’s work in CCI programs, tackling a key challenge in cybersecurity and network management: the difficulty of understanding complex network infrastructures and their security postures in real time.

The Problem: Network engineers and cybersecurity professionals find it hard to visualize their networks comprehensively, which makes it difficult to identify vulnerabilities, ensure policy compliance, and understand data flows within their infrastructure.

The Solution: NetScry offers a 3D visualization platform that turns abstract network data into an interactive, spatial experience. It captures live network information and maps each device to its actual physical location in 3D space, displaying real-time packet flows as they move between nodes. Users can pause the visualization at any moment to inspect individual devices or packets and access detailed information about protocols, headers, and data contents.

Beyond Visualization: The roadmap for NetScry includes a "Network Interpreter" feature that will overlay cybersecurity policies and regulations directly onto the 3D network map. This will allow engineers to immediately see which devices are subject to specific organizational policies, simplifying compliance tracking and security audits.



Market Impact: By making complex network analysis accessible through any web browser, NetScry democratizes advanced network visualization tools that were previously limited to specialized software. This approach broadens access to the technology for educational institutions, small businesses, and professionals who require powerful network insights without enterprise-level infrastructure.

This project demonstrates how academic research can evolve into practical solutions that address real industry needs, transforming theoretical knowledge into accessible technology for both educational and professional markets.

Currently, NetScry is being redeveloped as a browser-based tool so it can be used anywhere by anyone. If you are interested in testing NetScry during its closed testing phase or want more information about the project, please contact Jackson Walker (jacksonwalker5121@gmail.com).

c. Economic Impact. During 2023, CCI commissioned RTI International to conduct an economic impact assessment of the Commonwealth Cyber Initiative.

This report showed the economic impact created by CCI and its four nodes during 2022 and 2023. It was determined that COVA CCI generated $6.7- $6.8 million annually in labor income, which provided between $600,000 and $700,000 in annual state and local tax revenue.

The results of the COVA CCI assessment for years 2022 and 2023 are below.

Coastal Region: Economic Activity Supported by CCI Coastal in Coastal Virginia in FY 2022

	Jobs	Labor Income	Value Add	Output	State and Local Government Revenues
Direct	45	$4.2 M	$4.9 M	$9.2 M	$0.2 M
Indirect	23	$1.4 M	$2.3 M	$4.3 M	$0.2 M
Induced	24	$1.2 M	$2.3 M	$4.0 M	$0.3 M
Total	**92**	**$ 6.8 M**	**$9.4 M**	**$17.5 M**	**$0.7 M**

Source: IMPLAN, RTI analysis of FY 2022 CCI spending data. Note: Columns may not sum due to rounding.

Coastal Region: Economic Activity Supported by CCI Coastal in Coastal Virginia in FY 2023

	Jobs	Labor Income	Value Add	Output	State and Local Government Revenues
Direct	44	$4.1 M	$4.7 M	$9.0 M	$0.2 M

Indirect	23	$1.4 M	$2.3 M	$4.3 M	$0.2 M
Induced	24	$1.1 M	$2.3 M	$3.9 M	$0.3 M
Total	**90**	**$6.7 M**	**$9.3 M**	**$17.2 M**	**$0.6 M**

Source: 2023 CCI Annual Report

Chapter 5: Collaborative Partnerships and Projects

COVA CCI collaborates with academic institutions across the state on cybersecurity research projects previously mentioned in this report. Researchers are also partnering with businesses on potential federal funding opportunities and ongoing research. Some of these partners include G2Ops, MITRE, MI Technical Solutions, Port of Virginia, Valor Cybersecurity, and Peregrine Technical Solutions, among others. All projects funded through COVA CCI involve collaborations with researchers from multiple institutions and/or business partners.

During FY 2025, COVA CCI, in partnership with Old Dominion University, the City of Virginia Economic Development Office, and the Information Technology Office, held discussions about creating strategic partnerships to promote the City of Virginia and Hampton Roads to business partners. They also aimed to work with students on developing internships and potential jobs. After several meetings with key stakeholders, three working groups were established: Strategic Partnerships, Workforce Development, and IT Infrastructure. This initiative has resulted in a series of meetings with both national and international companies interested in investing and expanding their presence in the region.

Chapter 6: Financial Report

The Coastal Virginia Center for Cyber Innovation, as part of the Commonwealth Cybersecurity Initiative, acts as the hub of southeastern Virginia for research, innovation, and the commercialization of next-generation cybersecurity technologies, especially in the fields of Cyber Physical Systems Security and Artificial Intelligence within the maritime, defense, and transportation sectors.

Research Funding: Funds for research support have been allocated to three key areas: ongoing support for research scientists, funding for cybersecurity research, and improvements to the Coastal Virginia Shared Academic and Research Environment. For ongoing funding of research scientists, resources have supported 12 faculty members hired at William and Mary, the Old Dominion University School of Cybersecurity, and the Virginia Modeling, Analysis, and Simulation Center. Additionally, these funds will sustain an IT Engineer responsible for managing research projects related to COVA SHARE. Lastly, funds continue to finance various cybersecurity research projects.

Workforce Development and Innovation Funding: Resources allocated to foster regional innovation and build the talent pipeline have been used to promote experiential learning, support undergraduate research, encourage student-led innovation programs, facilitate cybersecurity internships, and drive commercialization efforts. These funds also provide ongoing support for the Coastal Virginia Cybersecurity Student Association and their annual conference/CTF. The undergraduate research program connects students and faculty across the node on cybersecurity initiatives, while the Innovate Cyber Challenge brings together students from across the Commonwealth to develop solutions for cybersecurity challenges.

Operations Costs: The central operations team comprises a chief administrative officer/project manager and includes stipends for additional leadership team members. Operational funds cover program administration, research activities, innovation programs, and workforce development initiatives. These funds are also used to organize meetings, travel, and activities that foster community among members of the Coastal Virginia Center for Cyber Innovation.

Total funding received by COVA CCI, including base budget and funding received from hub/node-supported projects.

Base Budget Allocation:	$2,500,000
Hub supported projects:	$514,948
Northern Node supported projects:	$225,000
Total Funding Received:	$3,239.948

Distribution of COVA CCI Allocated Funds across the node region.

Distribution of Funds Across the Node Region	
Institution	Amount
Christopher Newport University	$50,000
Old Dominion University *(Note 1)*	$2,058,333
William & Mary	$391,667
Total Committed Funds	**$2,500,000**
Note 1: Funding under ODU includes funds managed by the ODU Research Foundation, Virginia Space Grant Consortium (VSGC), Research Scientists Salary, and other Operations Costs	
Research Scientist Salaries	*$1,135,900*
Research Projects	*$240,000*
COVA CCI Staff Salaries	*$335,862*
VSGC Managed Projects Admin Support	*$5,000*
CoVA Cybersecurity Student Association	*$20,000*
UG Research (Includes payments to students from multiple institutions.)	*$31,200*
Innovate Cyber Challenge (Includes payments to students from multiple institutions.)	*$75,000*
Internships	*$26,000*
Cybersecurity Summer Camp	*$17,136*
Operations and other funds	*$172,235*
Total ODU Funds	*$2,058,333*

Chapter 7: Other COVA CCI Programs and Initiatives

a. Coastal Virginia Cybersecurity Student Association.

The Coastal Virginia Cybersecurity Student Association (CVCSA) hosted the Annual conference and Capture the Flag event, known as CyberForge, at Christopher Newport University, March 22-23, 2025. CyberForge allowed students from across Virginia to hear from cybersecurity experts, participate in a Capture-the-Flag competition, and network with fellow students.

As a part of its CoastalConnect initiative, CVCSA has unified all cyber clubs in Coastal Virginia into a regional association, significantly advancing the mission to establish a collaborative environment and facilitate resource sharing among member clubs. These clubs include Christopher Newport University, Norfolk State University, Old Dominion University, Regent University, Tidewater Community College, and William & Mary. By establishing connections with these educational institutions' cyber clubs, CVCSA aligns with CCI's objective of developing a networked approach to innovation and talent development, enabling a coordinated effort supporting tomorrow's Cybersecurity experts.

CVCSA CyberForge – March 22-23, 2025

Due to the CVCSA leadership's work, they proposed and were accepted to lead an effort to expand this program across Virginia. This led to the creation of Virginia Cybersecurity Students (VCyS). Virginia Cybersecurity Students (VCyS) is a statewide association which is working on establishing 3 regional nodes like CVCSA across the commonwealth. These nodes include the Coastal Node, Central Node, Northern Node and Southwest Node. This expansion signifies CVCSA's role in scaling up local initiatives to have a statewide impact. CVCSA's various events have reached over 700 unique participants.

These student-led initiatives directly support CCI's mission by facilitating talent

development, knowledge sharing, and networking, effectively bridging the gap between cyber students and industry.

To learn more about CVCSA and VCyS visit the COVA CCI Student Association Website - https://covacci.org/cvcsa/.

b. Williams & Mary Center for Legal & Court Technology

Problematic Generative AI Panel Discussion

On February 7, 2025, COVA CCI and William & Mary's Law School, Center for Legal & Court Technology, co-hosted a symposium focused on Problematic Generative AI. Panelists representing Law, Government, Academia and Industry from the US, Canada, and the United Kingdom gave their respective insights about these questions:

What is Generative AI and its limitations? How is Generative AI being used and how are risks managed today? Legal implications of Generative AI?
What remains to be done and how?

To learn more about the William & Mary Law School, Center for Legal & Court Technology visit their website - https://www.legaltechcenter.net/

Cybersecurity Newsletter: In addition to these symposiums, William and Mary Law School, Center for Legal & Court Technology, publishes a monthly "Cybersecurity Newsletter." This newsletter written by Daniel Shin, COVA CCI Research Scientist, William & Mary contains information and analysis on multiple legal issues related to cybersecurity litigation involving cybersecurity and cyber security-related topics, cyber security regulation and policy such as the White House 2023 National Cybersecurity Strategy, data breaches, cyber security issues affecting governmental bodies, including Virginia specific matters.

To see all the Cybersecurity Newsletters visit its website - https://www.legaltechcenter.net/ai-cyber/csnewsletter/.

c. Journal of Information Warfare

COVA CCI, working with the staff from the Journal of Information Warfare, published a special edition of the Journal of Information Warfare. Vol 23, Issue 4, Fall 2024, focused on cybersecurity research conducted by researchers and students affiliated with COVA CCI institutions.

Four Foreign Forces: A CTI Analysis of APTs Targeting the U.S., B Miller

Cybersecurity in the Maritime Industry: A Grounded Theory Exploration in the Hampton Roads Region, M Lapke, C Kreider, M Almalog

Liberating Cyberspace: Defining Cyberlibertarian Extremism and Exploring its Social Ramifications, D Hopkins, I Oesteraas

Using Deepfake Techniques as an Obfuscation Information Security Defensive Mechanism, D Shin

Social Murder in Another Century: Technologies That Enable Misinformation to Instigate Assault, L Potter, X Palmer

A Cyber Risk Management Perspective on Shipbuilding AI-Based Supply Chain Management, R Diaz, K Smith, R Ungo

Developing a Framework to Evaluate the Cyber-protection of the Information Sharing across Different Types of Supply Chain Governance, R Ungo, R Díaz, B Singh

The link to the issue is https://www.jinfowar.com/journal-issue/volume-23-issue-4.

d. Publications.

COVA CCI-affiliated researchers and faculty continue to contribute to the cybersecurity field through various publications and conference presentations. A list of these publications can be found on the COVA CCI website - https://covacci.org/research/publications/.

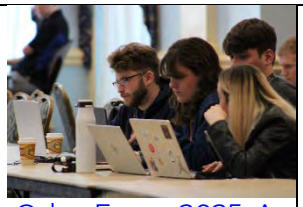
e. COVA CCI High School Cybersecurity Expo

On March 13, 2025, COVA CCI hosted a High School Cybersecurity Expo for about 50 high school students from Norfolk Public Schools and Virginia Beach Public Schools. During this event, the students participated in several hands-on experiences, allowing them to explore cybersecurity as a potential career field. Cybersecurity professionals from the US Navy, as well as ODU cybersecurity students, led these

workshops. Read the article written for ODU news to learn more about this Expo - https://www.odu.edu/article/norfolk-virginia-beach-high-schoolers-learn-about-cybersecurity-at-odu

f. COVA CCI Node in the News

COVA CCI has been actively promoting the success of its various activities through local news sources. Below is a selection of some of the articles posted on the COVA CCI website – News.

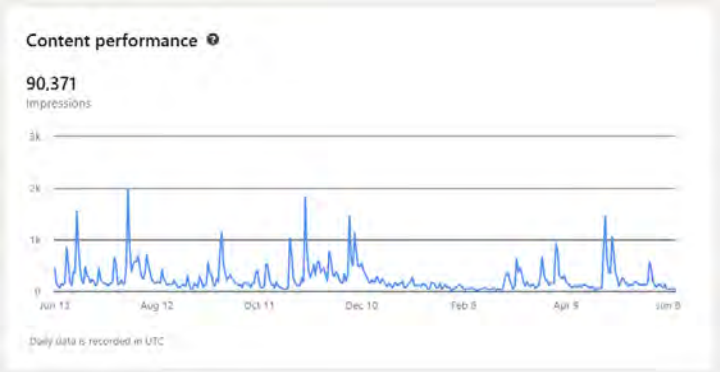
			
Kaufman Award, University Award for Outstanding Undergraduate Researcher Presented During Student Honors Event May 15, 2025 Old Dominion University Cybersecurity student, John Paul Peck, receives ODU's top award to a graduating senior, the Kaufman Award.	CyberForge 2025: A Cybersecurity Experience Like No Other March 22-23, 2025 Christopher Newport University Coastal Virginia Cybersecurity Student Association hosts it annual cybersecurity conference.	COVA CCI Researcher Meeting & Workshop March 28, 2025 COVA CCI-affiliated researchers met to discuss potential collaborative research opportunities.	ODU Cyber Clinic Supports Experiential Learning and Hampton Roads Businesses December 5, 2024 COVA CCI and ODU complete their 2nd cohort of the Cybersecurity Clinic.

Ten Faculty Selected as Artificial Intelligence (AI) Teaching Fellows October 4, 2024 ODU selects 10 faculty as AI Teaching Fellows	Christopher Newport University: Introducing the School of Engineering and Computing November 11, 2024 CNU creates School of Engineering and Computing.	William & Mary selects renowned computer scientist, alumnus to lead W&M's new School of Computing, Data Science & Physics October 3, 2024 WM selects Dr. Douglas Schmidt as it inugural dean of	ODU News: COVA CCI Announces New Director: Daniel Takabi May 24, 2024 Dr. Daniel Takabi is named the new COVA CCI Director, replacing Dr. Brian Payne, who was named the interim

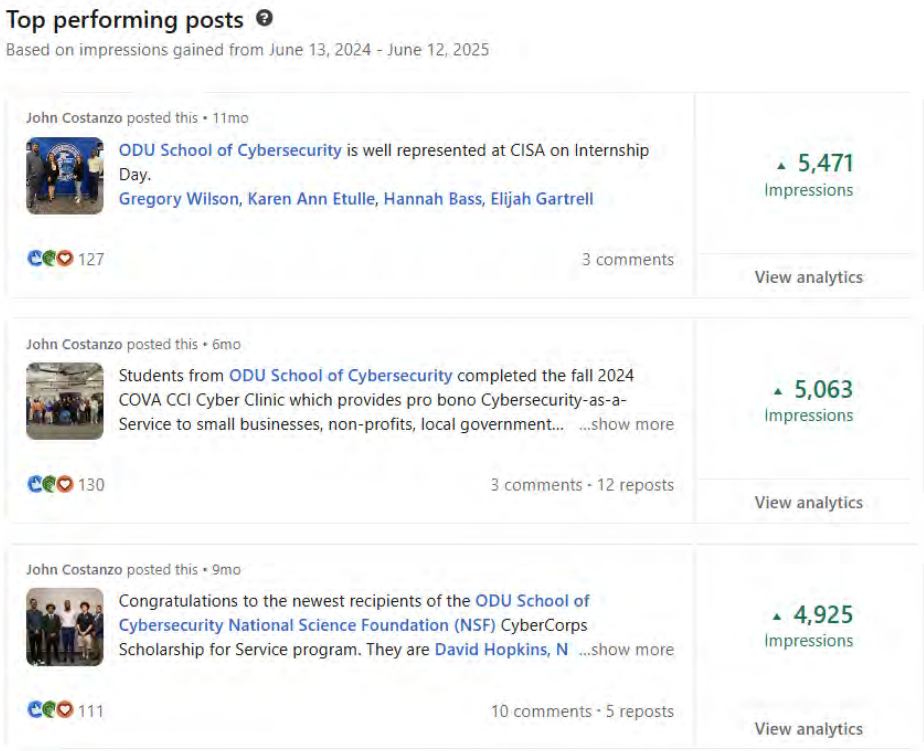
		the W&M new School of Computing, Data Sciences & Physics.	Provost for ODU.

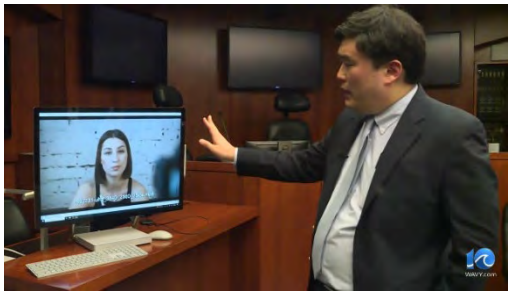
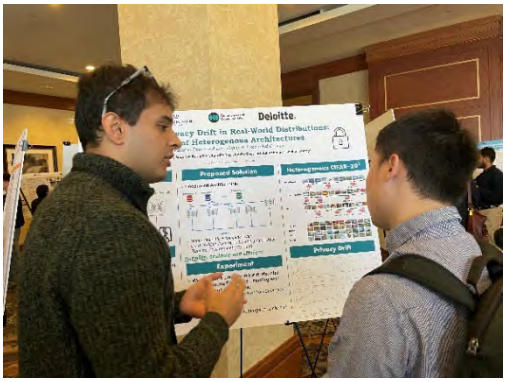
g. Social Media via LinkedIn

We use LinkedIn to post content related to cybersecurity trends, announcements, and other activities. Over the past 365 days (June 13, 2024
- June 12, 2025), there have been 90,371 impressions on our shared posts.



The top three posts from the past year generated over 15,000 impressions.



h. For additional information contact John Costanzo, Chief Administrative Officer, COVA CCI, jcostanz@odu.edu, or visit the COVA CCI website (https://covacci.org) and the Commonwealth Cyber Initiative website (https://cyberinitiative.org/).

COVA CCI Website
www.covacci.org