

# CyberBoat Challenge 2024

## hosted by the University of South Carolina Beaufort



Location: University of South Carolina Beaufort, 1100 Boundary Street, Beaufort, SC 29902

Dates: 17 – 19 December 2024 (Travel on Monday 16 Dec and Friday 20 Dec)

<b>Student Lodging:</b> Best Western Sea Island Inn 1015 Bay Street Beaufort, SC 29902 843.522.2090	<b>On Water Activities:</b> Safe Harbor Marina 1006 Bay Street Beaufort, SC 29902	<b>On Water Activities:</b> Henry C Chambers Waterfront Park Beaufort, SC 29902
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Note: Double occupancy rooms for students are covered by the Maritime Cybersecurity Institute.

Breakfast meals may be offered by the hotels; breakfast is not served at the CyberBoat Challenge.

## Agenda

### Tuesday 17 Dec 2024

<b>0730</b>	Student Shuttle Leaves Sea Island Inn for USCB		
<b>0730</b>	Registration: Submit Non-Disclosure Agreements, Waivers, and Receive Badges		
<b>0800</b>	Welcome	Dr Eric Skipper, PhD --- Executive Vice Chancellor USCB	
<b>0810</b>	Introductions	Rick Siebenaler Warren Parker	Maritime Cybersecurity Institute South Coast Cyber Center
<b>0830</b>	Overview of Marine Systems	Duncan Woodbury	Maritime Hacking Village
<b>0920</b>	Break		
<b>0930</b>	Introduction to J1939 and NMEA 2000	Jeremy Daily	Colorado State University
<b>1200</b>	Lunch Presentation	Chester "CJ" Maciag	Office of the Undersecretary of Defense
<b>1300</b>	Automated Identification System	Gary Kessler	Fathom5
<b>1450</b>	Break		
<b>1500</b>	Wireless Systems	Eric Thayer	Assured Information Security
<b>1800</b>	Dinner Presentation	Bryan Johnson	US Coast Guard
<b>1900</b>	Case Studies on Hacking Systems	Jake Jepson	Red Balloon Security
<b>2000</b>	Student Shuttle Leaves for Hotel		

### Wednesday, 18 Dec 2024

<b>0745</b>	Student Shuttle Leaves Sea Island Inn for USCB		
<b>0800</b>	National Marine Electronics Association	Mark Oslund	NMEA
<b>0830</b>	NMEA OneNet Introduction	Alex Polmans	NMEA
<b>1020</b>	Break		
<b>1030</b>	Applied Cryptography	Mert Pese	Clemson University
<b>1200</b>	Lunch Presentation	RADM John Mauger, USCG(ret.), Principal, (PORTS) LLC.	
<b>1300</b>	Assessment Preparation	Karl Heimer Jeremy Daily	Heimer and Associates Colorado State University
<b>1400</b>	Mentor Guided Assessments	Various Mentors	
<b>1800</b>	Dinner		
<b>1900</b>	Mentor Guided Assessments	Various Mentors	
<b>2000</b>	Student Shuttle Leaves for Hotel		

### Thursday, 19 Dec 2024

<b>0745</b>	Student Shuttle Leaves Sea Island Inn for USCB		
<b>0800</b>	Mentor Guided Assessments	Various Mentors	
<b>1200</b>	Lunch		
<b>1300</b>	Assessment Presentation Preparation	Various Mentors	
<b>1500</b>	Presentation of Results	Students	
<b>1800</b>	Dinner with concluding remarks	Rick Siebenaler	Maritime Cybersecurity Institute
<b>1930</b>	Student Shuttle Leaves for Hotel		

Note: During the assessment period, students will have OPTIONAL access to boats in the facility and some on-water testing will be encouraged at the City of Beaufort docks. All students will be invited for an OPTIONAL boat ride from Beaufort City Dock. Warren Parker is the point of contact for on-water activities.

# Sponsors & Contributors

A special thank you goes out to the sponsors & Contributors of the event.

Host  
Sponsor



**Maritime Cybersecurity Institute**



**South Coast  
Cyber Center**



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**SYSTEMS ENGINEERING**  
COLORADO STATE UNIVERSITY



The 2024 CyberBoat Challenge is sponsored in part by MCSI, which is supported by the NSF Engines Development Award: Advancing Cybersecurity Technologies for the Maritime Transportation System (SC) and funded by the National Science Foundation – Award Number 2305684.



## Mission

Following in the successful model of the CyberAuto, CyberTractor and CyberTruck Challenges, the mission of the CyberBoat Challenge is two-fold:

1. Develop the next generation workforce by bringing awareness, excitement, professional involvement, and practicum-based training to the maritime cyber domain.
2. Establish a community of interest for maritime cybersecurity that transcends individual companies or departments and reaches across disciplines and organizations to make a more universal and experienced base of engineers and managers.

## Program Committee:

Jeremy Daily  
Program Coordinator  
Colorado State University  
[jeremy.daily@colostate.edu](mailto:jeremy.daily@colostate.edu)

Rick Siebenaler  
Student Travel Coordinator  
Maritime Cybersecurity Institute  
[rsiebenaler@mcsi.org](mailto:rsiebenaler@mcsi.org)

Warren Parker  
Boat and Asset Coordinator  
South Coast Cyber Center  
[warren.parker@ymail.com](mailto:warren.parker@ymail.com)