

Preparing Cyber Warfare Professionals by Integration of Curriculum, Experiences, and Internships

Jorge Crichigno (PI) - University of South Carolina (USC), UT San Antonio (UTSA), SC State University (SCSU)

Project website: <https://research.cec.sc.edu/cyberinfra/projects/ONR>



Motivation and Goals

Motivation

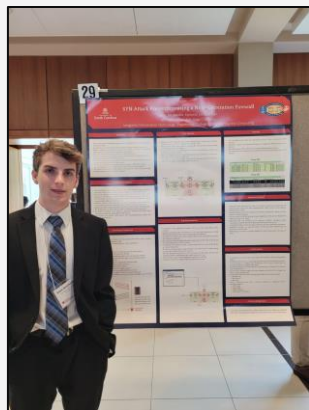
- Shortage of professionals with cybersecurity skills.

Goals

1. Advance formal and informal cyber communities.
2. Develop a multi-state internship program.
3. Expand the Academic Cloud to support large-scale learning and research nationwide on C4ISR.

C4ISR Undergraduate Research and Formal Courses

- Over 30 students specialized in C4ISR topics per year.
- Virtual lab libraries on C4ISR incorporated in courses at institutions in TX (UTSA) , SC, LA, NC, CA, and other states.
- Over 60 U.S. National Guard trained per year in cyber warfare-IT.



Informal Communities

- 1- to 3-day workshops have been organized, online & in-person.
- 5 hands-on workshops in 2023, **over 160+ IT professionals/educators** were trained.
- **Multiple universities** adopted the material.
- **8,550 lab experiments - 30,899 hours**, Feb 1, 2023-Jan 31, 2024
- Workshop details: <https://tinyurl.com/yennduua>
- Students who completed the C4ISR training are working on a DARPA project developing new C4ISR techniques.



< Workshop, Apr. '23, Texas Advanced Supercomputing Center, Austin, TX.

Community usage – Academic Cloud. >
Feb. 1, 2023 – Jan. 31, 2024

Community Usage	
Labs Attended	Hours Attended
8550	30899.63
8550	30899.63
8550	30899.63