Goals

Cybersecurity professionals need to be well rounded in most of the key areas of computing ranging from information theory to software system design, testing, and maintenance of distributed computing system. Our course modules and hands-on labs will be shared with the CAE community and other peer institutions in the U.S. through the proposed dissemination approaches discussed in Section 2.6. The outcomes of this project will provide needed resources to help prepare new cybersecurity professionals for our nation’s governmental and private sectors, and military bases. We will also integrate the hands-on labs into our existing NetLab+ server and newly built cybersecurity center at CSU supported by TSYS company. The expanded NETLAB+ server at CSU will benefit the cyber community, students from other institutions by providing them opportunities to get hands-on cybersecurity experience.

By organizing seminars and/or workshops to train cybersecurity professionals with directions from the NSA Regional Resource Center, our newly developed content modules and hands-on labs can have a huge impact on our local industries, military bases, as well as the nation’s governmental sectors that are in urgent need of qualified cybersecurity professionals. The CAE institutions adopting our content modules and hands-on labs for their cybersecurity curricula will make students well-trained in the field of intrusion detection systems and add valuable assets to their educational programs, specially to their cybersecurity programs. The hands-on labs designed from cutting-edge research in cybersecurity can help the students at the CAE institutions to engage in cybersecurity research activities at their early stages, resulting in much better trained and equipped cyber experts, and having great advantages over their peer students. All the effort we will make for this project will greatly benefit the cyber communities.