

Florida Center for
Cybersecurity
at the University of South Florida



*Board of Governors Report
July 2015 – June 2016*

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OVERVIEW

LEGISLATIVE LANGUAGE

The Center's mission was articulated by the 2014 Legislature:

1. The Florida Center for Cybersecurity (FC²) is established within the University of South Florida.
2. The goals of the Center are to:
 - a) Position Florida as the national leader in cybersecurity and its related workforce through education, research and community engagement.
 - b) Assist in the creation of jobs in the state's cybersecurity industry and enhance the existing cybersecurity workforce.
 - c) Act as a cooperative facilitator of state business and higher education communities to share cybersecurity knowledge, resources and training.
 - d) Seek out partnerships with major military installations to assist, when possible, in homeland security defense initiatives.
 - e) Attract cybersecurity companies to the state with an emphasis on defense, finance, health care, transportation, and utility sectors.

Source: HB 5101; 1004.444, Florida Statutes

MISSION

The mission of the Florida Center for Cybersecurity is to:

- Position Florida as the national leader in cybersecurity and its related workforce through education, community engagement and innovative, interdisciplinary research.
- Create thousands of new high-paying jobs in the state's cybersecurity industry.
- Serve as a facilitator for cybersecurity education - providing degrees, certificates, and training while contributing to Board of Governors priorities and encouraging students in non-IT majors to obtain industry-recognized cybersecurity specializations to enhance employability and wages upon earning their degrees.
- Enhance Florida's cybersecurity workforce, including reintegrating military veterans by utilizing their specialized skills and training.
- Act as a cybersecurity clearinghouse for statewide business and higher education communities - sharing knowledge, resources, and training opportunities to help mitigate cybersecurity threats, and optimizing investment to eliminate unnecessary duplication.
- Attract new financial, healthcare, transportation, utility and defense companies to Florida.

EXECUTIVE SUMMARY

The Florida Center for Cybersecurity, hosted at the University of South Florida, works with all of the 12 State University System (SUS of Florida) institutions to promote cybersecurity education and workforce development, research, and outreach across the state.

Here are a few highlights for FY 2015-16:

- **Annual Conference:** The Center hosted its Second Annual Conference in October 2015 with attendance of more than 600 people, a significant increase over the inaugural conference. About 20 percent of those attending were students and faculty who were able to bring knowledge back to the classroom and further their work in cybersecurity. All attendees had the opportunity to gain insights into many areas of the cybersecurity profession and gain a better understanding of industry needs and current trends.
- **Seed Grant Program:** For the second consecutive year, the Center awarded \$500,000 in collaborative seed grants for cybersecurity research in the SUS. For 2016, the program funded 10 projects from eight SUS institutions. Through the grants, SUS students gain practical experience in cybersecurity research methodology. Grant recipients also were highlighted during a day-long research symposium that was held as part of the annual conference in October.
- **Veterans Reintegration:** In January 2016, the Center launched New Skills for a New Fight (NSNF), a pilot cybersecurity training and certification program for military veterans funded by JPMorgan Chase & Co. Twenty veterans were chosen for the pilot, which will conclude in November 2016. The program transitions veterans into a career in cybersecurity in less than a year. Nearly 25 employers were engaged as part of the program.
- **Summer K-12 Programs:** The Center developed a summer cybersecurity programs for high school students and teachers. This includes GenCyber, which was funded through a \$100,000 grant from the National Security Agency, and a program offered in partnership with USF Pre-College. The programs were offered in July 2016.
- **Speaking Engagements:** FC² staff spoke about cybersecurity best practices and workforce development at more than 25 events across Florida and in four additional states. This is in addition to numerous media interviews.
- **Cybersecurity “WarGame” Simulation:** The Center partnered with Booz Allen Hamilton to offer a cybersecurity “wargame” simulation for senior officials in the public and private sectors. The session, held in conjunction with the annual conference in October 2015, educated senior leaders, especially those with non-IT responsibilities, on the strategic threats and risks associated with cybersecurity.
- **Board of Advisors:** The Center’s Board of Advisors was formed, meeting for the first time in September 2015. The Board -- chaired by retired Vice Adm. Mike McConnell, former Director of National Intelligence -- met three times during 2015-16 to serve as a resource, providing strategic direction and guidance to the Center.
- **Cybersecurity Training Lab:** The Center opened a dedicated cybersecurity training lab at USF’s Tampa campus in January 2016. The lab, designed to model a security operations center (SOC), was developed with input from the region’s law enforcement agencies, faculty and industry. The lab has been used as a classroom and training room for NSNF and was used for a pilot high school summer program in July.

BOARD OF ADVISORS

The Florida Center for Cybersecurity Board of Advisors provides strategic direction and guidance to the Center. The Board, representing the public and private sectors, brings perspective built on years of experience, and is committed to helping FC² fulfill its mission. Since its formation, the Board has:

- Leveraged its networks and relationships to build awareness of FC² at the national level.
- Shared first-hand knowledge regarding challenges and emerging opportunities on the evolving cybersecurity landscape.
- Provided perspective regarding cybersecurity workforce needs, policy and other topics.
- Helped the Center define priorities to support its mission.



First meeting of the Florida Center for Cybersecurity Board of Advisors in September 2015.

The 10-member Board is chaired by retired Vice Adm. Mike McConnell, a Senior Executive Advisor and former Vice Chairman of Booz Allen Hamilton. He served as a member of the National Security Council and managed the U.S. Intelligence Community's global engagement in support of U.S. and allied national security objectives. From 1992 to 1996, he served as the Director of the National Security Agency (NSA), and from 2008-09 he served as the Director of National Intelligence.

Board of Advisors members are:

- **Vice Adm. (retired) Mike McConnell**, Former Director of National Intelligence/Senior Executive Advisor, Booz Allen Hamilton, Chairman
- **Mark G. Clancy**, CEO, Soltra, An FS-ISAC and DTCC Company
- **Arthur W. Coviello, Jr.**, Executive Chairman (retired), RSA, The Security Division of EMC
- **William P. Crowell**, Partner, Alsop Louie Partners
- **Christopher Day**, CEO, Chymera Group LLC
- **Ed Giorgio**, Founder and President, Bridgery Technologies
- **Patrick Gorman**, President, Strategy and Product Development, CyberGRX
- **Lt. Gen. (retired) Kenneth A. Minihan**, Managing Director, Paladin Capital Group
- **Bob Rose**, Senior Strategic Advisor to the CEO, Securonix, Inc.
- **Dr. Ronald P. Sanders**, Vice President and Fellow, Booz Allen Hamilton

The Board of Advisors held its first meeting in September 2015 at USF. Subsequent meetings took place in January 2016 (Tampa) and May 2016 (Washington, D.C.). Under the leadership of Vice Adm. McConnell and through participation of a nationally-recognized Board of Advisors, the Center has grown its profile nationally and helped position Florida as an emerging player in cybersecurity.

EDUCATION REPORT



High school students participate in the Cyber Defense Boot Camp, a weeklong summer program launched in July 2016 by FC² in partnership with USF Pre-College and the USF Whitehatters Computer Security Club.

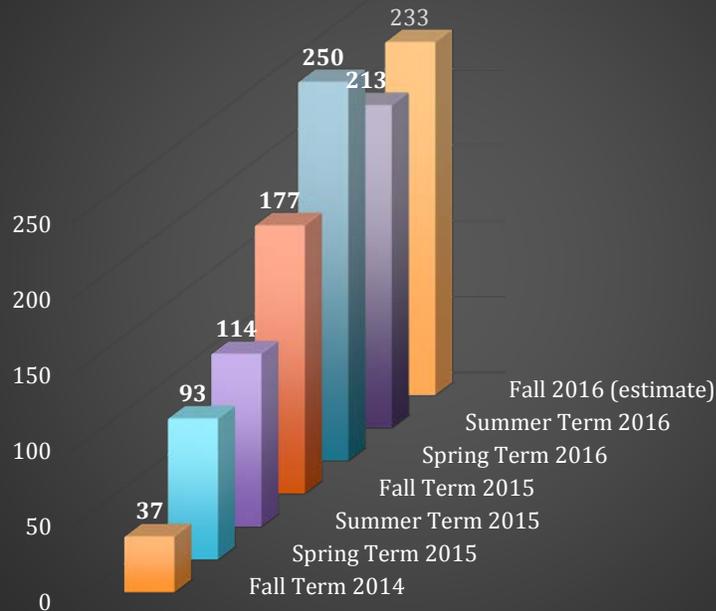
In keeping with its mission, the Florida Center for Cybersecurity has made strides in addressing the workforce gap that exists in cybersecurity, and students in Florida are reaping the benefits. The Center is focused on three key areas:

- Continuing support for USF's graduate program in cybersecurity.
- Developing cybersecurity pipeline programs for veterans and K-12 students.
- Leading collaboration between SUS universities.

To illustrate the demand, consider:

- More than 209,000 cybersecurity jobs in the United States are unfilled, according to U.S. Bureau of Labor statistics.
- The demand for cybersecurity jobs is expected to grow by 53 percent through 2018, according to U.S. Bureau of Labor statistics.
- Globally, the demand is expected to reach to 6 million by 2019, with a projected shortfall of 1.5 million, according to Symantec Research.

USF Master's in Cybersecurity Program Enrollment (by semester)



DEGREE PROGRAMS

Early in its inception, the Florida Center for Cybersecurity identified the need for a graduate program tailored to the needs of professionals already working in the cybersecurity field as well as highly qualified potential career changers, such as military members and veterans. To meet the demands of these students, address the cybersecurity workforce gap and provide readily accessible pathways for graduate-level education on a statewide scale, in Fall Term 2014, the Center partnered with USF to develop a fully online master's and graduate certificate program aligned to the needs of industry and government.

Here are a few highlights for the Master's in Cybersecurity program:

- Annual headcount tripled to nearly 300 students (2014-15 vs. 2015-16) and is expected to increase to 350 for 2016-17.
- A total of 46 students have earned master's degrees since Summer 2015, and 55 graduates are anticipated for fall 2016.
- A fourth concentration, Computer Security Fundamentals, was added.
- The degree was one of 10 master's programs highlighted in *The Christian Science Monitor* and was ranked as one of the top 10 cybersecurity graduate programs by universities.com.

During FY 2015-16, FC² also:

- Supported the hiring of an additional six faculty members to support cybersecurity education and research at USF. The faculty are having a positive impact on five colleges at USF and are helping to grow USF and Florida's reputation in the areas of cybersecurity education and research.

- Provided assistance to the College of Engineering and the Muma College of Business to develop a concentration in cybersecurity for two bachelor's degree programs. The concentrations are expected to begin in Fall Term 2016.
- Launched a reassessment initiative for the USF master's program to determine whether content is still relevant to current and projected workforce needs to ensure that USF cybersecurity graduates leave the program with appropriate knowledge and skills. Working with faculty, the Center developed a survey tool using the National Cybersecurity Workforce Framework as a guideline. Results from the survey have been compiled and mapped against existing curriculum and recommendations will be offered based on the findings.



Students who are part of New Skills for a New Fight participate in The Challenge: Cyber Defense on June 17, 2016.

VETERANS REINTEGRATION

Veterans are well-positioned to transition into high-demand, post-military careers in cybersecurity. This mutual need is outlined by current workforce statistics:

- Each year, more than 175,000 Americans leave military service.
- The unemployment rate for veterans is substantially higher than the overall national average (9 percent vs. 6 percent).
- Florida has the third largest population of veterans in the nation with over 1.5 million, and is home to 20 military installations.
- Cybersecurity is a focus area for veteran reintegration efforts because cybersecurity professionals are in high demand (near 0 percent unemployment), and starting salaries are much higher than the national average.

- Many veterans have been exposed to security procedures and have acquired security clearances during service that can help them compete for positions, bringing even more value to potential employers.

In January 2016, the Center, in partnership with the University of South Florida and three training and certification providers, launched New Skills for a New Fight, a free, 40-week cybersecurity training and certification program for veterans funded through a \$300,000 grant from JPMorgan Chase & Co. The pilot program offers 25 weeks of classroom and hands-on learning followed by a 15-week internship or mentorship.

Participants earn certifications and college credit toward a bachelor's degree. Tuition, books, online fees and exam vouchers are provided free of charge. Through the accelerated program, students can complete the program and land cybersecurity positions in less than a year.

NSNF is unique in that it incorporates traditional academic curriculum, practical, skills-based training and on-the-job experience to rapidly field cybersecurity practitioners aligned to a specific job role.

The program was highly competitive, with 60 applicants applying for 20 slots in the pilot program. The students chosen include:

- Veterans from four military branches (12 Army, five Marines, two Navy, and one Air Force).
- Two female students.
- Four active reservists.

The high level of engagement from the community, employers and from USF, as well as the hands-on approach to learning, have contributed to the program's overall success. The students who completed the program have received job offers as high as \$72,000.

The classroom portion of the program concluded with a cyber defense competition, where students were able to showcase their skills and network with nearly 20 prospective employers.

To achieve its goal of full employment, FC² reached out to dozens of Tampa Bay corporations. Students engaged with employers through classroom presentations and visits to Tampa Bay area security operations centers (SOCs).

Training and classes were held in FC²'s new, high-tech cybersecurity lab at USF's Tampa campus, which models a security operations center.

In May, the program was highlighted as part of a panel discussion at the U.S. Special Operations Command Care Coalition Conference in Tampa. In January, the program was highlighted during the Women in Government State Directors Conference. In April, the program also was highlighted on ATM screens across the Tampa region through the partnership with Chase.

The ultimate goal of the pilot program is to enhance, grow and successfully replicate it, providing a model for increasing the pipeline of cyber talent on a statewide level and beyond. Veteran students across the state will benefit from academic cybersecurity programs designed specifically for their skillsets and backgrounds.

SUMMER PROGRAMS

With the tremendous national need for cybersecurity professionals, it is crucial for Florida to strengthen the academic pipeline leading to cybersecurity careers. The Center partnered with the University of South Florida to launch two cybersecurity summer programs in July 2016.

- **Cyber Defense Boot Camp:** Fourteen high school students completed a one-week program offered through USF Pre-College. USF's Whitehatters Computer Security Club (WCSC), under the direction of faculty, developed the curriculum and led the program, which was offered at USF's Tampa campus.
- **GenCyber High School Program:** USF received a \$100,000 grant from the National Security Agency (NSA) to offer two weeklong cybersecurity camps for high school students. The curriculum was developed through the USF College of Education and led by students from WCSC, who provided one-on-one training. A total of 40 students were selected for the pilot program through a partnership with Hillsborough County Public Schools (HCPS). Two one-week sessions were offered in July 2016. GenCyber also included a one-day teacher camp, developed through the Florida Center for Instructional Technology (FCIT), for up to 20 HCPS teachers. The curriculum for the student and teacher camps was shared through a partnership with the University of West Florida and the Escambia County School District.

The Center is assessing the success of the programs.

CYBERSECURITY DATA CENTER

The Center supports courses and educational programs through its data center. Center staff, through the data center:

- Hosted USF's Master of Science in Cybersecurity Digital Forensics lab using EnCase and FTK imagers, industry-standard forensic tools.
- Supported USF's Practical Cybersecurity Course, which was offered for the first time in Spring Term 2016.
- Supported the senior project for four USF information technology students, setting up Kali Linux for penetration testing. The program will continue in Fall Term 2016.
- Hosted a worldwide capture the flag (CTF) security competition in April with over 1,000 teams. The virtual competition gave students the opportunity to compete with professionals. DEFKOR, of South Korea, won the competition. Another competition is planned in October 2016 in conjunction with the annual conference.

CAREER SERVICES

To connect cybersecurity students with potential employers, FC² partnered with USF Career Services in February 2016 to support the first cybersecurity-focused career fair to be held at USF. The Center assisted Career Services with the planning and publicity for the event, and also provided industry contacts. Nearly 24 employers in areas of cybersecurity, criminal justice and government affairs attended the on-campus fair.

The Center also has leveraged its connections to industry to help place students in cybersecurity internships. Employer partners include: Abacode, CACI and ReliaQuest.



The SUS Advisory Council held meetings in May at UWF (left) and in February at USF (right).

SUS ADVISORY COUNCIL ON CYBERSECURITY

FC² staff collaborate with all 12 Florida universities through the SUS Advisory Council on Cybersecurity. This collaboration helps the Center to map current offerings across the state, identify opportunities for programmatic improvement, align resources to address underserved stakeholder segments and market needs, and work to eliminate redundancy and duplication of effort across the SUS.

Among the highlights in 2015-16:

- Meetings at four SUS universities: University of North Florida (July), Florida Atlantic University (December), University of South Florida (February) and University of West Florida (May).
- Formation of the Curriculum Committee, which is focused on identifying curriculum needs and aligning courses to identify gaps and workforce needs.
- Formation of the Cyber Risk Management Committee, made up of CISOs and CIOs throughout the SUS. In February 2016, the sub-committee facilitated two weeklong U.S. Department of Homeland Security cybersecurity training courses, hosted by Florida State University. Thirty-eight FSU employees attended along with technology professionals from Florida A&M University, University of West Florida, University of Central Florida, University of South Florida and Florida Gulf Coast University. The committee also has promoted collaboration between the 12 SUS institutions through monthly conference calls, in-person meetings and other information exchanges.

COMMUNITY ENGAGEMENT



Clockwise from left: Conference keynote speaker (retired) Gen. Keith B. Alexander; session at annual conference; "wargame" simulation held at annual conference; St. Petersburg College New Ideas Conference.

Community engagement is important to FC²'s cybersecurity initiative. High value is placed on offering educational programs for industry and citizens, facilitating and hosting cybersecurity events and speaking engagements, and providing businesses statewide with a clearer understanding of cybersecurity threats and defenses.

This engagement is offered through:

- Partnerships
- Events
- Speaking engagements
- Media relations

PARTNERSHIPS

Through FC², discussions have taken place to develop a number of partnerships that will be beneficial to students and faculty in Florida, including:

- Global consulting firm **Booz Allen Hamilton**.

- **Team Orlando**, a collaborative alliance formed by the nation's leading military simulation commands, to help align research priorities and incentivize collaboration between faculty, students and government researchers.
- **JPMorgan Chase & Co.** in support of New Skills for a New Fight veterans training program.
- **U.S. Army Reserve Cyber Private Public Partnership initiative (P3i)** to help shape the future of education for the Army Reserves cyber mission force.
- **USF Florida Institute of Government** to explore cybersecurity awareness and training programs for county and municipal governments in Florida.

ANNUAL CONFERENCE

More than 600 people attended the Center's annual conference Oct. 13-14, 2015, a significant increase over attendance at the inaugural conference in 2014. The conference, held in conjunction with National Cyber Security Awareness Month, brought together experts and decision-makers from industry, military, government and academia, as well as students.

A highlight of the conference was a keynote speech from retired Gen. Keith B. Alexander, former NSA director, on "Staying Ahead of the Curve: Securing a Nation Amid Change." The speech was part of the SunTrust Foundation Lecture Series.

The first day offered an array of important topics, including: cybersecurity workforce development, cybersecurity national policy, analyzing purpose-built malware, and medical device security.

The second day offered the Center's first research symposium, with presentations from faculty researchers who were awarded funding through the Collaborative Seed Grant Program. Faculty and student researchers from 10 SUS institutions participated. The symposium served to highlight cybersecurity research in Florida and also to draw the attention of investors interested in commercializing and launching new businesses. The symposium concluded with an industry panel discussion.

The conference also included a cybersecurity "wargame" simulation for senior officials in the public and private sectors. The wargame educated senior leaders, especially those with non-IT responsibilities, on the strategic threats and risks associated with cybersecurity. Dr. Ronald P. Sanders, former U.S. Intelligence Community Associate Director of National Intelligence, and current Booz Allen Vice President, helped facilitate the exercise.

About 20 percent of those who attended the conference were students and faculty who were exposed to some of the brightest cybersecurity minds in the nation and were able to learn cybersecurity practices from top-ranked professionals. Students were able to bring this knowledge back to the classroom and further their work in this field. Faculty were able to gain insights into many areas of the cybersecurity profession and current trends.

The 2016 conference will be held at the Tampa Convention Center on Oct. 25. TCC will allow the Center to grow attendance and also offer space for additional sessions and demonstrations.

SPEAKING ENGAGEMENTS

As the reputation of the Center continues to grow, requests for staff to offer expertise through speeches, presentations and panel discussions also have increased. Over the past year, Center staff have given more than 25 speeches or presentations at community and business meetings, providing an opportunity to present information about cyber trends, to raise awareness of cybersecurity best practices and to highlight cybersecurity initiatives.

Following are just a few examples of recent speaking engagements:

- **Women in Government Conference** in Tampa, focusing on key topics for the 2016 state legislative sessions, including economic development, education and workforce development. FC² offered a presentation on the veterans' cybersecurity certification program and participated in a panel discussion that included representatives from JPMorgan Chase & Co. and Walmart (January).
- **Concerto Cloud Services Consumer Advisory Council** in Orlando (January).
- **Sixth Annual Continuing Education Training Institute (CETI)** in Orlando (March).
- **Annual New Ideas Conference** at St. Petersburg College. The forum, hosted and moderated by Congressman David Jolly, focused on emerging threats of terrorism (April).
- **Council of State Governments Workforce Panel** in Seattle (May).
- **Manatee Chamber of Commerce** in Sarasota (May).
- **National Homeland Security Association Conference** in Tampa (June).

SPONSORSHIPS

Through sponsorships, the Center supports external events that impact current and future SUS students. Sponsorships also help to raise awareness of cybersecurity, of FC², and are helping to position Florida as a leader in cybersecurity.

Sponsorships in 2015-16 included:

- **The Fourth Annual Security B-Sides Orlando Conference**, held March 12-13 at the University of Central Florida. The community driven conference brought together students, those interested in information security careers and working professionals. FC² was a presenting sponsor for the event. Of the more than 500 attendees, 150 were high school or college students. As part of the sponsorship, staff from the Center presented during the opening ceremonies and distributed materials in the exhibitor area.
- **Mil-OSS Hackathon & Working Group 7**, held May 21-23 in Tampa. The event brought together military and civilian government employees, contractors, industry experts and students to discuss the defense-industry open source advocacy. This year's event was held in conjunction with the Special Operations Forces Industry Conference (SOFIC).

MEDIA RELATIONS

The Center provided or facilitated more than 30 media interviews, serving as a resource about cybersecurity best practices, education, research and trends, during the 2015-16 fiscal year. The interviews help to position the Center as a leading voice in cybersecurity awareness and education, and also to position Florida as a leader in this emerging field.

Since July 2015, the Center has been mentioned more than 350 times on television stations in 42 states. TV interviews focused on a number of topics important to industry and consumers, including:

- Ransomware threats.
- Social media best practices.
- Protecting personal information on mobile devices.
- Research into power grid vulnerabilities.

- Password best practices.

The Center also received news coverage in print and online, providing experts on a number of important cybersecurity topics. A few examples include:

- A ForbesBrand Voice article that focused on cybersecurity threats affecting businesses.
- An *Orlando Sentinel* article on data breaches affecting Florida customers.
- An article in the *Naples Daily News* that helped residents understand a possible data breach at the Lee County Board of Elections.
- A *Tampa Bay Times* article on the data encryption debate.

RESEARCH REPORT



From left: October Research Symposium; USF Cybersecurity Research Roundtable

For the second consecutive year, the Florida Center for Cybersecurity awarded \$500,000 in research grants to invest in ideas and promote collaboration among cybersecurity faculty across the State University System (SUS).

Ten projects, representing eight SUS institutions, each received \$50,000 one-year seed grants. The grants were announced officially at the SUS Advisory Council on Cybersecurity meeting at USF on Feb. 24.

In addition to working on many of these projects, SUS students and faculty also will benefit from the cybersecurity discoveries generated through this research.

For the first time, officials from Team Orlando, a collaborative alliance formed by the nation's leading military simulation command, helped with the selection process.

The Seed Grant program is having a positive impact on cybersecurity research not only in Florida but also internationally.

Examples include:

- **Yian Zhou, You Zhou and Shingang Chen** from UF, and **O. Patrick Kreidl** from UNF, 2015 seed grant recipients, presented research on malware at the Seventh International Conference on Network & Communication Security in Sydney, Australia, in December 2015.
- USF Associate Professor **Jay Ligatti**, who received a 2015 grant and a renewal in 2016, received the Test of Time Award at the ACM conference on Computer and Communications Security (CSS) for a paper, "Control Flow Integrity" in November 2015. He has played a critical role in preventing Android injection attacks.
- UCF Assistant Professor **Yier Jin**, a 2016 recipient, who was awarded a \$750,000 U.S. Department of Energy grant in may for research to help prevent cyber breaches.

Florida Center for Cybersecurity Collaborative Seed Grant Program Awards

PROPOSAL TITLE	INSTITUTIONS	PI/CO-PI'S
Nonlinear Model-Based Cyber Attack-Resilient Grid Control	USF/UF	Dr. Zhixin Miao/Dr. My T. Thai
Creative and Composing Software Defined Networking (SDN) Security Modules	USF/FIU	Dr. Kaiqi Xiong/Dr. Xin Sun
Trusted Internet of Things Using Cross-layer Leveraging of Reconfigurable Device Signatures*	USF/UCF	Dr. Selcuk Kose/Dr. Ronald DeMara
Toward Software Defined Networking Enabled Cyber Resilience	FIU/FAU	Dr. Kemal Akkaya/Dr. Mehrdad Nojournian
Smart Grid Security Protection through Cross-Layer Approaches *	UCF/USF	Dr. Yier Jin/Dr. Yao Liu/Dr. Cliff Zou
Cyber Resilience for Injection Attacks*	USF/FIU	Dr. Jay Ligatti/Dr. Geoffrey Smith
Securing the Internet of Things from Hardware and Architecture Perspectives	UCF/UF	Dr. Jiann-Shiun Yuan/Dr. Xiaolin Li
Security Analyses and Applications of Complex Networks: From Theory to Practice	UCF/FIU	Dr. Mainak Chatterjee/Dr. Jason Liu
Toward Critical Infrastructure Resilience Against Cyber-Induced Attacks	FSU/FAMU	Dr. Xiuwen Liu/Dr. Ming Yu
New Technologies in Defense Maneuver Against Distributed Denial-of-Service Attacks	UF/UNF	Dr. Shigang Chen/Dr. Patrick Kreidl

* 2015 renewal

RESEARCH SUPPORT

FC² through its data support staff, is a growing technical resource for cybersecurity research faculty and students at USF. During 2015-16, the Center provided the technical knowledge and resources to support start-up projects for five USF faculty members. The support helped them as they applied for grants and other outside funding.

CYBERSECURITY RESEARCH ROUNDTABLE

In February, the Center invited cybersecurity research faculty from across USF to attend a research roundtable. More than 20 faculty and staff – representing the College of Business, College of Education and College of Engineering -- attended the meeting. The session gave faculty the opportunity for interactive and idea exchanges.

Two additional sessions are planned in Fall Term 2016 with the ultimate goal to expand the meetings to include cybersecurity research faculty from across the SUS. Through these meetings, FC² is creating collaboration among cybersecurity research faculty.

SUS ACADEMIC PROGRAMS

SUS University	Bachelor's Degree	Undergrad Certificate	Master's Degree	Graduate Certificate	Programs	CAE Designation
Florida A&M	✓ ¹	✓ ²	✓ ¹			CAE- IAE 4Y
Florida Atlantic	✓ ²	✓ ²	✓ ²			CAE- IA-R CAE-R
Florida Gulf Coast						
Florida International			✓			CAE-CDE 4Y CAE- R
Florida State	✓ ²		✓ ²		CyberCorps Scholarships	CAE-CDE 4Y CAE-R
Florida Poly	✓					
New College						
University of Central Florida		✓	✓ ²	✓	Summer program (K-12)	CAE-CDE 4Y
University of Florida						CAE- R
University of North Florida						
University of South Florida	✓ ¹		✓	✓	Summer programs (K-12), veterans training	CAE-CDE 4Y
University of West Florida	✓	✓	✓	✓	Summer program (K-12)	CAE- CDE 4Y
TOTALS	7	9	13	6		8

CAE-IAE: National Centers of Academic Excellence in Information Assurance Education

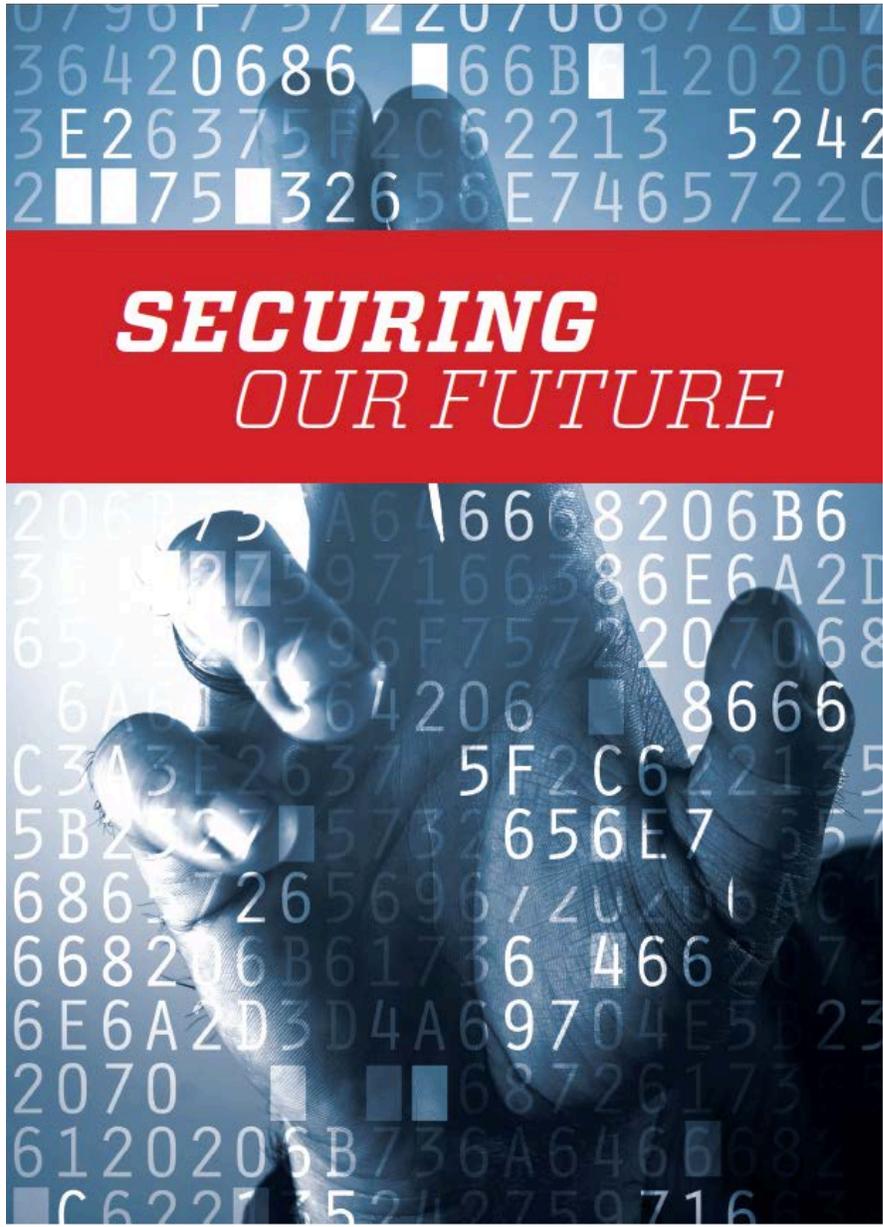
CAE-IA-R: National Centers of Academic Excellence in Information Assurance Research

CAE-R: National Center of Academic Excellence in Cyber Defense Research

CAE-CDE: National Centers of Academic Excellence in Cyber Defense Education

¹ Concentration/Specialization

² Cybersecurity related field



thefc2.org