NSA/DHS Centers of Academic Excellence in Cybersecurity



#### **Quarterly Newsletter**

Discovering and discussing the everchanging landscape of Cybersecurity Education for NSA Center of Academic Excellence designees.

# SECURE YOUR MEETING







**GENERATE MEETING ID** 

Never use your personal meeting ID

CREATE A **PASSWORD** 

Always use a meeting password and share it securely

WAITING ROOM

Use Zoom's waiting room feature to approve guests



**ZOOM UPDATES** 

Install Zoom application updates

**MEETING LOCK** 

Lock the meeting after it starts

2



Turn off screensharing for everyone except the meeting host



SAFE LINK

Do not share your meeting link on social media or websites



**DISABLE AUDIO 8 VIDEO** 

Mute audio & disable video for meeting participants

Image courtesy of Coastline College

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### About this issue:

Although the Executive Leadership Forum (ELF) was cancelled this year due to the COVID-19 pandemic, featured in this issue are two alumni reflections that would have been shared at this year's event. The CAE in Cybersecurity Community continues to operate at this time, and we hope that everyone is staying healthy and safe dufing this crisis!



Newsletter created by the CAE in Cybersecurity Community in collaboration with the CAE-C Program Office.

### **Community Spotlight**

# Alumni Perspectives

# Danielle Santos reflects on her time at a CAE Institution

### What CAE institution did you attend?

**DS:** California State University, San Bernardino (CSUSB).

### What was your major?

**DS:** Business Management with dual concentrations in Cybersecurity and Economics.

# Were you always interested in cybersecurity? If so, did you choose the school based on its cybersecurity program? If not, how did you get involved?

**DS:** When I was first looking at universities to apply to, I didn't have specific career aspirations. I chose my school based on location and my degree program - initially Business Management with no concentration. I thought to myself, "I can do many things in 'Business,' so I'll just start there".

Luckily, at CSUSB, Information Assurance and Security Management (now called Cybersecurity), was taught within the School of Business. While walking through the halls to get to my business classes, I would pass by the InfoSec club and hear students having fun, working on projects, and I would read the posters on the door of some of their activities. One day I decided to sit in on one of their club meetings. This opened the proverbial Pandora's Box and led to me taking an Information Systems Management class "for fun," then eventually deciding to switch my degree program altogether to Cybersecurity.

## What was your favorite part of your classes or the program?

**DS:** My favorite part of the program was that that the cybersecurity students really came together to help each other out. The InfoSec club room was a place where you could study, work on extracurricular projects, or just hang out between classes. Students who were about to finish their degree would be there and would be willing to help the brand-new students to give advice or help them through a tough homework

assignment. I always knew I had a group of people to bounce ideas off and teach me valuable lessons that couldn't be obtained in the classroom – like "don't trust anyone who tells you to run sudo rm -fr /\*".

I'd also have to say that the Cyber Defense course (which included offensive cybersecurity) was by far my most favorite educational course I've ever taken! The final exam was far from conventional, but in a good way. For the final, we navigated through laser beams, picked door locks, and bonus points were given for dressing up as a "hacker".

#### How did the program impact your career?

**DS:** The program provided me with countless opportunities to develop my technical and interpersonal skills outside of the classroom. The InfoSec club presented technical projects to work on, such as figuring out how an Xbox 360 can be used for purposes other than video games, and Saturday classes to explore Defense in Depth techniques. The CAE office also coordinated events and activities for students to practice their elevator speech by participating in career fairs and networking opportunities with local professionals. Since I didn't have any job experience in IT or related field, these

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-Danielle Santos

extracurricular activities provided valuable additions to my resume to help get me my first job after graduation.

The CAE program at CSUSB also gave me access to apply to the CyberCorps: Scholarship for Service program. In addition to supporting my college journey financially, this program added a second layer of extracurricular activities, job fairs, and career preparation.

#### What are you doing now?

**DS:** I am a Program Manager supporting the National Initiative for Cybersecurity Education at the National Institute for Standards and Technology. I get to work on standards, reports, and other materials that are used by people all over the world to help understand and build a stronger future cybersecurity workforce.

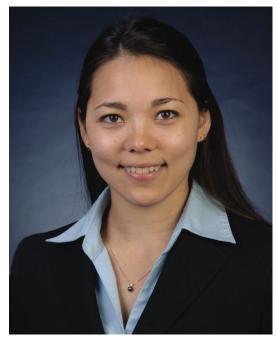
What advice would you give to current or prospective CAE students?

**DS:** If you are a current or prospective CAE student, my advice to you is this – don't sleep on these opportunities! There are so many resources available to students, especially those in pursuit of a cybersecurity degree. Scholarships for tuition, scholarships to attend conferences, opportunities to present projects and papers, free virtual career fairs, special hiring and training programs for recent graduates, and the list goes on. Take advantage of these while you can and network, network, network!

### Anything else?

**DS:** In my experience, both as a prior student of a CAE school and as an employee who occasionally interacts with CAE educators, I've found that the professors, instructors, and administrators at these schools are extremely passionate about preparing students for careers and providing them with quality education. They're approachable and willing to extend office hours because you've got back-to-back classes and can't make the regular hours. They're forward looking and attending conferences and trainings to learn about things that can be brought back to the classroom.

If you are a CAE educator, thank you, and please keep doing what you're doing for our future cybersecurity workforce. If you're a current or prospective CAE student, know that your professors can also be great mentors and career counsellors in addition to their role as a teacher.



Danielle Santos (pictured) graduated from California State University, San Bernardino, which received its CAE-CDE designation in 2014.

### **Community Activities**

# **CAE in Cybersecurity Symposium**



Mark your calendars for the CAE in Cybersecurity Symposium, scheduled for November 19-20, 2020, in Atlanta, Georgia. The Call for Program Committees will be open from April 15-May 30, and the Call for Proposals will be available from May 15-July 30.

The CAE in Cybersecurity Symposium is open to all existing Centers of Academic Excellence in Cyber Defense Education (CAE-CDE), Centers of Academic Excellence in Research (CAE-R), and Centers of Academic Excellence in Cyber Operations (CAE-CO), as well as government representatives and invitees. Schools that are currently applying or have applied for the CAE designation are also welcome to attend.

This event is designed to give CAE in Cybersecurity Community members and applicants the chance to present research, network, and receive updates from the community.

If you are interested in serving on the program committee(s), please fill out the form here.

## **Community Activity**

# National Initiative for Cybersecurity Careers and Studies (NICCS)

The National Initiative for Cybersecurity Careers and Studies (NICCS) is the leading online resource for cybersecurity training, education, and workforce development tools. NICCS connects students, educators, and cybersecurity professionals to academic programs, continuing education, and navigation of the nationwide cybersecurity field.

National Centers for Academic Excellence (CAE) are highlighted every quarter on the NICCS website through the Featured CAE Programs page. To be featured, CAE must have courses listed on the NICCS Education and Training Catalog.

Now that the NICCS Education and Training Catalog surpassed 5,000 cybersecurity course listings, there has never been a better time for CAEs to list their courses!

There is no cost to advertise courses on the training catalog. To become a NICCS training provider, please visit the Become a Provider page and submit an application. Once the application is received, instructions will be sent to submit courses.

CAE can also explore our new Cybersecurity Careers page, showing federal cybersecurity job openings from USAJobs.com.

To learn more about NICCS or the CAE program, visit the NICCS <u>CAE page</u> or email us at <u>NICCS@hq.dhs.gov</u>.



CAREERS AND STUDIES

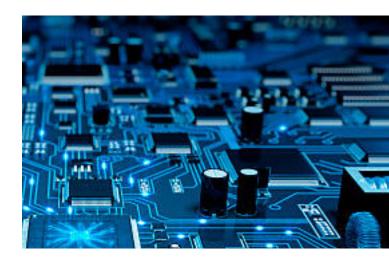


### **Community Activity**

# **Centers of Academic Excellence Virtual Career Fair**

On Sept. 4, 2020, from 9am-1pm PT, the CAE in Cybersecurity Community will be hosting a Virtual Career Fair, sponsored by the National Cybersecurity Training and Education (NCyTE) Center and the National Science Foundation (NSF).

The event is free for students, alumni and employers who wish to attend. Employers seeking cybersecurity talent can showcase their organizations by hosting virtual booths and presentations. In past years, over 1,000 job seekers have participated in the event, and more than 20 representatives from



government, industry, and academia have run virtual booths.

Students and alumni from CAE institutions who are looking for internships, full-time, part-time, permanent, seasonal, or temporary employment are welcome to take advantage of this opportunity. Students who are interested in attending can fill out the interest link <a href="here">here</a>. The exhibitor registration can be found here.



## **Community Spotlight**

# Alumni Perspectives

# Steven Hernandez reflects on his time at a CAE Institution

### What CAE institution did you attend?

**SH:** I graduated from the National Information Assurance Training and Education Center (NIATEC.) The Center is hosted at the College of Business at Idaho State University.

### What was your major?

**SH:** I was an MBA student with a major in computer information systems with an emphasis in information assurance.

# Were you always interested in cybersecurity? If so, did you choose the school based on its cybersecurity program? If not, how did you get involved?

SH: I started in electronics engineering. I received a scholarship that would originally cover a vocational degree, so I enrolled in Idaho State University's Electronic Systems program. This program covered the practical application of electronics engineering to a multitude of applications such as robotics, radio communications, solid state devices, micro controllers, critical infrastructure, lasers, electro optics and an amazing array of technology areas. When I finished with my associates, I had an opportunity to enroll in a bachelor's program in the College of Business. There I did my Bachelor of Business Administration in computer information systems and took several philosophy courses as I was able. When I was finishing my undergrad degree, I was approached by Dr. Schou. He is the Principle Investigator at NIATEC. I had finished a capstone project with him in risk management and he asked if I would be interested in a scholarship leading to an MBA. Needless to say I said yes and haven't looked back since.

# What was your favorite part of your classes or the program?

**SH:** I really enjoyed the diversity of the program at NIATEC. You did a full MBA in the course in

addition to six certifications from the Committee for National Security Systems and another three industry credentials in cybersecurity and information assurance. Needless to say when we walked out the door we understood business, strategy, business law, management, organizational behavior, finance, investing and strategy in addition to our overwhelming work in information assurance evidenced by our credentials. It really gave me grounding to enter the government at an accelerated rate and provide impact early. Having the background in business and electronic systems has also proved very valuable as drones, critical infrastructure and the internet of things are all front and center in our daily lives.

#### How did the program impact your career?

**SH:** It's directly related to my success and my ability to provide value to my employer and the nation. One of the most important aspects of the program is the community I'm a part of. Folks in this community keep in touch, they call each other when times are good and when times are challenging. The program fostered this cohort mentality by challenging us with work that could only be solved through teambuilding.

Needless to say when we walked out the door we understood business, strategy, business law, management, organizational behavior, finance, investing and strategy in addition to our overwhelming work in information assurance evidenced by our credentials.

-Steven Hernandez

#### What are you doing now?

SH: Presently I'm the Co-Chair for the United States Federal Government Chief Information Security Officer Council, the Chief Information Security Officer for the US Department of Education and the Government Chair for the ACT-IAC cybersecurity community of interest. Needless to say I don't get as much sleep as I would like, but the rewards of seeing the impact we make is beyond anything I could have expected. On the "big ideas" front I'm heavily engaged in the Zero Trust Architecture activities and also engaged in Cloud, Workforce and Risk Visualization initiatives across the Federal Space.

## What advice would you give to current or prospective CAE students?

**SH:** Be diverse in your studies and in building relationships. Your value will come from not only what you know, but who you know and your relationships

with them. It is impossible for a single person to strategically move an organization. Only a coalition of folks with some great leadership can move the needles. We must work together. Information assurance is such a broad domain it can be easy to gate keep and think "well they do X and they aren't really cybersecurity." This thinking will torpedo your career in a hurry. We need every single person we can get in our field and being open to new ways of working and encouraging underrepresented folks to join us is the only way we are going to get ahead. Also make sure you take some time for yourself. Once you enter this career fully your life will move at an incredible speed.

## Anything else you'd like to share about your experience?

SH: I'm excited for those who will join us soon. There's never been a better time to join the ranks of the information assurance professionals throughout our federal, state, local and tribal governments and the folks supporting us. We have tremendous blue sky if we are willing to work for it and the only limits we really face are those we put on ourselves.



Steven Hernandez (pictured) graduated from Idaho State University, which received its CAE-CDE designation in

# National Cyber Summit in Huntsville, Alabama

June 2-4, 2020

Time: 8:00am-5:00pm

Join academics and professionals in the field of cybersecurity as they discuss cyber training, education, and workforce development. For more information, please visit: <a href="https://www.nationalcybersummit.com/">https://www.nationalcybersummit.com/</a>

# CAE Forum Virtual Event

Time: First Wednesday of Every Month @ 1:10pm Eastern Time

CAE Forum is a live, online webinar where members of the CAE in Cybersecurity Community can give non-technical presentations to the community.

For more information, please visit: https://www.caecommunity.org/content/cae-forum-resources

## CAE Tech Talk Virtual Event

Time: Third Thursday of Every Month @ 1:10pm Eastern Time

CAE Tech Talk is a live, online webinar where members of the CAE in Cybersecurity Community can give technical presentations to the community. For more information, please visit: <a href="https://www.caecommunity.org/content/cae-tech-talk-resources">https://www.caecommunity.org/content/cae-tech-talk-resources</a>

The CAE-C Program Office uses the contact information uploaded into <a href="https://www.iad.gov/nietp">www.iad.gov/nietp</a> to send out routine reminders, solicitations, and event invitations. Please ensure that you have updated your information with the correct contacts from your institution.

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To submit ideas, stories, photos, events, feedback, or more, please email us at info@caecommunity.org.