2023-2024 Innovation of the Year Application

Project Title

GSOC - Gaucho Security Operations Center Internship Program

Principal Applicant (point of contact for notifications and any questions about the application)

First name   Rachelle
Last name   Hall
Title   Department Chair, Business, IT and Cyber
Email address   rachelle.hall@gccaz.edu
Phone number   623-845-3231
Location   Glendale

Name, title, college/district office of each team member who created the innovation.
Names and titles will be included on the League for Innovation in the Community Colleges website. (example - Name, Title, College; Name, Title, District Office)

- Dr. Susan Campbell, CTE Dean, GCC;
- Rachelle Hall, Department Chair - Business, IT and Cyber, GCC;
- Martin Bencic, Lead Cybersecurity Faculty, GCC;
- Chad Stroot, Lead GSOC Analyst, GCC;
- Drew Nichols, Lead GSOC Engineer, GCC;
- Amy Fitzhugh, Admin Specialist Sr., GCC;
- Sally Hervey, Program Coordinator, GCC;"

Innovations should fall into one of the following categories. Select the category most strongly aligned with the project (maximum of one)

- Workforce Preparation and Development

Innovations should meet one or more of the following criteria. Please select the criteria that best apply to the innovation (select all that apply).

- Quality. Students and/or staff agree that the innovation increases quality in the course, program, office, or institution. Evidence of quality may include student ratings or letters of support from colleagues.,

- Creativity. The innovation should be original or the adaptation creative. The program description or letters from experts are examples of evidence.

Please select the strategy of the MCCCD strategic plan most aligned with the innovation (select all that apply).

- Student outreach and success

Project Summary (maximum of 1,000 characters)
This description will be posted on the League for Innovation in the Community College website and used for program materials.

The GSOC is a live operations center and the first of its kind in a community college in Arizona. The problem addressed is two-fold: bridges the gap between academia and the workplace by using competency-based curriculum, and provides additional cybersecurity service to rural municipalities in need. The municipalities in need are those that fall at or below the cybersecurity poverty line – they have the need for increased cybersecurity, but not the means to secure it.

The college cybersecurity program partners with rural municipalities where GCC interns from a cyber program provide cybersecurity as a service. The gap, which is nationwide, prevents students from employment because they lack experience in the industry. This program attracts quality students to enroll and graduates students/interns with over 300 hours of actual workplace experience while giving back to the community by providing municipalities with a much-needed service.

Project Description (maximum of 1,000 words)
Provide a detailed explanation of the problem(s) addressed by the project? Explain how the project aligned to the category and program criteria identified by the League for Innovation in the Community College. Explain how the project aligns with one or more strategies of the MCCCD strategic plan. Explain the impact of the project. Describe the partnerships involved and plan for sustainability.

The GSOC Internship Program addresses the gap that exists between academia and the workforce; students lack development of workplace-ready skills but have the education. The second problem addresses the need for increased cybersecurity monitoring that fall on many rural municipalities who need added security measures, but lack the means to implement. These municipalities fall on or below what is known as the cybersecurity poverty line.

Alignment to workforce preparation and development is demonstrated in the GSOC program by providing a competency-based learning environment with the opportunity for students/interns to enter the workforce prepared to succeed. The internship program gives students up to 300 hours of experience working in a live security operations center monitoring, detecting and informing clients of potential risks and threats on their systems. In addition, this internship is

paid, through the grant, which immediately increases the value of our students' resume. Students do not only gain real-world experience working in a security operations center, but they also learn the 'soft skills' that are also in demand.

Strategic alignment to student outreach and success, strategic goal 1.2, is met by supporting students to reach their academic, personal, and/or professional goals by providing them with curriculum and experience opportunities to be successful in their industry. The 300+ hours the interns complete during this program engages them in teamwork and collaboration as they work together to determine action plans needed to protect the clients from possible incidents. This incorporates critical thinking and problem-solving skills to as they develop the best way to address those incidents and communication skills as they inform the clients of the detection and action plan for the incident. Students cannot gain this type of experience with academia only. Through this internship we are able to reduce that gap between education and the workforce.

Strategic alignment to student outreach and success, strategic goal 1.1, is met by attracting and recruiting more students. The cybersecurity programs at GCC have grown over the past three years. From 2021 to 2022, the degree seeking program grew in enrollment 56.5% and the certificate program grew in enrollment 12.8%. From 2022 to 2023, the degree seeking programs grew an additional 20.4% and the certificate program grew another 52.8%.

There have been several partnerships established as the GSOC was being built. Stellar Cyber has partnered with GCC to provide the software needed to monitor and detect potential threats to our clients at no cost. The Town of Wickenburg as the first rural municipality to sign on as a client of the GSOC. This partnership not only gives our interns that leading edge by monitoring their network, but it also allows GCC to give back by providing cybersecurity as a service at no cost. Their support and belief in this learning environment gives us the confidence needed to continue on with this invaluable project.

Another partnership established is with the State of Arizona Department of Homeland Security and Cyber Command. The state of Arizona has resources they share with our program keeping us knowledgeable in new threats and the information needed to stop these. We are working closely with the Deputy Director and Interim Chief Information Security Officer on creating a way to share the GSOC Internship Program with other institutions across the state. Our joint effort is to do whatever is possible to continue to educate and fight cybercrime to our best possible ability.

GCC has also established a partnership with the AZ Cyber Initiative, a non-profit designed to unlock opportunities for young people interested in cybersecurity. AZ Cyber offers programs through workforce partners to provide work-based learning opportunities that can lead to quality jobs in the future. We are planning to host an event with AZ Cyber at GCC in the spring. The event will offer a bootcamp to high school students who represent an underserved population. At the same time, there will be a bootcamp offered to faculty on teaching cybersecurity. Both of these bootcamps will be offered at no cost to the students or the faculty.

This program has a lot of growth and success potential. As we continue to work with our existing partners and establish new clients, we can continue to offer this program in a sustainable format serving our students and our community.

Glendale Community College held a Grand-Opening and Ribbon-Cutting Ceremony on Friday, August 18th, launching the Gaucho Security Operations Center or GSOC. Through the work and collaboration of an amazing GCC team, the opening of GSOC was a tremendous success. The opening was celebrated with a ribbon-cutting ceremony and tours of the facility with over 150 in attendance.

The GSOC was made possible by a STEM grant that was awarded to the CTE area managed by Dr. Susan Campbell for workforce development. Martin Bencic, Cybersecurity Program Director, and Rachelle Hall, BIT Department Chair, put together a program plan where students would have an opportunity to graduate with experiential learning via a paid internship in their last semester in the program. Over the summer, a classroom was transformed into a security operations center where cybersecurity students monitor, detect, and inform our clients (rural municipalities) of potential anomalies in their network. This is provided as a service to the community, with no cost to the client.

Rui Pereira, Mayor of the Town of Wickenburg, shared his enthusiasm as the first rural municipality to partner with GCC on this project. "Students will provide real-time security network traffic monitoring that is complementary to our IT contract services," he said. "This is an amazing opportunity for the Town of Wickenburg."

The guest speaker for the event was Mr. Ryan Murray, Deputy Director and Interim State Chief Information Security Officer for the State of Arizona Department of Homeland Security and Cyber Command. Mr. Murray presented to the crowd the importance of programs such as GSOC to our community and the opportunities that it presents for our students. "GCC's new center provides a 'unique opportunity' for partnerships," stated Murray. He enjoyed touring the facilities and took time to talk with students from MET Professional Academy (Peoria Unified School District) after the event ended and answered all of their questions.

The GSOC would not have been made possible without the many who dedicated their time and efforts to get this done. A special thank you to all who worked on this project: Facilities, OIT, Media, Business Services, Career and Technical Education, Business Development, Marketing, and Career Services. Last, but not least, a BIG GCC thank you to the BIT-GSOC crew: Chad Stroot, Drew Nichols, Martin Bencic, Ed Vasko, Susan Campbell, Deborah Dee, Keely Duffy, Amy Fitzhugh, Sally Hervey, Brent Kleinman, Tonya Hollingsworth, Kara Kujawa, Tevis Tumulty, Heather McAnerney, Charlie Hall, Samuel Hervey, and Patrick Lovings, who all volunteered during the opening. It was a little warm on Friday to say the least and they didn't miss a beat whether they were outside, inside or in between.

Hats off to our first class of interns: Claudio Munoz Merced, Nikolas Hooper-Torres, Jose Rodriguez, Sarah Koltweit, James Fullington, and Kevin Kacskos. Their official start day in the GSOC is Monday, August 21, 2023 and they, too, volunteered on Friday during the tours to answer questions from our attendees.

Best regards,

Rachelle Hall

Over 150 Attendees for the GSOC Grand Opening

Gaucho Security Operations Center

Ribbon-Cutting Ceremony Official GSOC Opening

Media Links:

AZ Central: https://www.azcentral.com/picture-gallery/news/local/glendale/2023/08/18/photos-glendale-community-college-gaucho-security-operations-center/70624071007/

AZ Republic: https://www.azcentral.com/story/news/local/glendale/2023/08/21/glendale-community-college-starts-cybersecurity-center-for-rural-towns/70596697007/

Fox 10 News: https://www.fox10phoenix.com/news/glendale-community-college-preparing-students-for-a-cybersecurity-career

Channel 3 – AZ Family: Glendale Community College has a new cybersecurity operations center for students (azfamily.com)

GSOC@gccAZ.edu   Business, IT & Cyber