

Project Title: Gaucho Security Operations Center - GSOC

Applicant: Rachelle Hall



Category most strongly aligned with the project: Workforce Preparation and Development

Criteria that best apply to the innovation: Quality, Cost Effectiveness, Creativity

Strategy of the MCCC strategic plan most aligned with the innovation: Student outreach and success, Economic resources and sustainability

Project Summary:

The Gaucho Security Operations Center (GSOC) is a unique nationally recognized program in cybersecurity that provides an opportunity to students to serve a paid internship at the end of their program giving them up to 300 hours of experience in a live security operations center upon graduation. This is the only program of its kind in the district and the state. The GSOC provides cybersecurity as a service to rural municipalities who fall at or below the cybersecurity poverty line; they are a critical infrastructure that demands cybersecurity monitoring but do not have the resources to supply it. The GSOC is added as a supplemental resource to monitor, detect and inform the clients regarding potential cybersecurity threats or vulnerabilities on their network. This program was developed and implemented to answer the gap between academia and the workplace. This program gives students experience upon graduation giving them the experience they need to meet industry requirements.

Project Description:

The GSOC Internship Program addresses multiple problems: bridging the gap that exists between academia and the workforce, the growing need to fill over 457,000 open positions nationwide in cybersecurity, with over 9,900 in the state of Arizona alone, and providing support for critical infrastructures with supplemental cybersecurity support to monitor, detect, and inform their networks of potential vulnerabilities or threats. The municipalities supported are those who may fall below the cybersecurity poverty line; they need to implement stricter cybersecurity rules and measures, but lack the resources to do so. The GSOC offers their interns to assist in this process as a free service.

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 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 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 alone. Through this internship we are able to

reduce that gap between education and the workforce and our interns have been employed by Arizona Department of Homeland Security, APS, and Blackbaud.

The impact of the program was nationwide. Our program received recognition with the National Cyber Director, Harry Coker; where GCC was invited to be a contributing factor at a White House Convening followed by a visit by the director to GCC. The GSOC program was named as a model program that meets their new initiative at the federal level removing the 4-year degree requirement for cybersecurity and IT jobs and, instead, using competency-based and skills-based experience as well.

The GSOC has created partnerships with three clients: The Town of Wickenburg, Wickenburg Unified School District, and The City of Litchfield Park. A new partnership created is with the Arizona Department of Homeland Security where GCC has been named as a Regional Security Operations Center, one of three in the state of Arizona. This partnership will result in a cost savings for the operations of the GSOC. AZHODS will employ (fund) the interns working in the GSOC beginning Fall 2025. The student interns will be serving as interns with AZHODS in the GSOC providing a much broader path for entering the workforce while making \$15 per hour.

Stellar Cyber also 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, followed by the Wickenburg Unified School District and the City of Litchfield Park. These partnerships 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.

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.

GCC received their second, five-year designation as a Center of Academic Excellence in Cyber Defense awarded by the National Department of Homeland Security and the National Security Agency, and was awarded the WestMarc Best of the West in Innovative Excellence in October, 2024. 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.

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