

**Probationary Faculty Development Grant Report**

**Cybersecurity Workshop: Expanding Access to Cybersecurity  
Careers for All Students  
(CyberSwarm Event)**

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## 1. Introduction

As the instructor for MIS 170, Information Systems Security, and a contributor to cybersecurity curriculum development, I have worked extensively to support cybersecurity education, including developing Cal Poly SLO's first cybersecurity course and chairing Sacramento State's MS in Cybersecurity Development Task Force since Fall 2024. Through this experience, I have observed that many students interested in cybersecurity careers face challenges securing internships and connecting with industry professionals, particularly those without prior experience. Students also often struggle to identify which cybersecurity career path aligns with their interests and skills due to the field's diverse specializations.

To address these challenges, I proposed organizing a cybersecurity career workshop that would connect students with industry professionals, introduce them to cybersecurity career paths and certifications, and provide networking and internship opportunities.

## 2. Background

The cybersecurity field continues to face a major workforce shortage in the United States and globally, with hundreds of thousands of unfilled positions and increasing demand for skilled professionals (ISC2, 2024; Cisco Systems, 2024; World Economic Forum, 2024; Kuzior et al., 2024). At the same time, cyber threats are becoming more frequent and sophisticated, highlighting the need for stronger cybersecurity education, awareness, and workforce development programs. Students interested in cybersecurity often lack networking opportunities, career guidance, and exposure to industry professionals, which can limit their employability and career readiness (Tomić et al., 2020; Cybersecurity Ventures, 2025; Lightcast, 2024; NIST, 2024).

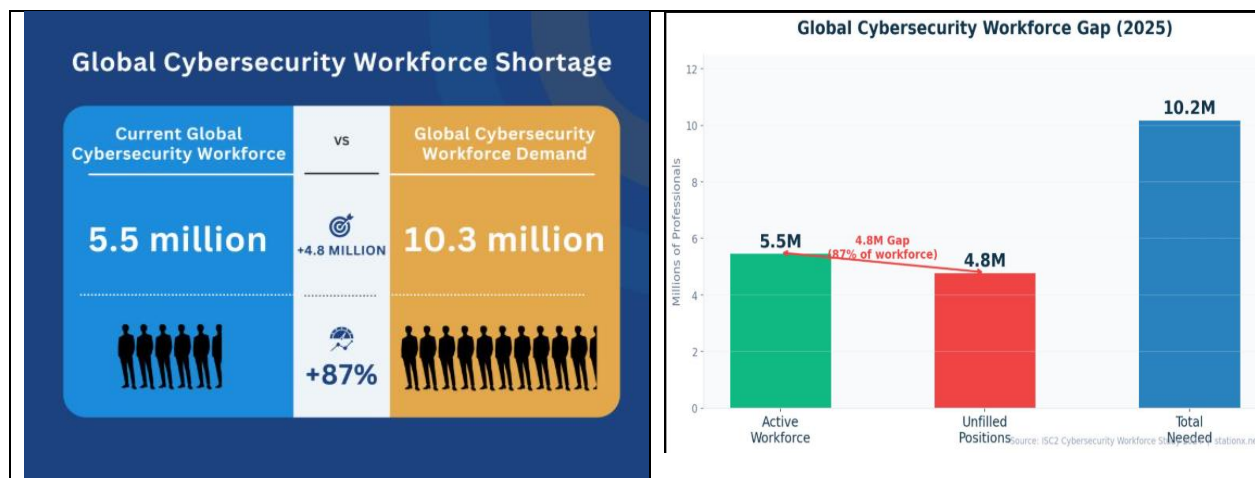


Figure 1. Global Cybersecurity Workforce Shortage

The proposed cybersecurity workshop aims to address these challenges by connecting Sacramento State students with industry experts, introducing them to cybersecurity career paths and certifications, and providing opportunities for mentorship, networking, internships, and professional development.

Beyond supporting student career development, the workshop contributes to strengthening the cybersecurity talent pipeline, promoting a culture of cybersecurity awareness, and increasing enrollment and job placement opportunities in future cybersecurity programs.

### **3. Implementation**

Below, I have outlined the step-by-step procedure I followed to organize this event:

#### **Step 1: Outreach**

- Contact local cybersecurity professionals (industry experts, clubs, local IT firms, etc.).
  - In this step, I contacted our department chair, the MISBA Fellows group, and ISACA inviting them to participate in a cybersecurity event that will bring students and cybersecurity professionals together.
- Send a survey to collect availability and areas of interest.
  - A When2Meet link was provided to collect the availability of the invitees.

#### **Step 2: Hiring an ISA**

I hired one of my students, Kevin Bali, as my student assistant. He has experience organizing multiple events and helped with the event coordination and logistics.

#### **Step 3: Sponsors**

One of our attendees connected us with individuals working for technology and cybersecurity companies such as Palo Alto Networks, Solutions Simplified, Cyera, AHEAD, Cribl, Redapt, Inc. and Computacenter. They agreed to support the event by providing swag items and covering catering expenses.

#### **Step 4: Panelists**

Six panelists were invited to participate in the event: Andrew Bell, Devon Nooner, Quinton Snoddy McAlpine, CISM, Sean Cordero, Briana J. and Brad Grebitus.

The panelists were divided into two main panels:

- The first panel discussed career pathways and activities after graduation.

- The second panel answered questions about the realities of cybersecurity jobs and careers.

Two moderators, Kevin Bali and Hanna Medina facilitated the panel discussions.

### **Step 5: Logistics**

- Select a date and time.
  - We created an RSVP form and booked the Terrace Suite at The WELL. The event was scheduled for Friday April 24<sup>th</sup>, 5-8 PM.
  - We then arranged the necessary technical support and equipment.
  - A total of 130 RSVPs were received from the invitees.

### **Step 6: Content Planning**

- We developed an event agenda, which is provided on this website created by Juan Campos, one of our Computer Science students. The event was named “CyberSwarm.”

<https://cyberswarmsac.com/>

- We coordinated with speakers to finalize discussion topics and event flow.
  - Zoom meetings were scheduled with the panelists to review and discuss the panel questions in advance.
- The event badges which included the sponsor names, were also designed by one of our students, Juan Campos.

### **Step 7: Student Engagement**

- In addition to hiring an ISA, we asked MIS 170 students, ISACA and MISA student clubs to volunteer for the event and assist with registration, catering, and logistics.

### **Step 8: Day of the Event**

- We arrived three hours before the event started.
- The sponsors arrived with swag items and set up outside the event room.
- Students and other attendees checked in using a QR code and received their name badges.
- The panelists arrived and were seated in the front row, while the moderators took their designated seats.
- The first panel began, followed by a question-and-answer session. After the break, the second panel started.
- The event concluded with a social hour and networking session.

Some of the questions that we asked the panelists:

#### Career Preparation

- What helped you most in getting your first cybersecurity job?
- What skills should students develop before graduating?

#### Certifications and Education

- Which certifications are actually useful for entry-level roles?
- How important are certifications compared to hands-on skills?

#### Internships

- How important are internships for cybersecurity careers?
- What should students do if they cannot get an internship?

#### Advice

- If you could go back to your senior year, what would you do differently?
- What should students start doing today to prepare for their first cybersecurity job?

### **Step 9: Follow-Up**

- I encouraged my students to connect with speakers on LinkedIn and through other networking opportunities.
- I posted a message on LinkedIn to thank everyone who participated and supported the event.
- Overall, I received positive feedback from students and other attendees. They acknowledged that the event was successful and that they were able to connect with at least one new person at the event.

## **4. Challenges & Lessons Learned**

One of the main challenges in organizing this event was the limited timeline between the announcement of the grant award and the end of the semester. In addition, the event required extensive paperwork and administrative approvals, particularly when working with external sponsors and catering services. The process was not centralized, resulting in repeated requests for the same forms and information from multiple offices. Scheduling also proved difficult, as students, faculty, and industry professionals had very different availabilities. Some students were unable to participate due to personal circumstances. Another challenge involved campus catering policies, which required the use of on-campus caterers despite sponsor preferences.

Regardless of these challenges, the event demonstrated strong industry interest in supporting students and engaging with the university community.

Several lessons were learned from this experience. Future events would benefit from a longer planning timeline, additional faculty and staff support, and a more streamlined administrative process. Building stronger long-term relationships with industry partners could also help establish a reliable network of guest speakers and sponsors for future events. Most importantly, this

experience highlighted that many cybersecurity companies are highly willing to support student success. Therefore, reducing barriers and strengthening university-industry collaboration could help make this event an annual initiative.

## 5. Conclusion

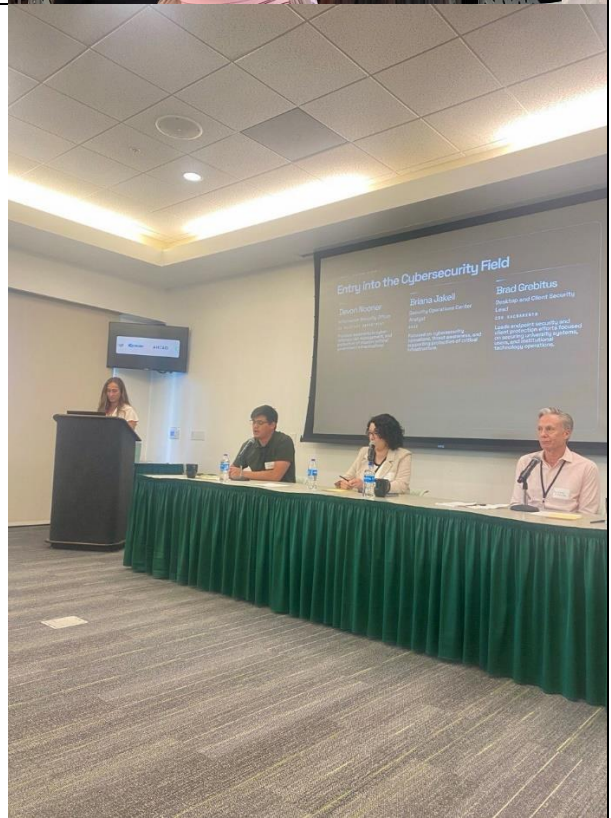
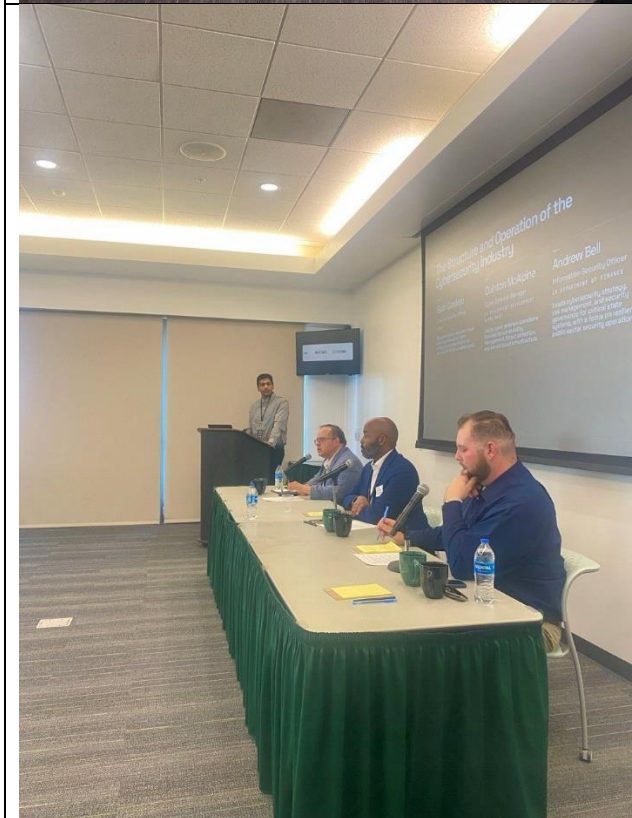
This workshop supported Sacramento State's values of diversity and inclusion by providing equitable access to cybersecurity networking, mentorship, and career opportunities, particularly for underrepresented, first-generation, and international students. It strengthened collaboration among students, faculty, industry professionals, and community partners.

The event outcomes will enhance MIS 170 course materials through updated cybersecurity career insights and potential guest speakers. It also supports the development and promotion of the future MS in Cybersecurity Management and certificate programs and created potential employment opportunities for our students.

## 6. Final Budget

| Item                    | Cost             |
|-------------------------|------------------|
| Snacks and Refreshments | \$ 102.12        |
| Supplies                | \$ 215.27        |
| Student Assistant       | \$ 100.00        |
| <b>Total Expenses</b>   | <b>\$ 417.39</b> |

## 7. Event Photos







## 8. Acknowledgements

I would like to express my sincere gratitude to the Diversity Awards Committee for honoring me with this grant and for supporting initiatives that promote student engagement, inclusion, and professional development.

We would like to thank our sponsors: Palo Alto Networks, Solutions Simplified, Cyera, AHEAD, Cribl, Redapt, Inc., and Computacenter, for their generous support in making this event possible. We also extend our appreciation to our distinguished panelists, Andrew Bell, Devon Nooner, Quinton Snoddy McAlpine, CISM, Sean Cordero, Briana J., and Brad Grebitus, for generously sharing their time, expertise, and experiences with our students.

Special thanks go to Juan Campos for his invaluable contributions and support throughout the event. We are also deeply grateful to Jose Escoto for connecting us with outstanding cybersecurity professionals and for his continued support. We would like to acknowledge our moderators and student volunteers: Kevin Bali, Hanna Medina, Nathan, David, BoiAnn, Brian, Rhiya, Ajia, Jon, and Viet, for their dedication and assistance. Finally, we sincerely thank Angela Park for her exceptional behind-the-scenes efforts and organizational support, which were essential to the success of this event.



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