THE 3 C'S - ENGAGING AND TRAINING CYBERSECURITY STUDENTS

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BEYOND THE CLASSROOM
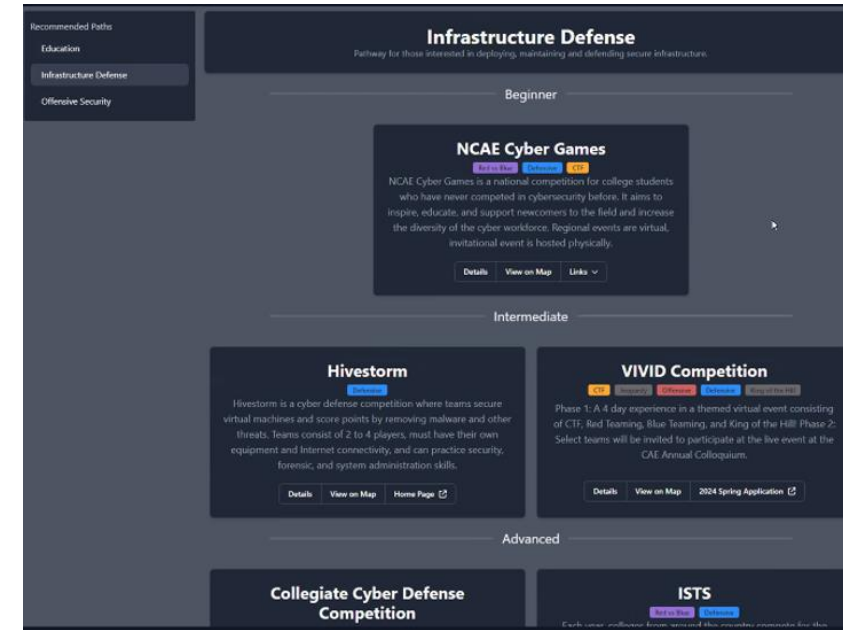
Competitions

Certifications

Clubs

Other Activities

Community Symposium

COMPETITIONS

- ◆ **Hands-on Learning**
- ◆ **Low Barrier to Entry**
- ◆ **Skill Development**
- ◆ **Teamwork/Networking Opportunities**
- ◆ **Resume Boost**
- ◆ **Pathway to Jobs**

[Mid-Atlantic Collegiate Cyber Defense Competition](#)

SURVEY: COMPETITIONS

Competitions funding:

- ❖ Departmental budgets

- ❖ Industry or corporate sponsorships

- ❖ Student self-pay

- ❖ Grants (Internal and External) – Perkins

Competitions are schools participating in:

- ❖ NCL, NCAE CyberGames, CCDC/Mid-Atlantic CCDC, Cyber Forge, Information Security Talent Search (ISTS), NSA Codebreakers, DoE CyberForce, CPTC, Hack the Port, Hivestorm, eCTF, ICL Collegiate Cup, CSAW, Hack the Building Hospital, ISTS, DefCon's CTF, Various Hack the Box competitions, PCDC (Palmetto), Conquer the Hill various, ICPC (Programming), DiceCTF, MetaCTF, LA CTF, SANS, HackKean, ISC2, CaptureTheTag, HackNJIT, CNY Hackathon, WRCCDC, CIRCUS, SoCal Cyber Cup, TryCyber, OverTheWire

CERTIFICATIONS

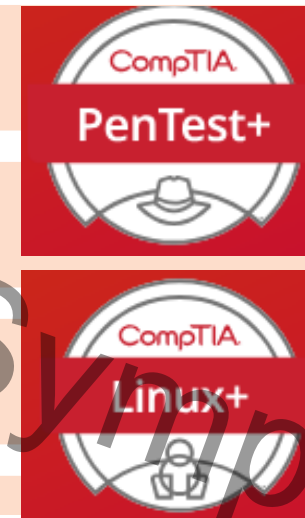- ◆ **Structured Learning**

- ◆ **Skill Validation**

- ◆ **Industry Recognition**

- ◆ **Career Entry Point**

- ◆ **Higher Earning Potential**

SURVEY: CERTIFICATIONS

Certification Funding:

- ❖ Student self-funding

- ❖ Perkins Grants, Strong Workforce

- ❖ Course Fees

- ❖ Institutional and department budgets

- ❖ Vendors, Industry or corporate sponsorships

Certifications schools provide funding for:

- ❖ CompTIA Network+, Security+, Linux+, Pentest+, CCNA, EC-Council

CLUBS

Clubs

- ❖ Tech Club
- ❖ Women in Technology
- ❖ Women in Cybersecurity (WiCyS)
- ❖ Hackerspace club

Challenges

- ❖ Often requires faculty support
- ❖ Community College students struggle to commit to actively participating in club activities

SURVEY: CLUBS (CONT)

Club Activity Funding:

❖ Student activity fees

❖ Institutional and department budgets

❖ Industry or corporate sponsorships

❖ Student self-funded

❖ Alumni or donor

Engaging activities:

❖ Speakers CISA, CyberCommand, DHS, NSA, NIST RMF, NIST ITL

❖ Competitions – CAE Atlas

❖ Hosting conferences for student researchers to speak and present

❖ Research Days event - students get to create posters or present their work via a presentation.

❖ Hands on activities / Demos

❖ Self-learning

❖ Field Trips – CISA, National Cryptologic Museum

❖ High School Outreach

GAMES

- ❖ [CYBER SECURITY FAMILY FEUD](#)

- ❖ [Defense Counterintelligence and Security Agency: Security Awareness Games](#)

- ❖ [Backdoors & Breaches, an Incident Response Card Game](#)

- ❖ [Cyber Security Jeopardy](#)

- ❖ [Phishing Box: Phishing IQ Test](#)

- ❖ [Cisco Open DNS Phishing Quiz](#)

- ❖ [Nova Labs- Cybersecurity Lab](#)

- ❖ [FTC Phishing Scam Game](#)

- ❖ Escape Rooms – [Virtual](#) or In Person

CYBER RANGE

- ❖ [Baltimore Cyber Range](#)

- ❖ [US Cyber Range](#)

- ❖ [National Cyber Range](#)

- ❖ [CISA Cyber Range](#)

- More

OTHER ACTIVITIES

- ❖ Apprenticeships
  - ➤ Cisco Talos
  - ➤ Maryland Department of Transpiration (MDOT)
- ❖ Internships
- ❖ Graduate Assistants
- ❖ Part-time jobs on campus
- ❖ Resume Preparation/Mock Interviews
- ❖ Cyber Fire Training
- ❖ Students work in Cyber Lab and SoC
- ❖ Google Cybersecurity Clinic via Tides

Q & A

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