



CYBER SECURITY COMPETITIONS

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Cyber Security Competitions are used by various governmental and non-governmental agencies to gauge capabilities, potential, and specific abilities of students from middle school through college.



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Google, Microsoft plan to spend billions on cybersecurity after meeting with Biden

Cyber Security Competitions are inventive and competitive ways to find and train America's next Cyber Defenders. Each of the various competitions are sponsored and hosted by major corporations, defense contractors, and governmental agencies.

Sponsors include US Airforce, US Army, National Security Agency, Central Intelligence Agency, Boeing, Northrup Grumman, the National Cyber Security Center, and many more.

Colorado Springs is one of the major epicenters of Cyber Security training and competitions.

Cyber Security Competitions are fun and sometimes even exciting. They will draw in students throughout your school who would not normally be interested in "computer stuff".

Cyber Security Competitions provide close to real-world experience and help students visualize problems when they encounter them in written certification tests.

Cyber Security Competitions create scholarship opportunities for those students who succeed. Proven capabilities in competitions equal real-world potential in the Cyber Security Operations Cell (CSOC).

CYBER SECURITY COMPETITIONS

- CyberPatriot
- National Cyber League
- CyberStart
- Annual Cyber Symposium Challenge
- Various Others





<https://www.uscyberpatriot.org>

CyberPatriot is the one of the original competitions. It began its first season in 2009. In 2021 it had become the largest competition of its kind in the world. Over 2000 teams in 22 countries.

The competition places students in the roll of a network administrator for a mid-sized company. They must read and understand the company policies and then implement changes to meet those policies.

Purely a defensive competition.

Competitors: *Highschool and Middle school students*

PROS:

- Excellent preparation for Network+™ exam.
- Very well organized
- Requires critical thinking skills

CONS:

- Very rigid in execution
- 6-hours of competition without "time-outs"
- Requires considerable knowledge of Virtual Machine use to play

Cost: JROTC and Civil Air Patrol – Free; All Girl Teams – Free; "Open Division" - \$205 per team



<https://nationalcyberleague.org/>

The NCL, presented on Cyber Skyline (cyberskyline.com), enables students to prepare and test themselves against practical cybersecurity challenges that they will likely face in the workforce, such as identifying hackers from forensic data, pentesting and auditing vulnerable websites, and recovering from ransomware attacks.

Both offensive and defensive challenges.

Competitors: *Collegiate and Highschool students*

PROS:

- Requires critical thinking at every level
- Flexible for students who can only play a few hours at a time
- Let's students compete individually and as a team
- Various categories let's students identify their field of interest (pentesting, forensics, red team, threat hunting, etc.)

CONS:

- Difficulty level eventually becomes far too intense for typical high school students
- Linux capabilities and use is a must at higher levels

Cost: \$35 per player



Discover your hidden talent and start your cybersecurity learning journey with CyberStart America

<https://cyberstart.com/>

Solve mysterious cyber-crimes, uncover new cases, and earn valued cybersecurity skills as you venture through thrilling storylines and advance up the ranks as a cyber agent. Earn points by finding flags, solve challenges to unlock new levels and skills. Top ten percent finishers are eligible to compete for scholarship money.

PROS:

- Scenario/story driven challenges
- Much more focused on website weaknesses
- Annual scholarship game at the end (\$2500)
- Field Manual walks students through the theory and techniques used to solve challenges

CONS:

- Virtual Machines are required for some challenges
- Higher level challenges are extremely tough
- No team game, only individual

Cost: FREE



The **National Cyber Security Center** in Colorado Springs offers an annual competition in conjunction with the CyberSpace Symposium. Teams across Colorado can compete from a distance or in person. One day's challenges are reserved for High School students the next day is for college students.

Deloitte Corporation (www2.deloitte.com) conducted this year's competition at the Broadmoor Hotel.

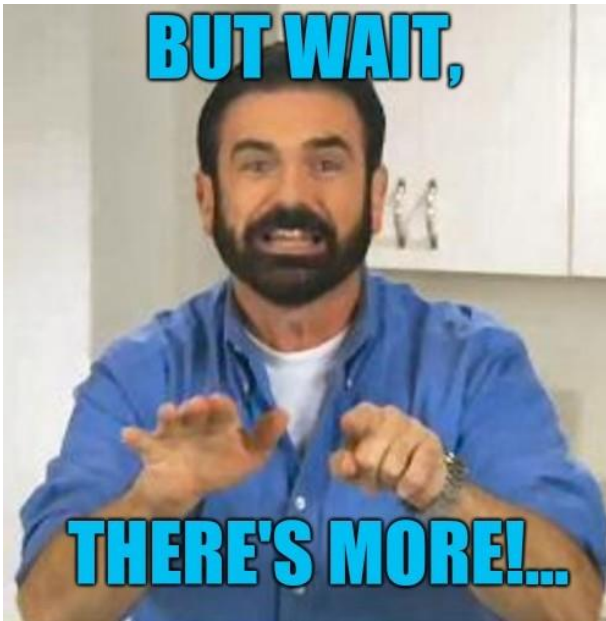
PROS:

- Students get to be with and around major players in the Cyber Security field and experience what their future could look like.
- Winning team receives a \$1000 check for their school

CONS:

- Students will have to get permission to miss a day of school

Cost: FREE (lunch is included)



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CAPTURE THE FLAG
CardHax

A graphic featuring a red padlock icon in the center of a blue circular structure, surrounded by circuitry and data points. The text "CAPTURE THE FLAG" is in large white letters, and "CardHax" is in yellow below it. The top of the graphic includes logos for UL College of Education & Human Development, UL J.B. Speed School of Engineering, and Tenable.