STEAM CLOWNTM PRODUCTION

CYBER PATRIOTS - THE NEW "CHESS CLUB" FOR THE HIGH TECH STUDENT



What Is CyberPatriot?

- The National Youth Cyber Education Program
 - AFA CyberCamps
 - Elementary School Initiative
 - National Youth Cyber Defense Competition
- Not hacker training
- Fun way to learn skills that will be useful in the future

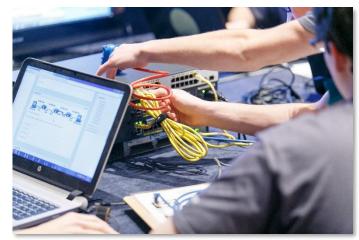






The National Youth Cyber Defense Competition









What is CyberPatriot?



Let's watch a video to find out...





Introduction to Cybersecurity



What is cybersecurity?

All the tools we use and actions we take to keep computers, networks, and information safe and available for those who need it, and unavailable for those who should not have it.





Why is cybersecurity important?

Things that rely on computers:

- Banks
- Factories
- Schools
- Airlines and Railroads
- Stores
- Police and fire departments
- Military and government systems





Source: US Department of Homeland Security

⇒7,200+ critical American industrial control systems are linked to the Internet, and therefore vulnerable to attack.

 Doctors' offices Answer: Cybersecurity isn't just about protecting computers.

Almost everything relies on, or could be affected by a computer.



Why is cybersecurity important?

- 2006: 26.5 million veterans' personal information is compromised after the theft of a Veteran Affairs employee's laptop.
- 2009: Coca-Cola executive clicks link in spoof email allowing attackers to steal confidential files on \$2.4 billion business deal with Chinese juice company.
- 2011: DHS plants USB drives and CDs outside of government and government contractor buildings. The majority are picked up by employees and inserted directly into their organization's computers.

Answer: People make mistakes.

Cybersecurity is often about protecting organizations and individuals from themselves.



Why is cybersecurity important?

Case: RSA Security Services

- RSA: security firm that sells SecurID®
- Lockheed Martin: a \$46 billion defense contractor that uses SecurID[®]



Source: blogs.rsa.com

Attackers infiltrate RSA's network through malware deployed in spoof emails sent to employees

Criminals capture
the algorithms used
to generate
Lockheed Martin's
random SecurID®
passwords

Criminals launch
attack on
Lockheed's
networks using the
algorithms they
stole from RSA

Luckily, Lockheed's security team is able to thwart the attacks

Answer: We're all connected

A weakness in one system can be exploited by attackers to target another system



Cybersecurity in Action

```
8756264:28756540, ack
756540; win616425, alend
8756540:28756720, ack
62276, win 16335, len
  • @ ☆ □ [
  (i) 0:00 / 4:39
```

Source: Deloitte and Symantec http://www.youtube.com/watch?v=l XOrcBxy-E



Who's hiring?







75,100
Information
Security Analyst
Jobs in 2012

102,500 Information Security Analyst Projected in 2022

That's 36.5% growth!

