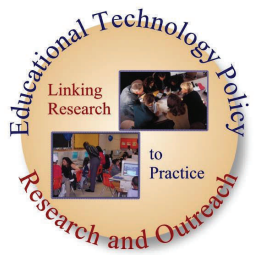
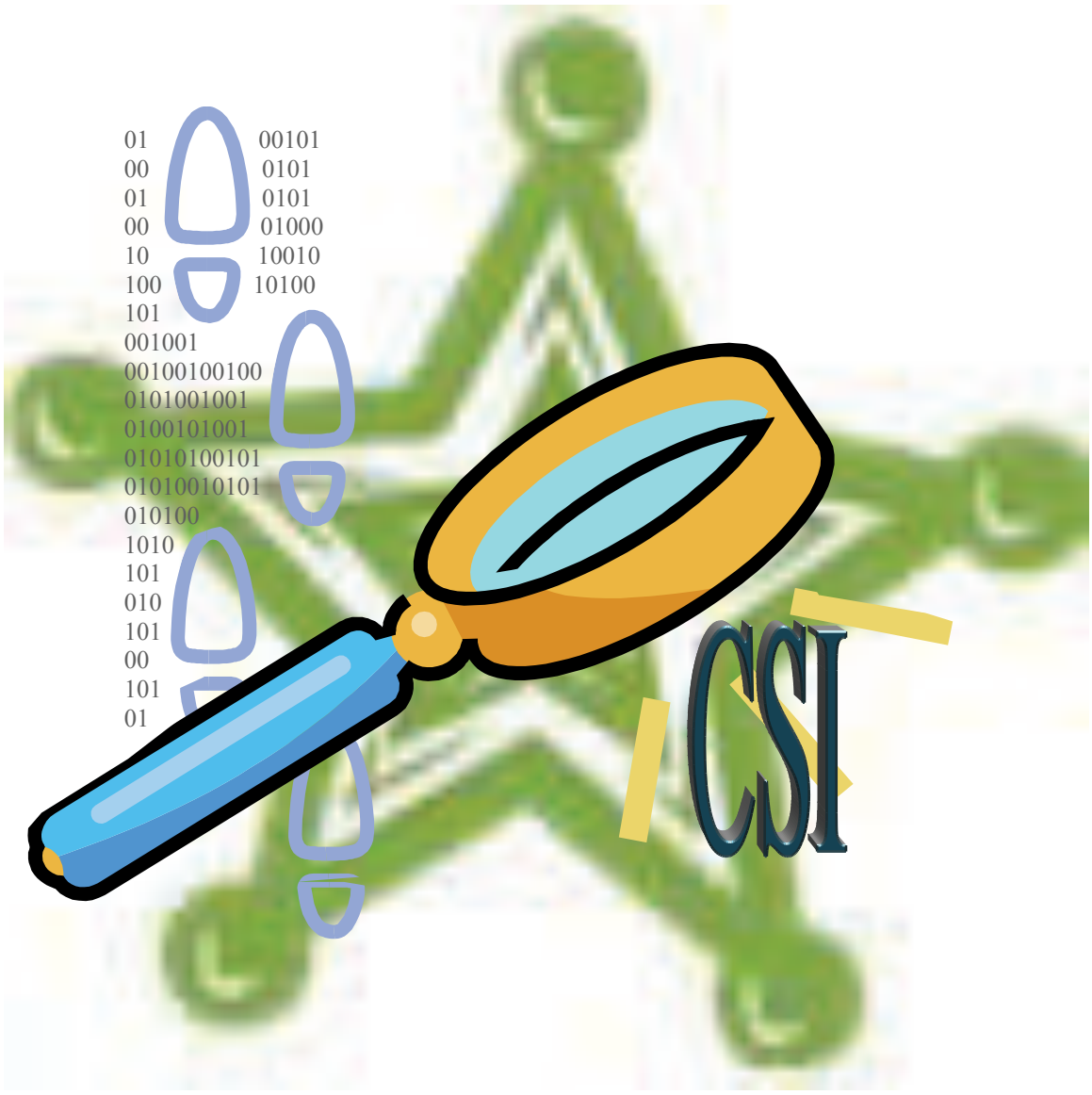


# Cool Careers for Girls in Cybersecurity 2010





Middle school girls become Celebrity Stalker Investigators (CSI) for a day to solve a cyberstalking crime.

During this interactive crime solving event, girls learn from women in companies and agencies throughout the state what it takes to navigate the professional pipeline in the vast fields of Cybersecurity and Information Assurance, as well as other science, technology, engineering, and mathematics (STEM) fields.

The 2010 event will be held October 29, 2010 at the National Electronics Museum from 9:30 a.m. until 1:30 p.m.





## Agenda

Arrival - 9:30 a.m.

Explore National Electronics Museum and  
Meet Cyber Career speakers

9:30--10:00:

Welcome and setting the stage for scenario and activities  
Break into groups of 10 and complete 4 activities

10:00-10:30: Activity 1

10:30-11:00: Activity 2

11:00-11:30: Activity 3

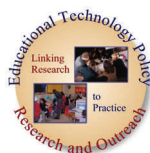
11:30-12:00: Activity 4

12:00-12:30: Lunch & booth exploration

12:30-bus pickup:

Solve the crime together with the lunch speaker: Careers in  
Cybersecurity.

Tour of Museum





## Activity Summary

Girls break into forensic teams of 10 and will complete 4 of the following activities.

### Cell Phone Forensics:

Students will use a SIM card reader to retrieve deleted files from a cell phone. This can lead to a discussion about secure communications or the permanence of digital information.

### Cryptography:

Students will decrypt a message using a frequency chart. Students will learn the importance of encryption in every day life: UPC, credit card transactions, and texting.

### Wireless:

Students will access a wireless data stream and investigate the data. The vulnerability of wireless technologies will be connected to instruction on how to identify safe wireless hotspots.

### Robotics:

Students will program a “human robot” to retrieve a package. This activity links to a conversation about the many disciplines required for a successful robotics program including: electrical, and mechanical engineers and mathematicians and computer scientist.

### Malware:

Students will perform diagnostics on a machine and find a key logger. Risky behaviors that put student data, information and identities in jeopardy will be explained.

### Steganography:

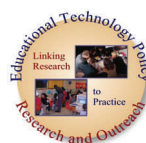
Students will use diagnostic tools and skills to determine if photographs have been altered. Connections to digital forensic investigations will be explored.

### Computer Hardware

Students will assemble a computer. Students will name the part and function of each computer part.

### Logic

Students will solve logic puzzles use Venn diagrams and make logical arguments. The principals of logic and solving puzzles will be connected to careers that use these skills.



# Cool Careers for Girls in Cybersecurity 2010

**Middle School Girls!  
Join the Celebrity Stalker  
Investigations (CSI) team for a day  
solving a Cyberstalking crime**

**Date: 10/29/2010**

**Time: 10 a.m. to 1:30 p.m.**

**Where: National Electronics  
Museum**

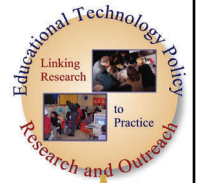
**In order to solve a  
Cyberstalking crime the  
elite all girl CSI teams will**

- **assemble a computer and**
- **use digital forensics tools**  
**on**
  - **cell phones**
  - **wireless data  
streams**
  - **hard drives and**
  - **pictures**



## SPONSORS

T-Shirts and lunch provided to all participants thanks to the generous sponsorship of the following organizations



### Details

National Electronics Museum  
1745 West Nursery Road  
Linthicum Hts., MD 21090

Contact the coordinator at your school for more information or email [dpruitt@edtechpolicy.org](mailto:dpruitt@edtechpolicy.org)

**During this interactive crime solving event, girls learn from women in companies and agencies throughout the state what it takes to navigate the professional pipeline in the vast fields of Cybersecurity and Information Assurance.**

Name \_\_\_\_\_

School \_\_\_\_\_

T-shirt Size: S    M    L    XL

Box Lunch Choice (circle one)

Turkey            Roast Beef            Vegetarian