



# Summary Report from the Girls Workshop Cool Careers for Girls in Cybersecurity October 4<sup>th</sup>, 2007

University of Maryland, College Park, MD





# University of Maryland CyberWATCH Subcontract Deliverables by Year Update

# **Cool Careers for Girls in Cybersecurity Workshop-Maryland Event Summary**

The third in a series of *Cool Careers in Cybersecurity Workshops* which provided information and skills necessary to navigate the professional pipeline in the vast fields of Cybersecurity and Information Assurance as well as other Sciences, Technology, Engineering, and Mathematics (STEM) fields was held Thursday October 4, 2007. The workshop was run in conjunction with the 6<sup>th</sup> annual Cyberethics, Cybersafety and Cybersecurity (C3) conference. 33 middle school girls and 25 high school students (N: F=14; M=11) from Fairfax County schools attended. Sessions included hands-on activities, speakers, and an opportunity to talk with professionals in the field. Participants learned more about Cybersecurity, as well as ethics and safety. Participants also learned first hand from IT/IA experts about career opportunities and pathways in Cybersecurity by visiting two UMD Technology Incubator companies: <a href="Irrufina">Irrufina</a> and <a href="Irrufina">IRX Systems</a>. Attention was given to issues for women from underrepresented groups.

#### The participants heard from:

- State's Attorney Mr. Gansler who recently launched Maryland's C.L.I.C.K.S. initiative - Community Leadership in Cyber Knowledge & Safety - an educational outreach program designed to equip Maryland's community leaders with the resources to teach students and their parents about Internet safety. Security topics (highlighting identity theft) were also covered.
- First Sergeant Robert Smolek an 18-year veteran of the Maryland State Police, currently assigned to the Criminal Investigation Division where he supervises the Computer Crimes Unit, a specialized investigative unit dedicated to the investigation of computer intrusion, fraud, identity theft, child exploitation, and the forensic analysis of digital media seized during criminal investigations, discussed the federally funded, multi-agency, multi-jurisdictional virtual task force designed to increase the capacity of Maryland law enforcement to respond to computer facilitated crimes against children. Trooper First class and MD State Police Investigator E. Cohen finished the session with an overview of educator and end user "do and don'ts" for Internet Safety.
- KEYNOTE LUNCHEON Dara Gordon Murray, CISSP and Director, IT Security Staff, CISO and Sr. Sec. Advisor to the Assistant Sec. for Program Support U.S. Health and Human Services shared with the audience Protecting Your Children and Home Computer
- Ron Teixeira, Executive Director, National Cyber Security Alliance shared the recently released (October 2007) *McAfee/NCSA Study Findings*

 Bob Kirby, Senior Director for K-12 Education, CDW-G reviewed the recent (summer 2007) CDW-G School Safety and Security Index

**Afternoon Session:** Career opportunities and pathways in Cybersecurity by visiting two UMD Technology Incubator companies: **Trufina** and **TRX Systems**.

#### Full Agenda

#### 8:00 - 9:00 AM

REGISTRATION CHECK IN: REFRESHMENTS

#### 9:00 - 9:10 AM

#### **OPENING REMARKS**

DAVINA PRUITT-MENTLE

Director, Educational Technology Policy, Research and Outreach C3 Conference Chair

#### 9:10 - 9:45 AM

## OPENING KEYNOTE & C3 AWARD OF EXCELLENCE Recipient of the C3 Award of Excellence:

MARYLAND ATTORNEY GENERAL DOUGLAS F. GANSLER C.L.I.C.K.S. Initiative

#### Presentation:

LAURIE NATHAN

Outreach Coordinator, NetSmartz

This presentation will share free interactive and educational safety resources including 3-D activities to share with children and teens about how to be safe online. It will also describe the new C.L.I.C.K.S initiative.

#### 9:45 - 10:30 AM

# OPENING KEYNOTE & C3 AWARD OF EXCELLENCE Recipient of the C3 Award of Excellence:

DETECTIVE SERGEANT ROBERT SMOLEK

Maryland Internet Crimes Against Children Taskforce

#### Internet Safety Presentation:

ELIOTT COHEN, TROOPER FIRST CLASS, INVESTIGATOR Maryland State Police

As technology goes on and on, Internet crimes against children continue to be a growing problem, as the Internet has provided those individuals with a sexual interest in children unprecedented, unsupervised access to children. Eliott Cohen

will discuss computer facilitated crimes against children, with a particular focus on victims, offenders, and those online technologies commonly used to sexually exploit children.

10:30 - 10:40 AM BREAK

#### 10:40 AM - 11:40 PM

#### ACADEMIC INTEGRITY: PROCESSES AND EXPECTATIONS

Andrea Goodwin

Assistant Director of the Office of Student Conduct
Office of Judicial Programs and Student Ethical Development

11:40 AM - 1:15 PM

**Grand Ballroom** 

#### LUNCH AND LUNCHEON KEYNOTE SPEAKER

#### **Protecting Your Children and Home Computer**

DARA GORDON MURRAY, CISSP

Director, IT Security Staff, Chief Information Security Officer and Senior Security Advisor to the Assistant Secretary for Program Support U.S. Health and Human Services

#### The McAfee/NCSA Study Findings

RON TEIXEIRA

Executive Director National Cyber Security Alliance

#### 1:15 - 2:15 PM

#### 2007 Recently Released CDW-G School Safety Index

**BOB KIRBY** 

Senior Director for K-12 Education CDW-G

#### **Speaker Biographical Sketches - 2007**

**Keynotes and C3 Award Winners** 

C3 Award Recipient
Douglas F. Gansler
Maryland State Attorney General
C.L.I.C.K.S. Initiative

For eight years prior to becoming Maryland Attorney General, Mr. Gansler had been Montgomery County's chief prosecutor, where he launched innovative and successful programs to fight gangs, punish criminals, and protect the public. He has an unparalleled record of experience as a State's Attorney, former Assistant United States Attorney and private litigator.

Prior to being elected State's Attorney, Mr. Gansler was an Assistant United States Attorney from 1992 to 1998. He prosecuted over 1,000 cases involving almost every conceivable type of crime, including public corruption, hate crimes, narcotic trafficking, sex offenses, child abuse, economic crimes, gang-related violence, and homicides. In one of his most noted cases, he prosecuted the drunk-driving diplomat who killed a 16-year old Maryland girl near Dupont Circle in Washington, DC. While he was a federal prosecutor in the homicide division, he was part of a community-based team that formed the model for many of the advances in community-based justice that he has implemented in Montgomery County.

State's Attorney, Mr. Gansler recently launched Maryland's C.L.I.C.K.S. initiative - Community Leadership in Cyber Knowledge & Safety - an educational outreach program designed to equip Maryland's community leaders with the resources to teach students and their parents about Internet safety.

# Laurie Nathan Outreach Coordinator, NetSmartz

Laurie Nathan is the Lead Outreach Coordinator for the NetSmartz Workshop, a program of the National Center for Missing & Exploited Children (NCMEC). Prior to her arrival at NetSmartz, Ms. Nathan was a staff analyst in the Exploited Child Division (ECD) at NCMEC. During her tenure in the ECD, Laurie garnered extensive knowledge of Internet search capabilities, became familiar with the ways children can be exploited through the usage of the Internet, and worked closely with law enforcement to have these cases resolved.

Prior to her work at NCMEC, Ms. Nathan was the Director of Programs at Prevent Child Abuse of Metropolitan Washington. Laurie managed over 40 volunteers who answered calls on PhoneFriend, a support line for children ages 5 to 15. Additionally, she worked on child abuse prevention outreach campaigns for the Washington, D.C. metro area.

Ms. Nathan graduated with highest honors from Emory University in Atlanta, GA with a B.A. in Psychology and a minor in Art History.

# C3 Award Recipient Robert Smolek Detective Sergeant Maryland Internet Crimes Against Children Taskforce

First Sergeant Robert Smolek is an 18-year veteran of the Maryland State Police, currently assigned to the Criminal Investigation Division where he supervises the Computer Crimes Unit, a specialized investigative unit dedicated to the investigation of computer intrusion, fraud, identity theft, child exploitation, and the forensic analysis of digital media seized during criminal investigations. 1SGT Smolek also directs the Maryland Internet Crimes Against Children Task Force (MDICAC), a federally funded, multi-agency, multi-jurisdictional virtual task force designed to increase the capacity of Maryland law enforcement to respond to computer facilitated crimes against children.

As a Maryland Police Training Commission certified police instructor, 1SGT Smolek regularly lectures, trains, and provides technical assistance in the area of computer crime investigation to federal, state, and local law enforcement agencies and serves an adjunct professor at Anne Arundel Community College where he teaches a Cybercrime course. 1SGT Smolek holds an MS in Management from Johns Hopkins University.

Eliott Cohen
Trooper First Class, Investigator
Maryland State Police
Maryland Internet Crimes Against Children Taskforce

Trooper First Class Eliott Cohen, a nine (9) year veteran with the Maryland Department of State Police, is currently assigned to the Criminal Investigation Division, Computer Crimes Section. The Computer Crimes Section heads the Maryland Internet Crimes Against Children Task Force, which is responsible for the investigation of Online Child Sexual Exploitation. Tfc. Cohen has been an investigator in the Computer Crimes Section for five (5) and is responsible for conducting criminal investigations relating to crimes facilitated by the use of computers and other areas of high technology. As an investigator, his primary responsibility is to investigate crimes of Online Child Sexual Exploitation. Tfc. Cohen has been recognized as an expert in computer related investigation by Maryland courts and his peers. He regularly instructs federal, state and local law enforcement on how conduct computer related investigations. He also educates children, parents, counselors and school administration about the risks children face when online and how their online presence exposes them to a variety of sexual predators.

As a Maryland Police Training Commission certified police instructor, regularly lectures, trains, and provides technical assistance in the area of computer crime investigation to federal, state, and local law enforcement agencies. Tfc. Cohen

graduated from Montclair State University in Montclair, NJ with a B.S. in Political Science and a minor in Psychology.

#### Session/Workshop Speakers

# Andrea Goodwin Assistant Director of the Office of Student Conduct Office of Judicial Programs and Student Ethical Development University of Maryland

Andrea Goodwin is the Associate Director of Student Conduct at the University of Maryland. Her responsibilities include administering and overseeing the University's Academic Integrity Process and advising the Student Honor Council on campus. She meets regularly with students to resolve cases of academic misconduct and serves as a resource to faculty, staff and students regarding issues of academic integrity on campus. Andrea received a Bachelor's degree in Business Administration and a Master's degree in Higher Education Administration from Syracuse University. Andrea received her Ph.D. in Education, Policy, Planning and Administration from the University of Maryland.

# Dara Gordon Murray, CISSP Director, IT Security Staff, Chief Information Security Officer and Senior Security Advisor to the Assistant Secretary for Program Support U.S. Health and Human Services

Dara Gordon Murray is the Director, IT Security Staff, Chief Information Security Officer and Senior Security Advisor to the Assistant Secretary for Program Support at U.S. Health and Human Services (HHS). Formerly as HHS' Director of the Information Systems Security Division, Program Support Center and the Program Manager, HHS-wide IT Security Program Team, Ms. Murray had oversight responsibility for the implementation of an agency-wide risk management and comprehensive computer security awareness training program for approximately 2000 federal government employees and contract employees. Prior to working for HHS, she was employed for the National Science Foundation and with the U.S. Department of Justice, Tax Division and the Telecommunications Services Staff. Her responsibilities included the deployment of network security for the Justice Consolidated Network, (JCN) which is the first high-speed network using asynchronous transfer mode (ATM) processing sensitive but unclassified federal government information ever to be maintained by a public switch carrier under the Federal Telecommunications Services (FTS) contract. Due to her efforts, she has won several network security awards for technical excellence from the General Services Administration for the implementation of the JCN.

She started her federal career in 1987 as a DB2 and COBOL programmer, prior to being appointed a Computer Security Specialist at the U.S. Nuclear

Regulatory Commission. Prior to 1987, she worked as a CICS programmer for the IBM Federal Systems Division in Gaithersburg, Maryland. She holds an AA in Computer Science from Montgomery College, a B.S. in Computer Science and MBA from University of Maryland, Graduate School, and a Post-Masters Certificate in Telecommunications Engineering from Johns Hopkins University.

#### Bob Kirby Senior Director for K-12 Education CDW-G

Bob Kirby, senior director, K-12 education, CDW-G will provide an exclusive look at the comprehensive results of the CDW-G 2007 Student Safety Index and results from the release of the self-assessment tool and discuss the trends and solutions that CDW-G believes are essential to ensuring the security of our schools.

CDW Government, Inc. (CDW-G) released the findings of its first Student Safety Index at the National Education Computing Conference in June 2007. The Student Safety Index set a national benchmark highlighting school districts' security successes and challenges. Surveying 381 K-12 school district security and IT managers, the Student Safety Index uncovered where districts stand in terms of computer network security, security incident response and emergency planning, and explored the areas that still need attention and improvement. CDW-G believes that feedback from district IT and security personnel is essential to helping communities make security decisions that are in the best long-term interests of students and schools. In August 2007, CDW-G followed up the study with the release of the School Safety Index self-assessment tool to enable members of the educational community to participate in the national study. Both the Index and self-assessment tool help parents, administrators and policymakers understand the importance of implementing and actively supporting physical and cyber security policies.

#### Ron Teixeira Executive Director National Cyber Security Alliance

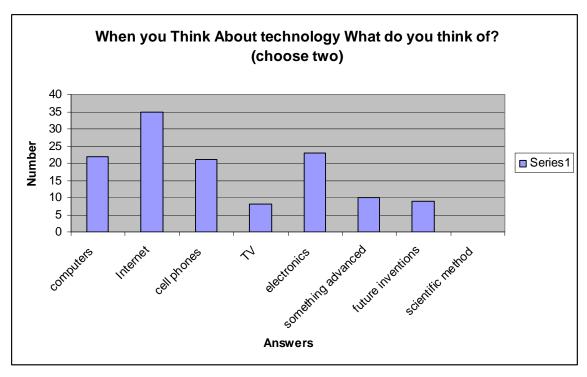
As the executive director of the National Cyber Security Alliance (NCSA), Teixeira is responsible for the overall management of cyber security awareness programs and national education efforts. Teixeira works closely with various government agencies, corporations and non-profits to increase awareness of Internet security issues and to empower home users, small businesses and the education community with tools and best practices designed to ensure a safe and meaningful Internet experience. Teixeira has provided security tips on a number of news outlets like CNN, Newsweek, Associated Press, Parade Magazine and Radio and TV News Shows all over the country.

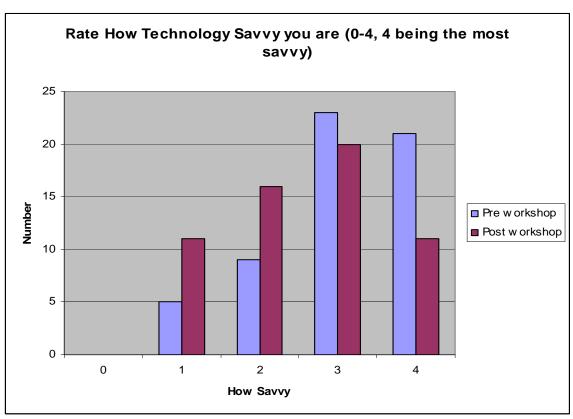
#### Lessons Learned:

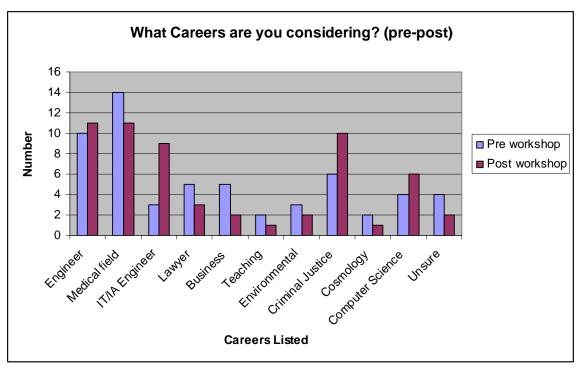
Overall the workshop went very well. The only suggested improvement would be to find a way to have tour to companies earlier in the day. Students were exhausted by the end of the day and complained about having to walk across campus. Being able to interact with speakers during lunch was a huge success.

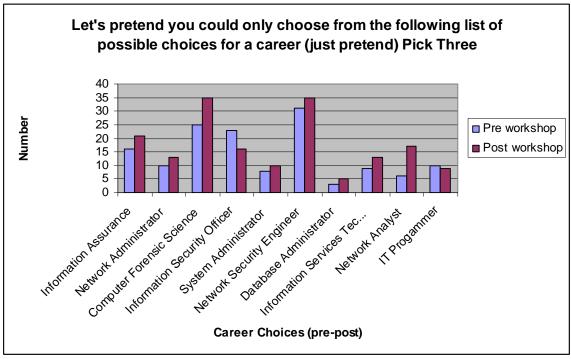
### **Summary Evaluations from the Attendees**

| Evaluation and Feedback (0-4) 4 being the highest                     |         |
|---|---------|
| General Questions   | Average |
| 0 - 4 scale, with 4 being strongly agree                              |         |
| The workshop/conference objectives were clear.                        | 3.9     |
| The length of the workshop was sufficient to cover the subject matter | 3.3     |
| Overall, the workshop instructors and speakers were effective.        | 3.9     |
| I learned new information in this workshop.                           | 4.0     |
| I'd like to learn more about IT/IA and Cybersecurity                  | 3.0     |
| I may consider Cybersecurity as a career choice                       | 3.2     |
| AVERAGE   | 3.55    |
| Speaker's Presentations   |         |
| 0 - 4 scale, with 4 being strongly agree                              |         |
| State's Attorney Mr. Gansler  | 2.9     |
| Detective Sergeant Robert Smolek                                      | 3.9     |
| Laurie Nathan, Netsmartz  | 3.5     |
| Dara Gordon Murray  | 3.0     |
| Ron Teixeira National Cyber Security Alliance                         | 3.6     |
| Bob Kirby CDW-G   | 2.8     |
| AVERAGE   | 3.28    |
| Tours   |         |
| Trufina   | 2.9     |
| TRX Systems   | 3.3     |
| AVERAGE   | 3.10    |









#### How could this workshop be improved?

- Not have to walk so far
- Have the tours earlier in the day
- Have to sit too long

#### Please list any additional comments or suggestions

- I need to learn more about safety and security
- Makes me think about all I do online
- The police people were very interesting I might look more into this
- Food was great –8 listed