Drexel UNIVERSITY

Drexel University Cybersecurity Institute Newsletter

Wanted: Diversed Cybersleuths
The need for more women and diversity in Cyber Security

Spotlight:
Matthew C. Stamm, Assistant Professor

Matthew C. Stamm is Assistant Professor at Drexel University's Department of Electrical and Computer Engineering and the Multimedia and Information Security Lab (MISL).

While heading the Multimedia and Information Security Laboratory (MISL), Stamm conducts research on signal processing and information security with a focus on digital multimedia forensics and anti-forensics. Much of his research involves developing techniques to detect information forgeries, such as falsified images and videos, along with understanding what anti-forensic countermeasures an information attacker can use to disguise their forgery.

Click this link to view Matthew's profile and affiliations

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CYBER RISK ALERTS AND TRAINING

NetDiligence

"We bring to your attention a sampling of recent media stories involving cyber risk and privacy liability."

Vol. 173 - September 15, 2015

SANS

"SANS NewsBites is a semiweekly high-level executive summary of the most important news articles that have been published on computer security during the last week.

SANS (also) provides intensive, immersion training designed to help you and your staff master the practical steps necessary for defending systems and networks against the most dangerous threats - the ones being actively exploited."

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Seeking Cyber Students:

acm Association for Computing Machinery

Why should students join ACM?

"Computing is key to solving our world's most critical problems. ACM enables students to discover and access leading-edge resources, develop professional and technical networks, and make a difference in the world by providing:

- Valuable Career Resources
- Timely Computing Information
- The ACM Digital Library
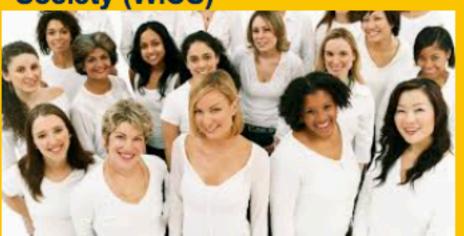- Beyond-the-Classroom Resources" - ACM

Membership Benefits

Student membership starts at $19:

Join ACM Online Today

Drexel Women in Computing Society (WiCS)

Click link to join Drexel Women in Computing Society (WiCS)

The Master of Science (MS) Degree in Cybersecurity at Drexel's College of Engineering

Master's in Cyber Security.

Click link to see course curriculum, requirements and graduate co-op program opportunity

CYBERSECURITY NEWS:

COO Dr. Jane LeClair Expresses Concern of Lack of Women in Cybersecurity

Dr. Jane LeClair, COO National Cybersecurity Institute
(Click above photo to read her bio)

Dr. Jane LeClair is the Chief Operating Officer for the National Cybersecurity Institute Excelsior College in Washington, DC. She is known for her advocacy work of reaching out to women in the technology field. Recenty, there was a first annual Women in Cybersecurty Conference (WiCys) held in Nashville, TN. Dr. LeClaire realizes the shortage of women in IT and gave her insight on a report written by *Lesley Piper* (of Cyberwatch West) who also wrote about the conference. In her blog, *"Points to Ponder"* Dr. LeClair discusses the lack of women in cybersecurity and brings to light her key points which were: change, interests, ask and speak , negotiate and coaching to alleviate this problem.

Video 01:57 "The Growing Need for More Women Cybersleuths" on cnbc.com

Next Women in Cybersecurity (WiCyS) Event 2016: Dallas, TX (March 31st -April 2)

WiCyS' Website

October is National Cybersecurity Awareness Month

BE CYBER SAVVY. OCTOBER IS NATIONAL CYBER SECURITY AWARENESS MONTH

National Cyber Security Awareness Month (NCSAM) was first introduced in 2004 by the United States and the Department of Homeland Security. Since then, it has been observed during the month of October and its purpose is to emphasize the importance of vigilance and protection by all computer users against online cyber threats.

Every October, the Department of Homeland Security and the National Cyber Security Alliance (NCSA, a non-profit organization) reaches out to all Americans, public- and private- sector organizations and the international community in regard to cyber risks and offer the best practices on how to stay safe and secure online.

Click links below to view how various organizations are recognizing this significant, momentous event:

Department of Homeland Security

FBI

White House 2014 Proclamation

PALaw.org

CompTIA

Remembering 9/11 in Past Video

Video 03:57 Last month, 9/11 was remembered. View a video and listen to a photographer's story who spent 9 months at ground zero. A fireman saw him taking photos and handed him a Bible that was destroyed at the scene but not completely. The bible was singed to concrete but ironically the page displayed the famous verse that read: "....and eye for an eye, and a tooth for a tooth". However, below this verse had the words explaining to "turn the other cheek". The photographer gives his insight how he felt that day after being handed this Bible and his experiences dealing with tragic day.

Dealing With Privacy Threats and Data Breaches

THREATWIRE Aug 26 '15

The White House Supports CISA

Video 04:37 WH endorses controversial CISA Bill, FTC can sue companies that were hacked and RoboKiller App Wins Competition

Homeland Security NewsWire

Homeland Security News Wire: Cybersecurity

Department of Defense (DoD)
Department of Defense Website

LifeLock Relentlessly Protecting Your Identity

LifeLock Website

Another Russian Hack

Video: 0:57 The U.S. government claimed that between June and July 2015, Russian hackers comprised governmental unclassified emails with spearfishing methods that contained legitimate looking emails. No classified emails were breached.

TECHNOLOGY NEWS

Silicon Valley Addresses Diversity by Targeting Black Students

The *STEM (Science, Technology, Engineering and Mathematics) Education Coalition program* was developed to bring attention to Congress, the Administration and other organizations the vital role it brings so that the U.S. continues to remain the leader of the global marketplace. STEM Coalition believes improvement is needed in our nation for *all* students to learn science, mathematics, technology and engineering. This especially includes minorities and women. Unfortunately, at the present time, the United States Census Bureau revealed that African-Americans and Hispanics are continually underrepresented in the STEM workplace. Jason Young, is one man looking to change that. Mr. Young developed the *Hidden Genious Project* two years ago and he actively seeks high school men of color to engage in programs of coding, web/app design and team building skills.

Read more on nytimes.com

Development of New Software Aids in Speeding Up of Breast Cancer Diagnosis

Breast- cancer diagnosis can be a complex, time consuming process. First tissue must be obtained by a core needle biopsy or surgical excision and then a pathologist must prep the tissue for what is called an "analysis and histological assessment". Fortunately, Dr. Rebecca Richards-Kortum, a Rice University bioengineer and her fellow colleagues are developing new software with 90% accuracy that will result in speeding up this process. This will also eliminate the need for a specialist to perform this diagnostic service thus cutting cost. In addition, their method will benefit developing countries.

Read more on news.rice.edu

Dr. Rebecca Richards-Kortum, Rice's Malcolm Gillis University Professor

Microsoft Invests $75 Million in Schools to Advance Computer Science

Microsoft CEO: Satya Nadella

As of today, computer science is offered in less than 10% of city schools and only 1% of students are learning it. New York Mayor Bill de Blasio is making his mission to have computer science taught in all its city's public schools within the next 10 years. Microsoft Presdient, Brad Smith, also recognizes the shortage of African Americans, Latino, girls and women entering the tech field. Currently, there is a shortage of computer science graduates and this is effecting the industry. In response, Microsoft is investing $75 million dollars into computer science education for the youth and has created *TEALS (Technology Education and Literacy in Schools)*. It is described as a program that "pairs engineers from Microsoft and other high-tech companies with teachers to team-teach computer science in high schools".

Read more on USAtoday

China Invests $1.57 Billion in Cloud Computing

Tencent 腾讯

China is expanding its cloud-computing business by investing $1.57 billion (10 billion yuan) in its Chinese Internet company called Tencent Holdings, Ltd. This will take effect over the next five years. Recently, Alibaba Group Holding Ltd., Tencent's main Internet competitor, opened its first U.S. data center in Silicon Valley, along with having data centers in China and Hong Kong. Tencent responded by not only investing billions of dollars to their Internet company but by also making making plans to construct and operate datacenters in China, Hong Kong and North America.

Read more and view video (01:31) on channelnewsasia.com

Pentagon Collaborates with Silicon Valley Technology Firms to Aid Wounded Troops and the Military

Defense Secretary Ash Carter
Pentagon collaborates with Silicon Valley

Defense Secretary Ash Carter is trying to close the gap between the government and technology inventors in the Silicon Valley. The technology that is currently being develop is "flexible electronics that could replicate human skin on wounded troops or be used in ships and jets". Known as *Flexible Hybrid Electronics Manufacturing Innovations Hub* , Mr. Carter announced that the Pentagon contributed $75 million in seed money to the project. Mr. Carter is also quoted as saying, "We're drilling tunnels through that wall that separates government from scientist and commercial technologists-making it more permeable so more of America's brightest minds can contribute to our mission of national defense, even if only for a time".

Video 02:56 View Defense Secretary Ash Carter discuss this issue

"Polite" Google's Driverless Car Having Problems with "Rude" Human Car Drivers

Google

Google's driverless cars have reportedly been in 16 fender bending crashes since 2009, mostly due to human fault. Programmed to "follow the rules", most crash incidents occurred because Google cars will "politely" put on its brakes for walking pedestrians and then will be hit from behind from a human driver. Another documented incident was when one Google car stalled because it could not get through a four-way stop due to its sensors. The sensors had the driverless cars at a standstill to wait for the human drivers to stop.

Read more on nytimes.com

Video: 07:12 The Rubin Report on Google's Driverless Cars

World's Fastest Computer Up and Running

On August 12, 2015, two explosions occured at a container storage facility at the Port of Tianjin in China. It was estimated that over a hundred people was killed and hundreds more were injured. These explosions caused fires that continued to burn uncontrollably throughout that weekend which caused additional explosions. The Chinese state media believes the initial explosion was caused by hazardous materials in shipping containers that were unknown.

The supercomputer, also known as the Tianhe-1A, is housed in a nearby facility just a kilometer away from this explosion. It is known as the world's fastest computer. Even though this computer was still up and running following the blast, Chinese official shut it down for security reasons. However, after a security maintenance, it has been reported that on Monday, August 17,2015, the world's fastest computer was up and running.

Video 0:41 World's Fastest Computer

Is the Brain Faster Than Any Super Computer?

Katja Grace, a researcher at the Machine Intelligence Research Institute in Berkeley and Paul Christiano, a PhD Student in theoretical computer science at Cal Berkeley, developed a methodology that compares supercomputers to brains. This artifical intelligence (AI) project is sponsored and funded by Elon Musk who is considered a Silicon Pioneer. Grace is quoted as saying, "a big pragmatic benefit of measuring the brain in terms of communication is that it hadn't been done before". So, is the human brain faster than a super computer?

Read more on spectrum.ieee.org