



## Drexel University Cybersecurity Institute Newsletter

### September 2015 - In This Issue:

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Homeland Security Issues Warning on the Proposed Bill

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Majority Leader Mitch McConnell (R-Ky) brings Cybersecurity Information Act to floor. However, privacy advocates are concerned about privacy protection for consumers

## Spotlight: Ioannis Savidis

Ioannis Savidis is an Assistant Professor at Drexel University, where he is Director of the Integrated Circuits and Electronics (ICE) Design and Analysis Laboratory. He received his B.S.E. degree in electrical and computer engineering and biomedical engineering from Duke University, Durham, NC, in 2005. He also received both the M.Sc. and Ph.D. degrees in electrical and computer engineering from the University of Rochester, Rochester, NY under the guidance of Professor Eby G. Friedman. As part of his doctoral work, he developed circuit design techniques and methodologies for proper synchronization and power delivery of heterogeneous three-dimensional integrated circuits.



[Click the link to view Ioannis' profile and his affiliations](#)

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### Privacy Enhancing Technologies Symposium (PETS) Philadelphia, PA

"The annual Privacy Enhancing Technologies Symposium (PETS) brings together privacy and anonymity experts from around the world to discuss recent advances and new perspectives. PETS addresses the design and realization of privacy services for the Internet and other data systems and communication networks" -PETS

[PETS Website](#)

### Seeking Cyber Students:

### Drexel Women in Computing Society (WiCS)

"Our purpose is to support, recruit, and retain women pursuing a degree in the broad field of computing. WiCS will enhance communication among women in computing through informal dinners and gatherings, speakers, field trips, and arrange for tutoring and mentoring for its members as needed. The ultimate goal is to empower women in computer fields to succeed and thrive in the Drexel community and beyond". -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

The Master of Science (MS) in Cybersecurity is an interdisciplinary program that prepares students with both the academic and practical training to be competitive in the ever-changing technical landscape of cybersecurity. The program is designed for students with backgrounds in computer engineering, computer science, electrical engineering, telecommunications engineering or other related technical fields.

[Click link to see course curriculum, requirements and graduate co-op program opportunity](#)

### NetDiligence

#### Cyber Risk News Alert

"We bring to your attention a sampling of recent media stories involving cyber risk and privacy liability. These exposures include business interruption, legal liability (such as class action lawsuits), as well as crisis costs to investigate the breach, notify the victims and defend/settle class-action style lawsuits, including AG regulatory enforcement actions and fines." -NetDiligence

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### Two New Bug Threats for MAC Computers



Two new bugs are currently affecting Macintosh computers. The first is a bug that produces unwanted malware and the second is threat of total permanent control of your Mac through a hacker. This first malware is called VSearch and tempts with pop-up ads and does

redirection of your search engine utilized by Google. This bug was made public by German security researcher, Stefan Esser, which has the only known fix. The second known bug for the Mac allows total control of your computer by a hacker. This take over is accomplished by attackers being able to install malware in the firmware of the computer.

[Read more on CNNMoney](#)

### CYBERSECURITY DEFENSE/PROTECTION:

#### Homeland Security NewsWire

[Homeland Security News Wire: Cybersecurity](#)



#### Department of Defense (DoD)

[Department of Defense Website](#)



LifeLock searches over a trillion data points every day looking for potential threats. They can proactively monitor credit applications, file sharing and a wide spectrum of other networks that have your personal information.

[LifeLock Website](#)

### TECHNOLOGY NEWS

### Drexel's Research/Students Attempts to Bring Peace to War Zone Countries

Drexel University's engineering researchers and students created a group called the Young Engineer Program which formed an alliance with The PeaceTech Lab. Together, they are using their latest skills and technologies to bring peace to conflict war zone countries such as Afghanistan, Sudan and Columbia.



[Read full article on Networkworld](#)

[DrexelNow:Engineering Peace](#)

[The PeaceTech Lab](#)

### The Future of Coding is in Girl Power



Girls Who Code, a nonprofit group is looking to increase the number of women in technology. They reported that in 1984, 37% of computer science graduates were women. However, the number has died down to just 18 percent of women grads today. In response, Girls Who Code created a seven-week camp called Girls Who Code Summer Immersion Program, which actively pursues and encourages high schools girls to attend to fill this growing gap.

[Read more in the Washington Post](#)

### Drexel's CCI Faculty Weigh in on Pope Francis' Visit to Philadelphia



Several Drexel University College of Computing & Informatics faculty were recently quoted in several news outlets on issues surrounding the upcoming visit by Pope Francis at the [World Meeting of Families](#) in Philadelphia this September:

Jennifer Booker, PhD was quoted in a [July 24 Philadelphia Inquirer story](#) about problems with SEPTA's website during the sale of special transit passes.

Scott White, PhD spoke with [NBC10 on Aug. 6](#) about the City of Philadelphia's plans to shut down major roadways. White was quoted in an [Aug. 9 Philadelphia Inquirer story](#) on excessive security measures being taken by the City of Philadelphia and law enforcement. He was also interviewed on [WURD-Radio \(900-AM\)](#) on Aug. 11 about security measures the city is taking during the Pope's visit.

Ko Nishino, PhD was quoted in an [Aug. 11 Philly Voice story](#) on the technological challenges in estimating the crowd sizes and his research in computer vision detection of unusual events in crowds.

### Meet HERMES, A Bipedal Robot with Human Reflexes Created at MIT

HERMES, called a "human-machine interface that keeps balanced, with human reflexes" was developed by MIT colleagues to one day be released and to help aid in disaster sites. These types of robots would explore trouble zones controlled by human operation via a remote, safe location.

[Read more on MIT News](#)



### CYBERSECURITY NEWS:

### New Cybersecurity Bill Raises New Privacy Concern

The *Cybersecurity Information Act* was created to promote better cybersecurity in the United States. According to this bill, this will be achieved by the increasing of shared information that contain cybersecurity threats through Internet traffic which involves the U.S. government and technology/manufacturing companies. Majority Leader Mitch McConnell wants this bill passed but has so far faced opposition from both sides of parties due to concern of privacy rights for consumers.

[C-Span Video 11:13](#) McConnell presents the issue of cybersecurity to the floor.

### Homeland Security Disapproves of New Cybersecurity Bill and Issues Warning

The Department of Homeland Security is vehemently against the proposed cyberinformation-sharing bill as stated in a letter. They are quoted as saying that this bill would be "harmful to America and a threat to the country's cybersecurity". DHS Deputy Secretary Alejandro Mayorkas, who also signed the letter, states that "the inefficiency of any information sharing program will markedly increase; developing a single, comprehensive picture of the range of cyber threats faced daily will become more difficult."



DHS Deputy Secretary Alejandro Mayorkas

[Read more on NationalJournal](#)

### Model Tesla S Car Remotely Hijacked



Video 1:06 Researchers were able to remotely hack the Tesla Model S Automobile

Tesla responded by fixing the bug that allowed hijackers to hack the Model Tesla S car.

[Read more on CNNMoney](#)

### Dark Web's \$100M Yearly Drug Sales Still Going Strong Despite Recent Crackdowns

Computer science professor/researcher Nicolas Cristin of Carnegie Mellon University ran a Dark Web study along side fellow colleague Kyle Soska, also a CMU researcher. Their research of 35 Dark Web markets, which started in 2013 to earlier this year, details how profit and sales are between \$300,000 to \$500,000 dollars a day and around \$100 to \$180 million a year. The Dark Web market is still flourishing despite FBI investigation take downs such as Operation Onymous. Bitcoin is drastically being effected due to this latest finding.

[Read more on Wired.com](#)

### Researchers Threatened With New Cybersecurity Law for Testing Computer Vulnerabilities

Whitehat security researchers believe that their work is strongly needed to work against the criminal world in cybersecurity. They believe they are needed to better understand cyber threats and vulnerabilities and as a result, to work with vendors to help fix them. Now, due to the *US Computer Fraud and Abuse Act*, their work is being threatened with penalties they consider too vague and comes with harsh punishments.

[Read more on the guardian](#)