November 2017 Newsletter

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Chuck Ludwig

Head of Information Security at Susquehanna International Group, LLP (SIG)

Chuck Ludwig is the Head of Information Security at Susquehanna International Group, LLP (SIG) and a coach and mentor for the Drexel CyberDragons club. Chuck has been in the Information Security field for almost 20 years, getting his start in the US Air Force before beginning his career as a Security Engineer at SIG in 2002. He now leads SIG's global security program, managing a team of 20 (and growing!). Chuck has loved working with the Cyberdragons since the summer of 2016, and is proud to have coached Drexel's very first Collegiate Cyber Defense Competition team to a 4th place finish in the Mid-Atlantic regional finals in 2017. Chuck also serves as the Industry Sector Chief for the upcoming Philadelphia Cybersecurity Education Alliance (PCEA).

Contact Info:

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[Click here to learn more about Chuck!](#)

NSA Professionals Score College Credit at Drexel

For more than half a century, students in training to become experts in numerous fields at the National Security Agency have participated in rigorous training at the National Cryptologic School — learning everything from foreign languages to codebreaking. Today the school with the classified curriculum is expanding its coursework to keep students ahead of the latest technological threats by partnering with Drexel University to offer them the opportunity to earn a master's degree in cybersecurity.

[To learn more click here!](#)

NSA Cybersecurity Workforce Education Grant

The Isaac L. Auerbach Cybersecurity Institute will receive the Cybersecurity

New Cybersecurity Courses

New Cybersecurity course sequence is offered this academic year!
- Instructor: Adjunct Professor **Russel Handorf** of FBI
- Undergraduate and Graduate
- Fall 2017 course: "Security Offensive and Defensive Tactics"
- Follow-up course in Spring 2018

Excite Center Interview

Today everything we do is connected to the internet, we talk to Director of the Auerbach Drexel Cybersecurity Center Steve Weber and president of the Drexel Cyber Dragons Colbert Zhu about what is cyber security and how you can learn and practice it.

[Click here to listen to the interview!](#)

Workforce Education grant from National Security Agency (NSA). This grant will fund the development and offering of several new cybersecurity laboratory courses aimed at senior undergraduate students in Drexel's Department of Electrical and Computer Engineering (ECE), including Security Offensive and Defensive Topics, Blockchain and Cryptocurrency Laboratory, Wireless Security Laboratory, Image, and Video Forensics Laboratory.

Philly BSides Conference 2017

https://www.bsidesphilly.org/
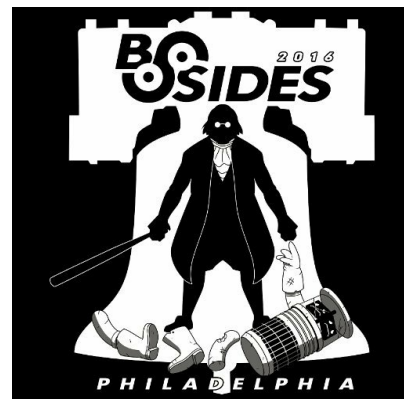
The BSides Philadelphia is an Information Security conference by information security community members. The conference is going to be at Drexel University again. The event will be just one day on December 8th. The meeting included speakers, demonstrations, and lectures related to numerous topics in cybersecurity. Small career opportunities and networking sessions were also provided throughout the conference. The limited tickets are available through the student organization, CyberDragons.

Drexel Isaac L. Auerbach Cybersecurity Institute Has a New Website!

[Click here to check it out](#)

Cybersecurity News
Cyber Security Market is Estimated to Reach $224.48 Billion

Growing at a CAGR of 14.84% by 2022

    Global Cyber Security Market Report, Is a Proficient and Detail Research on Latest Technological Advancements with Market Share Analysis of The Top Players In this Industry. This Report Provides Strategic Recommendations in Key Business Segments Based on the Cyber Security Market Estimations along with Growth Factors and Investment Opportunities Worldwide.

    The Global Cyber Security market is estimated at $85.21 billion in 2015 and is expected to reach $224.48 billion by 2022 growing at a CAGR of 14.84% from 2015 to 2022.

Click here to learn more!

Seeking Cyber Students

Join CyberDragons

- Knowledge and hands-on experience on cybersecurity topics
  - Preparation for National Collegiate Cybersecurity Defense Competition
- Meetings for Fall term:
  Tuesday: 17:00 - 19:00
  Thursday: 17:00 - 19:00
- Location: Science Center at 3401 Market St. 3rd-floor room 326

Email CyberDragons Student President **Colbert Zhu** with questions about how to get involved at colbert.zhu@gmail.com

Click Here to Join!

Drexel Women in Computing Society (WiCS)

Drexel's Women in Computing Society's (WiCS) purpose is to support, recruit, and retain women pursuing a degree in the broad field of computing. As a recognized student organization at Drexel University, WiCS is open to current undergraduate and graduate students of all genders, majors, and backgrounds.

Click here to learn more about the Drexel Women in Computing Society (WiCS)

The Master of Science (MS) Degree in Cybersecurity at Drexel
The 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.

Click here to view required courses and to learn more about the graduate co-op program

Cybersecurity Institute's Recent Grants

Isaac L. Auerbach Cybersecurity Institute has been granted these three grants from different sources for researches in Cybersecurity topics.

1. High Performance Techniques to Identify the Source and Authenticity of Digital Videos Using Multimedia Forensics

Matthew C. Stamm who is a professor at Drexel Electrical and Computer Engineering is a Primary Investor (PI) of this grant. The grant is give by The Army Research Office Rapid Innovation Fund. The grant will be valid until June 2019.

2. Secure Hardware IP Solution Low Overhead Circuit Obfuscation Primitives

Ioannis Savidis who is a professor in College of Electrical and Computer Engineering at Drexel, is a Primary Investor (PI) of the grant. The grant is give by Drexel Ventures Innovation Fund. The grant will be valid until June 2018.

3. Attribution of Malicious Binaries

Rachel Greenstadt who is a professor in College of Computing and Informatics at Drexel, is a Primary Investor (PI) of the grant. The grant is give by Defense Advanced Research Project Agency (DARPA). The grant will be valid until 2019.

Drexel Spotlight In Cybersecurity

Michael Iaconianni

Bachelor of Science in Computer Engineering
Michael Iaconianni is interested in the computing fields pertaining to OpenWRT routers, Machine Learning (where he is designing a python blackjack project), and Kernal Development. Michael has worked as the Systems Administrator at SIG, a Big Data analyst at Sonepar, and was the Embedded Linux Engineer at Information Assurance Specialists. Michael plans to continue his career at a Cybersecuirty consulting firm in Philadelphia.

Click here to learn more about Michael Iaconianni

Cybersecurity Institute's Recent Publications

Isaac L. Auerbach Cybersecurity Institute has worked on many publications. Recently, these two papers have been selected to be

presented at 12th International Conference on Malicious and Unwanted Software on October 11th to 14th.

1. Behavioral Anomaly Detection of Malware on Home Router
   Authors: Ni An, Alexander Duff, Gaurav Naik, Michaelis Faloutsos, Steven Weber and Spiros Mancoridis
2. Lightweight Behavioral Malware Detection for Windows Platforms
   Authors: Bander Alsulami, Spiros Mancoridis, Avinash Srinivasan and Hunter Dong