BIO INFO CONTINUED

Dr. Joel Michael Schwarz, Director of BSA's Global Internet Enforcement Program

Joel Schwarz oversees BSA's Global Internet Enforcement program, designed to monitor and combat Internet-facilitated software infringement via multiple online channels. Schwarz is also responsible for overseeing BSA's data analytic efforts worldwide and is a member of BSA's Global Data Protection Steering Committee, responsible for ensuring compliance with BSA's privacy principles and policies. Concurrent with his work at BSA, Schwarz is also an adjunct professor at Albany Law School, where he developed and now teaches graduate-level courses on cybercrime, cybersecurity and privacy.

Schwarz previously served as the National Counterterrorism Center's (NCTC) 1st Civil Liberties and Privacy Officer, standing up and overseeing the NCTC Civil Liberties and Privacy Office. Given his experience with standing up a privacy office within NCTC, Schwarz was also selected to help standup the Office of the Director of National Intelligence's (ODNI) Cyber Threat Intelligence Integration Center (CTIIC), established by Presidential Memorandum in February 2015 as the federal lead for all intelligence support in response to significant cyber incidents.

Before joining the ODNI, Schwarz was an attorney with the United States Department of Justice's Computer Crime and Intellectual Property Section (CCIPS), prosecuting cases involving the use of the Internet, and providing Internet investigative/prosecution training and technical assistance to governments and law enforcement around the world. Prior to the Justice Department, Schwarz worked as counsel on E-Commerce for MetLife, and served as the New York State Attorney General's special counsel for Internet Matters, and assistant attorney general with the Attorney General's Internet Bureau.

For more information about Cybersecurity Day at IUP, please contact Dr. Waleed Farag, Director, Institute for Cybersecurity, at farag@iup.edu, 724-357-7995.

GUEST SPEAKERS TITLES AND ABSTRACTS

Dr. Bryant Wysocki, Senior Level executive, Technical Advisor for C4I and Cyber Systems for the Air Force and Associate Director, Information Directorate, Air Force Research Laboratory, Rome, NY

Title: Cyber Science in an Exponentially Changing World

Abstract: Today's rate of technology advancement and fast capability adoption raises new challenges in security and assurance. This talk examines the challenges associated with rapid government deployment of emerging technologies and considers alternatives to current acquisition methods. The material also includes a brief overview of the Air Force Research laboratory, Information Directorate, and highlights technical opportunity areas for university partners.

Dr. Joel Michael Schwarz, Director of BSA's Global Internet Enforcement program

Title: Is IoT Safe for Me?

Abstract: Everything from connected refrigerators, to cars, to thermostats and even light bulbs, can, and has been, connected to the Internet. But with that convenience comes a cost in terms of vulnerabilities; not only because the Internet always adds a new threat vector, but also due to some of the unique characteristics of IoT devices. We'll begin this talk by discussing some of the inherent vulnerabilities of IoT devices, after which we'll pivot to some of the unique issues implicated by the sensitive types of records collected by IoT devices, and how they are being sought today for use in criminal prosecutions. To better understand the legal context under which access to these records is being sought, we'll also spend a bit of time exploring the 4th Amendment right to a "Reasonable Expectation of Privacy," and how that comes up in the context of law enforcement access to IoT records (from your pacemaker, Amazon echo device, etc.). Finally, we'll delve into an interesting and evolving area of technology—specifically, data collected by cars at the time of a crash, usually by an airbag deployment type system—which has led to a split of opinion between the state courts that have considered this question to date, after which we'll explore together the ways that the 4th amendment might apply in those types of cases going forward.

Mr. Brian Gouker, Division Chief in the National Security Agency's College of Cyber

Title: Cyber Career Opportunities

Abstract: There are vacant cyber jobs open in the United States today. Both the federal government and private industry are aggressively hiring. Cyber and cyber security has entered the mainstream and industries such as health care, finance, manufacturing and retail all hire cyber security professionals to protect valuable information from cyber breaches. This presentation will discuss cyber opportunities at the National Security Agency, the federal government, and private industry.

Dr. Guido Cervone, Associate Director of the Institute for CyberScience and Professor of Geoinformatics at Pennsylvania State University.

Title: CyberScience and Geoinformatics for Target Detection

Abstract: This talk will focus on CyberScience as a new fundamental paradigm for the science enterprise. It will present the Institute for CyberScience at the Pennsylvania State University, discussing the importance of the computational cyberinfrastructure and some selected Earth science applications. The main emphasis will be on numerical modeling at scale and the analysis of large remote sensing data.

Mr. Kyle Crain, Information Security Architect at the Pennsylvania State University

Title: Cybersecurity in High Education: Securing Data In an Unsecured Environment

Abstract: Higher Education is a unique and challenging place for the cybersecurity field. Working in this environment poses many unique obstacles vs. being a cybersecurity practitioner in the corporate world. In this session I will give an overview of what a cybersecurity team at a leading research institution looks like and discuss the strategies and initiatives we use on a daily basis to secure sensitive data being generated by our researchers. I will present some attack trends and statistics and talk about why a large campus is like a bustling city, chalk full of all kinds of data that attackers try to exfiltrate on a daily basis. We will draw comparisons and contrast how security is implemented in higher education vs. corporate entities to help you gain some insight as to how different sectors require different skill sets. I will also discuss different career paths to landing a career in this exciting, dynamic, and in-demand field.

THE 12TH ANNUAL CYBERSECURITY DAY AT IUP

OCTOBER 29, 2019

OHIO HUB
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CYBERSECURITY DAY AT IUP

TIME SLOT	SPEAKER	TOPIC TITLE
9:00 - 9:10	Dr. Waleed Farag, Director, Institute for Cybersecurity at IUP and Professor of Computer Science	*Opening Remarks (Event history, ICS work and recent achievements, and logistics*
9:10 - 9:20	Dr. Tim Moerland, IUP's Provost and Vice President for Academic Affairs	*Provost's Remarks*
9:20 - 9:30	Dr. Francisco E. Alarcón, Chair, Department of Mathematical and Computer Sciences	*Chair's Remarks*
9:30 - 10:20	Dr. Bryant Wysocki, Senior Level Executive, Technical Advisor for C4I and Cyber Systems for the Air Force and Associate Director, Information Directorate, Air Force Research Laboratory	*Cyber Science in an Exponentially Changing World*
10:20 - 10:35	AM Break	
10:35 - 11:25	Dr. Joel Michael Schwarz, Director of BSA's Global Internet Enforcement program.	*Is IoT Safe for Me?*
11:25 - 12:50	Lunch Break	
12:50 - 1:00	Dr. Deanne Snavely, Dean, Kopchick College of Natural Sciences and Mathematics	*Dean's Welcome Message*
1:00 - 1:50	Mr. Brian Gouker, Division Chief in the National Security Agency's College of Cyber	*Cyber Career Opportunities*
1:50 - 2:00	PM Break	
2:00 - 2:50	Dr. Guido Cervone, Associate Director of the Institute for CyberScience and Professor of Geoinformatics, Meteorology and Atmospheric Science at the Pennsylvania State University	*CyberScience and Geoinformatics for Target Detection*
2:50 - 3:00	PM Break	
3:00 - 3:50	Mr. Kyle Crain, Information Security Architect at the Pennsylvania State University	*Cybersecurity in High Education: Securing Data In an Unsecured Environment*
3:50 - 4:00	Dr. Waleed Farag, Director, Institute for Cybersecurity at IUP	*Conclusions*

BIOGRAPHICAL INFORMATION ON GUEST SPEAKERS

Dr. Bryant Wysocki, Senior Level executive, Technical Advisor for C4I and Cyber Systems for the Air Force and Associate Director, Information Directorate, Air Force Research Laboratory, Rome, NY

Dr. Bryant Wysocki is the Technical Advisor for C4I and Cyber Systems for the Air Force and Associate Director, Information Directorate, Air Force Research Laboratory, Rome, New York. As the recognized national/international authority on C4I and cyber systems, Wysocki provides technical oversight of these areas for the Air Force and advice on C4I and cyber systems to the highest level Air Force and government officials.

Wysocki started his active duty career with the Air Force as a nuclear weapons technician in 1991 and served in numerous technical and operational positions later serving as a civilian scientist. Previously, as Information Directorate Chief Engineer, Wysocki was responsible for the development and implementation of tailored engineering policies, processes, and technical programs across the directorate's broad spectrum of information science research and development. He has a broad span of technical leadership experience with a diverse background in military operations, acquisitions, logistics, maintenance, program management, systems engineering, engineering physics, fundamental research, and technology development.

Dr. Guido Cervone, Associate Director of the Institute for CyberScience and Professor of Geoinformatics, Meteorology and Atmospheric Science at the Pennsylvania State University

Dr. Guido Cervone is Associate Director of the Institute for CyberScience and Professor of Geoinformatics, Meteorology and Atmospheric Science at the Pennsylvania State University. He also holds the appointments of Affiliate Scientist at the National Center for Atmospheric Research (NCAR). He received a Ph.D. in Computational Science and Informatics in 2005, and M.S. and B.S. in Computer Science in 2000 and 1998. His expertise is in geoinformatics, machine learning, and remote sensing, and his research focuses on the development and application of computational algorithms for the analysis of remote sensing, numerical modeling and social media spatio-temporal Big Data.

Mr. Kyle Crain, Information Security Architect at the Pennsylvania State University

Kyle Crain is the information security architect and team lead for the Consulting and Architecture group within the Office of Information Security (OIS) at Pennsylvania State University, University Park. Kyle has worked at Penn State for 11 years and has been involved with the Office of Information Security for eight years. During his time with OIS, he worked on a variety of key initiatives and services as a network security analyst and cybersecurity engineer before being named the Information Security Architect. Kyle believes in balancing security with usability to support the goals of the university and that security cannot be a one size fits all approach. He enjoys building relationships with university personnel to understand their needs and help design approaches that are both secure and allow work to continue without introducing unnecessary complexities. Currently, the key initiatives his group is responsible for include: cloud security, Authority to Operate (ATO), Office 365 data security, and design and build of secure enclave environments.

Mr. Brian Gouker, Division Chief in the National Security Agency's College of Cyber
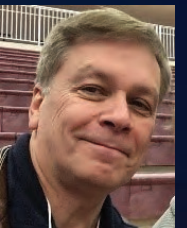
Brian Gouker is a division chief in the National Security Agency's College of Cyber. He is responsible for several NSA and national programs. Brian directs the Centers of Academic Excellence (CAE) in Cyber Defense and Cyber Operations programs, the GenCyber K-12 cyber summer camp initiative, a highly selective NSA technical summer internship program, the DoD Cybersecurity Scholarship Program, and manages advanced cyber education programs for NSA civilians and US Cyber Command military forces. Brian is also the US government's senior representative to the NATO Multinational Cyber Defense Education and Training Project which is building the strategy for International Military Cyber workforce development.

A retired Air Force officer, Brian holds technical and advanced degrees from the University of Texas at Austin, Houston Baptist University, and the US Army War College. Brian is fluent in American Sign Language and serves as a Special Olympics kayak coach.