WORKSHOP SCHEDULE

9:00 - 9:10 am

Dr. Waleed Farag The PC4A Project and Workshop Logistics

9:10 - 10:50 am

Mr. Dom Glavach Cloud Security Telemetry

10:50 - 11:00 am

Morning Break

11:00 - 12:40 pm

Dr. Xin-Wen Wu

Beyond Confidentiality: How Modern Cryptography is Used to Protect Our Data and Cyberspace.

12:40 - 1:20 pm Lunch Break

1:20 - 3:00 pm

Dr. Balaji Palanisamy Introduction to Blockchains

ABOUT PC4A

IUP, in partnership with six community colleges across Pennsylvania has been awarded a substantial grant from the US Department of Defense with the increasingly important goal of supporting and strengthening the cybersecurity workforce in our country.

Project Objectives

- Increase Certification Rates
- Increase Transfers to 4 Year Institutions
- Increase Interest in DoD/DIB Employment

Contact Information:

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PC22A PA Community College Consortium Cooperative Agreement PROUDLY PRESENTED BY THE DOD, PC4A, WCCC & IUP

FACULTY PROFESSIONAL DEVELOPMENT WORKSHOP



APRIL 1, 2023

WORKSHOP SESSION TITLES, SUMMARIES AND SPEAKER BIOS



Mr. Dom Glavach

Chief Security and Technology Officer CyberSN

Session Title: Cloud Security Telemetry

Session Summary: This session provides an overview of Amazon Web Services (AWS), including key terminology and services. The talk introduces necessary configurations to perform threat detection in the cloud such as log telemetry, analysis, and visualization as well as an introduction to common threat hunting techniques.

Speaker Bio: Dom Glavach is the chief security officer and chief security strategist at CyberSN. In this executive role, he is responsible for leading the company's information security strategy, policy, IT operations, security engineering, security operations, data privacy, and cyber threat detection. Prior to CyberSN, Glavach spent 20 years working with Concurrent Technologies Corporation, where he served as the chief information security officer and research fellow. He played a critical role in the company's cyber risk management, providing cyber technical leadership and subject matter expertise to commercial and government clients. Glavach is a CISSP, an active member of the Armed Forces Communications and Electronics Association Cyber Committee, chairs a subcommittee on Vehicle and Embedded Systems Cyber Security, and mentors at cybersecurity meet-ups. He has presented on various security topics to a wide range of public and government audiences, including the National Institute of Standards and Technology and the National Security Agency.



Dr. Xin-Wen Wu

Associate Professor of Computer Science University of Mary Washington

Session Title: Beyond Confidentiality: How Modern Cryptography is Used to Protect Our Data and Cyberspace.

Session Summary: Modern cryptography, including symmetric ciphers, asymmetric crypto algorithms, and secure hash algorithms, provides powerful tools to protect cyberspace as well as users. When being used properly, advanced cryptography ensures confidentiality, integrity, and beyond. In this workshop, we will introduce algorithmic concepts of the most commonly used cryptographic protocols. Interesting examples and hands-on activities will be offered to help understand the concepts.

Speaker Bio: Xin-wen Wu, Ph.D., has been working in cybersecurity and various related areas as a researcher and educator over the last two decades. He has published two books, a monograph, and numerous research articles in reputable journals and international conferences. Dr. Wu is a faculty member at the University of Mary Washington currently. He was also affiliated with Indiana University of Pennsylvania, extending his academic experience at several research-focused universities including the University of California at San Diego and the University of Melbourne in Australia.



Dr. Balaji Palanisamy

Associate Professor of Computing and Information University of Pittsburgh

Session Title: Introduction to Blockchains

Session Summary: This talk will provide an introduction to distributed ledger technologies. We will discuss the fundamentals of a decentralized ledger and the functioning of a blockchain. We will also introduce the basics of the Ethereum blockchain and the notion of smart contracts in Ethereum.

Speaker Bio: Balaji Palanisamy is an Associate Professor in the School of Computing and Information at the University of Pittsburgh. His research interests include data privacy. privacy-preserving system design and scalable and resource management for distributed systems, IoT infrastructures, edge and cloud computing. At the University of Pittsburgh, he carries out research in the Laboratory of Research and Education on Security Assured Information Systems (LERSAIS). He is a recipient of an IBM Faculty Award in 2017 and is a co-recipient of the Best Paper Awards in various conferences including DBSec 2022, IEEE BigDataCongress 2018, IEEE BigDataCongress 2017, IEEE/ACM CCGrid 2015 and IEEE CLOUD 2012. He is currently an Associate Editor for the IEEE Transactions on Dependable and Secure Computing, IEEE TDSC and the IEEE Transactions on Services Computing, IEEE TSC journal.

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