BOSTON
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2022 INTERNATIONAL WHITE HAT CONFERENCE

The Evolution of Illicit Crypto Use:
Current Approaches and Future Challenges for Financial and Government Sectors

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JUNE 1 & 2, 2022

Hosted by Boston University Metropolitan College's
Criminal Justice Graduate Programs and the
Center for Cybercrime Investigation & Cybersecurity

Welcome to the 2022 International White Hat Conference

Over the years, the use of cryptocurrency has reportedly been prevalent in illicit darkweb marketplaces, especially in sex and drug trafficking incidents, ransomware, and various financial schemes. However, the existing capabilities of many law enforcement agencies are limited, and local and state law enforcement officers often lack the expertise to identify and acquire potential evidential artifacts from contemporary consumer technologies to support the elements of proof required in a successful prosecution.

Focusing on the "Evolution of Illicit Crypto Use," the Third Annual White Hat Conference is an effort to bring disruptive change to cybercrime investigation, exploring innovative techniques and global measures to bring about effective criminal justice policies and establish preventive measures—leading to more efficient investigations and successful prosecutions.

The 2022 White Hat Conference will serve to enhance current capacities of higher education to better serve students of cybersecurity, computer forensics, and digital evidence, leading to improved cybercrime investigations and successful prosecutions. Over the two days of morning and afternoon sessions, subject matter experts will share their expertise on emerging technologies, laws, and policies—while highlighting the challenges faced by law enforcement. Furthermore, the conference will host a job fair to assist students with internship opportunities within the areas of computer forensics and digital evidence. This will help establish a corroborative approach that can further promote the development and implementation of internship/co-op programs.

Hosted by Boston University's Metropolitan College (MET) Criminal Justice Graduate Programs in collaboration with Utica College and the Center for Cybercrime Investigation & Cybersecurity, the 2022 White Hat Conference is made possible by a grant from the Department of Justice's (DOJ) Bureau of Justice Assistance (BJA), awarded to MET faculty member Dr. Lou Chitkushev and myself.

We look forward to collaborating with you on innovative solutions to cybercrime issues.

Dr. Kyung-shick Choi

Director, Center for Cybercrime Investigation & Cybersecurity
Professor of the Practice and Director, Cybercrime & Cybersecurity Programs
Boston University Metropolitan College

Agenda

Note that all meeting times are Eastern Daylight Time (EDT).

Wednesday, June 1, 2022	
Morning Sessions	
9:30–10 am	**Opening Ceremonies** • Welcome Speech: Dr. Tanya Zlateva, Dean, Boston University Metropolitan College • Opening Remarks: Dr. Kyung-shick Choi, Founder of the White Hat Conference; Director of Cybercrime Investigation & Cybersecurity Programs, Boston University Metropolitan College
10–10:50 am	**Keynote Session I: Private Sector** • Moderator/Discussant: Dr. Cathy Marcum, Chair of the Division of Cybercrime, American Society of Criminology; Professor of Justice Studies, Appalachian State University • Speaker: Ron Plesco, Former Prosecutor, DLA Piper Global Law Firm
10:50–11 am	**Break**
11-11:45 am	**Keynote Session II: Government Sector** • Moderator/Discussant: Dr. Cathy Marcum, Chair of the Division of Cybercrime, American Society of Criminology; Professor of Justice Studies, Appalachian State University • Speaker: Eric Yingling, Supervisory Special Agent, Federal Bureau of Investigation, Virtual Assets Unit (VAU), Virtual Currency Response Team Lead
11:45 am–12 pm	**White Hat Competition Team Introduction** • Interview with Ismael Morales, Director of the White Hat Cybercrime Investigation Competition; Assistant Professor of Cybersecurity, Utica University
12–1 pm	**Lunch Break**
Afternoon Sessions	
1–1:50 pm	**Law Enforcement Expert Panel: Challenges and Best Practices in Crypto Investigation** • Moderator/Discussant: Dr. Hannarae Lee, Bridgewater State University • Speaker: Peter Moores, Senior Enforcement Counsel, Securities and Exchange Commission • Speaker: Ken Jones, Former US Postal Inspection Service Director; Senior Managing Director in the Global Risk and Investigations Practice, FTI Consulting
1:50–2 pm	**Break/Cybercrime Investigation Competition Live**

White Hat Conference Agenda (cont.)

2–2:50 pm	**Crypto-Investigation Training**
	• Moderator/Discussant: Dr. Kyungseok Choo, Utica University
	• Matt Richardson, Director of Intelligence and Investigations, Anti-Human Trafficking Intelligence Initiative
	• Larry Cameron, Chief Information Security Officer, Anti-Human Trafficking Intelligence Initiative
2:50–3 pm	**Break/Cybercrime Investigation Competition Live**
3–3:50 pm	**Expert Group Panel: Crypto Use in Human Trafficking**
	• Moderator/Discussant: Dr. Kyungseok Choo, Utica University
	• Dr. Richard R. Brooks, Professor of Electrical and Computer Engineering, Clemson University; CTO, Danaides NGO
	• Karim Rajwani, Senior Vice President and Chief Operating Officer, Scotiabank
	• Dr. Donald Rebovich, Distinguished Professor of Criminal Justice, Utica College
3:50–4 pm	**Interview with Cybercrime Investigation Competition Director and Two Case Managers**
	Cybercrime Investigation Competition: Top 3 Teams
	Closing Announcement

Thursday, June 2, 2022

Morning Sessions

9:30–10 am	**Program Announcement: Introducing Top 3 Teams and Judges**
10-11 am	**Mock Trial Session 1: Cybercrime Investigation Expert Testimony**
	• Top 3 Teams Introduction
11-11:10 am	**Break**
11:10 am–12 pm	**Session 2: Judges' Decision**
	• Dr. Jennifer LaPrade (Mock Trial Moderator, USA)
	• Dr. Mohamed Chawki (International Judge, France)
	• Dr. Gergely Dzsinich, LLM, CIPP/E (International Judge, Hungary)
	• Dr. Austen Givens (USA)
	Q&A
12-1 pm	**Lunch Break: Final Decision**

White Hat Conference Agenda (cont.)

Afternoon Sessions	
1–1:50 pm	**Job Fair** • Moderator: Whitney Sanders, University of Texas at Dallas • Ken Jones, Former US Postal Inspection Service Director; Senior Managing Director in the Global Risk and Investigations Practice, FTI Consulting • Ilia Kolochenko, Founder, CEO, and Chief Architect, ImmuniWeb • Matt Richardson, Director of Intelligence and Investigations, Anti-Human Trafficking Intelligence Initiative
1:50-2 pm	**Break**

2–2:50 pm	**Student Paper Competition Presentation**
	• Moderator: Dr. Sinyong Choi
	• Student Presenters:
	  • D Demers, Bridgewater State University
	  Paper Title: Kerberoasting: An Attack on a Cryptographic Authentication Technology
	  • Bo Ra Jung, Boston University
	  Paper Title: Dynamics of Dark Web Financial Marketplaces: An Exploratory Study of Underground Fraud and Scam Business
	Q&A: Discussant (10–15 min) + Audience (5–10 min)

2:50-3 pm	**Break**
3-3:50 pm	**The Evolution of Metaverse and Future CIC Training** • Discussant/Moderator: Dr. Sinchul Back, University of Scranton • Dr. Kyung-Shick Choi, Director of Cybercrime Investigation & Cybersecurity Programs, Boston University Metropolitan College • Marlon Mike Toro-Alvarez, Former Member, Colombian National Police; Doctoral Student of Criminology and Criminal Justice, Southern Illinois University Carbondale
3:50-4 pm	**Break**
4-4:30 pm	**Awards Ceremony** • White Hat Competition Winner (3 Teams) • Student Paper Competition Winner (2 Teams)
4:30-5 pm	**Closing Remarks** • Dr. Lou Chitkushev, Senior Associate Dean, Boston University Metropolitan College

Cybercrime Investigation Competition

Cybercrime Investigation Competition

The 2022 competition will be held virtually as a team competition. For this competition, college student/practitioner teams will engage in cybercrime investigation-focused activities centered on digital forensics. The goal of the competition is to develop effective cybercrime investigation training, test the best practices reflecting the needs of all levels of law enforcement, and establish training guidelines in computer forensics and digital evidence.

The White Hat Cybercrime Investigation Competition will serve as a pathway to evaluating and promoting common goals, needs, and interests associated with technical skills and legal expertise that lead to comprehensive high-level cybercrime investigation educational learning and skill development. BU has created an evidence-based digital case scenario framework that provides competitors with realistic scenarios that reflect major cybercrime cases.

The 2022 International White Hat teams will compete for 20 hours from May 31 to June 1, which is the first day of the White Hat Cybercrime Investigation Competition.

Student Paper Competition

Student Paper Competition

The White Hat Conference Paper Awards will be presented to the winning team of each participating institution. Teams, comprised of students and a faculty coach, will be judged on original, unpublished papers presented at the 2022 White Hat Conference.

The International Journal of Cybersecurity Intelligence & Cybercrime

The *International Journal of Cybersecurity Intelligence & Cybercrime* is a peer-reviewed journal launched by the Center for Cybercrime Investigation & Cybersecurity in 2018. The IJCIC provides empirical research articles, policy reports, case studies, and book reviews that highlight the origins, patterns, causes, motivations, and trends of cybersecurity and cybercrime in a contemporary era, while also providing new methods and approaches to existing issues within the field. By exploring theoretical and practical implications for a wide range of audiences, including academics and industry experts currently working in the field, the journal offers unique opportunities for bridging these audiences and initiating discussions that enhance theory, method, and practice within the growing field of cybersecurity and cybercrime.

Learn more about the journal at **vc.bridgew.edu/ijcic**.

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