Boston University Metropolitan College



INTERNATIONAL WHITE HAT CONFERENCE

AI & Robotics Frontier: Mastering Cybercrime Defense in the Digital Age

**JUNE 26–28, 2024** 

In-Person or Virtual Format

# live.bu.edu/whitehat



Produced by Boston University Metropolitan College's Criminal Justice Graduate Programs and the Center for Cybercrime Investigation & Cybersecurity Welcome to the 2024 International White Hat Conference Artificial intelligence and robotics are at the forefront of modern technological development, with capacities rapidly advancing by the day. The more these technologies grow, the more vital they will become to the field of cybersecurity and cybercrime defense. It is for that reason that the theme of the 2024 International White Hat Conference, "AI & Robotics Frontier: Mastering Cybercrime Defense in the Digital Age," focuses on the cuttingedge of artificial intelligence and robotics and their applications in cybersecurity and cybercrime defense.

Emphasizing the need to adapt and advance in the face of growing digital threats, this area of focus reflects the importance of interdisciplinary approaches. The conference's programming will bring together experts from AI, robotics, cybersecurity, and law enforcement. A significant portion of the conference will be dedicated to delving into technical areas, discussing and

showcasing the newest technologies and methods for tackling cybercrime, ensuring digital security, and understanding the ethical and legal considerations of these rapidly progressing domains.

Building on the success of previous International White Hat conferences, the event unites cybersecurity stakeholders from government, the private sector, and academia to address contemporary challenges in digital security. The conference promises to be a pivotal event for professionals and academics in these disciplines. The conference's dual format, offering both online and inperson participation, underscores its commitment to accessibility and broad engagement, catering to a global audience eager to remain at the forefront of AI, robotics, and cybersecurity, with a special emphasis on the technical intricacies and challenges in these areas.

Hosted by Boston University Metropolitan College's Criminal Justice Graduate Programs and the Center for Cybercrime Investigation & Cybersecurity in partnership with the Korean National Police University, the 2024 International White Hat Conference is made possible by our global sponsors and Center for Cybercrime Investigation & Cybersecurity partners. 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





Note that all meeting times are Korea Standard Time (GMT+9). For speaker bios, visit **live.bu.edu/whitehat/speakers**.

### Wednesday, June 26, 2024

| 11-11:50 am | Student Poster Session  |
|-------------|---|
| 12-1 pm     | Lunch   |
| 1–2 pm      | Cybercrime Investigation Challenge Orientation  |
| 2 pm        | <b>Cybercrime Investigation Challenge Begins</b><br>• Challenge Completes at 2 am, Thursday, June 27 (12 hours) |

Thursday, June 27, 2024

Master of Ceremonies: Ben Pak, Police Officer, Los Angeles Police Department; President, Korean American Law Enforcement Organization

| Morning Sessions |   |
|------------------|---|
| 10:30-11:10 am   | Opening Ceremonies  |
|                  | <ul> <li>Singing of the Korean and US National Anthems:<br/>Christine Jeong</li> </ul>  |
|                  | <ul> <li>Welcome Speech I: President, Korean National<br/>Police University</li> </ul>  |
|                  | Welcome Speech II: Dr. Lou Chitkushev, Senior Associate     Dean, Boston University Metropolitan College  |
|                  | <ul> <li>Opening Remarks: Dr. Kyung-shick Choi, Founder of the<br/>White Hat Conference; Director of Cybercrime Investigation &amp;<br/>Cybersecurity Programs, Boston University Metropolitan College</li> </ul> |
| 11:10-11:50 am   | Keynote Session I: AI & Robotics  |
|                  | <ul> <li>Moderator/Discussant: Dr. Wook Kang, Professor of<br/>Public Administration &amp; Public Security, Korean National<br/>Police University</li> </ul>  |
|                  | Speaker: Dr. Tae Oh, Professor, School of Information,<br>Rochester Institute of Technology   |
| 11:50 am-12 pm   | White Hat Team Introduction   |
| 12-1 pm          | Lunch Break   |

#### White Hat Conference Agenda (cont.)

| Afternoon Sessions |  |
|--------------------|--|
| 1-1:50 pm          | <ul> <li>Session 1: Advancing Security Frontiers</li> <li>Moderator/Discussant: Meghan Martinez, Director of Cyber<br/>Range Programs, CyberTrust Massachusetts</li> <li>Speaker: Omario S. Kanji, Senior Fellow, National Security<br/>Institute at George Mason University</li> <li>Speaker: Dr. Jan Ellermann, Senior Specialist, Europol</li> <li>Speaker: Christopher Church, Senior Digital Forensic Specialist,<br/>INTERPOL</li> </ul> |
| 1:50-2 pm          | Break/Cybercrime Investigation Challenge Live  |
| 2-2:50 pm          | <ul> <li>Session 2: Use of Al &amp; Robotics in Crime Prevention</li> <li>Moderator/Discussant: Dr. Jeyong Jung, Professor,<br/>Ulsan University</li> <li>Speaker: Dr. Inhan Kim, Chief Technology Officer,<br/>ING Robotics</li> <li>Speaker: Dr. Mami Kajita, Singular Perturbations Inc.</li> <li>Speaker: Dr. Kangpyo So, Chief Technology Officer, AtoMe Inc.</li> </ul>  |
| 2:50-3 pm          | Break/Cybercrime Investigation Challenge Live  |
| 3-3:50 pm          | <ul> <li>Session 3: Legal Perspectives and Strategies</li> <li>Moderator/Discussant: Meghan Martinez, Director of Cyber<br/>Range Programs, CyberTrust Massachusetts</li> <li>Speaker: Dr. Ilia Kolochenko, CEO &amp; Chief Architect, ImmuniWeb</li> <li>Speaker: Dr. Yunsik Jake Jang, Professor, Hallym University</li> <li>Speaker: Dr. Haesung Yoon, Senior Research Fellow, Korean<br/>Institute of Criminology and Justice</li> </ul>   |
| 3:50-4 pm          | <ul> <li>Closing Announcement for Day 1</li> <li>Interview with Cybercrime Investigation Competition<br/>Director Dr. Sinchul Back and Case Manager</li> <li>Cybercrime Investigation Competition: Top 3 Teams</li> <li>Closing Announcement</li> </ul>  |

#### Friday, June 28, 2024

Master of Ceremonies: Ben Pak, Police Officer, Los Angeles Police Department; President, Korean American Law Enforcement Organization

| Morning Sessions (Online) |  |
|---------------------------|--|
| 9:30-10 am                | Program Announcement: Introducing Top 3 Teams and Judges   |
| 10-11 am                  | Mock Trial Session 1: Cybercrime Investigation<br>Expert Testimony<br>• Top 3 Teams Introduction   |
| 11-11:10 am               | Break  |
| 11:10 am-12 pm            | <ul> <li>Mock Trial Session 2: Judges' Decision</li> <li>Moderator: Dr. Jennifer LaPrade, Assistant Professor of<br/>Criminology, Missouri State University</li> <li>Dr. Yunsik Jake Jang, Professor, Hallym University</li> <li>Colonel Marlon Toro-Alvarez, Liaison Officer for Latin<br/>America, Center for Cybercrime Investigation &amp; Cybersecurity</li> <li>Dr. Gergely Dzsinich, Adjunct Professor, Emlyon Business<br/>School, France</li> </ul> |
| 12-1 pm                   | Lunch Break: Final Decision  |

#### White Hat Conference Agenda (cont.)

| Afternoon Session | ns   |
|-------------------|--|
| 1-1:50 pm         | Cyber Safety Education Panel   |
|                   | <ul> <li>Moderator/Discussant: Dr. Jeyong Jung, Professor,<br/>Ulsan University</li> </ul>   |
|                   | <ul> <li>Speaker: Dr. Elizabeth Englander, Professor, Director of<br/>the Massachusetts Aggression Reduction Center,<br/>Bridgewater State University</li> </ul> |
| 1:50-2 pm         | Break  |
| 2-2:50 pm         | Student Paper Presentation   |
|                   | <ul> <li>Moderator/Discussant: Dr. Sinyong Choi, Assistant Professor<br/>of Criminal Justice, Kennesaw State University</li> </ul>                               |
|                   | • Q&A: 15 minutes per person, plus an additional 15 minutes  |
| 2:50-3 pm         | Break  |
| 3-3:50 pm         | Career Fair  |
|                   | <ul> <li>Moderator/Discussant: Meghan Martinez, Director of Cyber<br/>Range Programs, CyberTrust Massachusetts</li> <li>Speaker: KT (TBA)</li> </ul>             |
|                   | Speaker: Neri Zin, Vice President of Global System Integrators     (GSI), CyberBit   |
| 3:50-4 pm         | Break  |
| 4-4:30 pm         | Award Ceremony   |
|                   | <ul> <li>Moderator: Dr. Michael Jenkins, Chair and Professor of<br/>Criminal Justice, Cybersecurity &amp; Sociology, University of<br/>Scranton</li> </ul>       |
|                   | <ul> <li>Award Presenter: Dr. Tae-hoon Ha, President, Korean<br/>Institute of Criminology and Justice</li> </ul>   |
|                   | White Hat Competition Winner (3 Teams)   |
|                   | Student Paper Competition Winner (2 Teams)   |
| 4:30-5 pm         | Closing Remarks  |
|                   | Dr. Tae-hoon Ha, President, Korean Institute of<br>Criminology and Justice   |
| 5:30-8 pm         | Closing Reception  |
|                   | KT Convention Hall   |

## Cybercrime Investigation Challenge

The White Hat Cybercrime Investigation Challenge is a pathway to assess and promote common goals, needs, and interests related to technical skills and legal expertise required for a comprehensive, high-level cybercrime investigation education. Boston University has developed an evidence-based digital case scenario framework that provides participants with realistic scenarios reflecting major cybercrime cases.

The 2024 Cybercrime Investigation Challenge will take place both virtually and in person. The aim of this challenge is to create effective training for cybercrime investigation, test the best practices that meet the needs of all law enforcement levels, and establish training guidelines for computer forensics and digital evidence.

College students and practitioners will work in teams to engage in activities focused on digital forensics and cybercrime investigation. On June 26 and June 27, teams will participate in a 12-hour challenge. On June 28, the top three teams will have the opportunity to present their findings at a mock trial and provide expert testimony.

#### Awards

- First Place Winner: \$1,000 prize
- Second Place Winner: \$500 prize
- Third Place Winner: \$200 prize

Teams, comprising students and a faculty coach, will be judged on original, unpublished papers presented at the 2024 White Hat Conference. Papers may be on any topic from any academic discipline but must focus on cybercrime and cybersecurity.

The winning team of each participating institution will receive the White Hat Conference Cybercrime Prevention and Response Award. The winning papers will also be considered for publication in the *International Journal of Cybercrime Investigation & Cybersecurity's* (*IJCIC*) special issue in 2024.

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.

Cyb<mark>ercrime</mark> Prevention and Response Award Thank You to Our Sponsors







Korean Institute of Criminology and Justice





### Boston University Metropolitan College



Boston University Metropolitan College 1010 Commonwealth Avenue Boston, MA 02215 bu.edu/met

- facebook.com/METBU
- 🚿 @METBU
- youtube.com/metcollegebu
- @METBU

Center for Cybercrime Investigation & Cybersecurity 46 Warren Ave, Milton 02138 centercicboston.org

- facebook.com/CenterforCIC
- ⊗ @CenterforCIC
- bit.ly/CenterCIC
- @ @CENTER\_FOR\_CIC





