



**Soft Target Engineering
to Neutralize the
Threat Reality**

Soft Target Engineering to Neutralize the Threat Reality (SENTRY)
A Department of Homeland Security (DHS) Center of Excellence

Advanced Development for Security Applications - Workshop 28
Building Effective Security for Soft Targets

Wednesday, November 13, 2024, 9:00 AM - 5:30 PM ET
Thursday, November 14, 2024, 8:00 AM - 4:00 PM ET

Cabral Center
40 Leon Street, Boston, MA 02115
Northeastern University, Boston, Massachusetts

AGENDA

Subject to Change

Wednesday, November 13, 2024 - Day 1

Time	Topic	Speaker
8:00 AM - 9:00 AM	Check-in/Breakfast	
Introductions		
9:00 AM - 9:05 AM	Welcoming Remarks - SENTRY	Michael Silevitch <i>Director, SENTRY</i> <i>Founding Director, ALERT</i> <i>Northeastern University</i>
9:05 AM - 9:10 AM	Welcoming Remarks - Northeastern University	Gregory Abowd <i>Dean of the College of Engineering</i> <i>Northeastern University</i>
9:10 AM - 9:15 AM	Welcoming Remarks - DHS	William Farmer <i>Program Manager</i> <i>Office of University Programs</i> <i>Science and Technology Directorate</i> <i>Department of Homeland Security</i>
9:15 AM - 9:30 AM	<i>Setting the Stage</i>	Carl Crawford <i>Csuptwo</i>
		Harry Martz <i>Associate Program Leader</i> <i>Center for Nondestructive Characterization</i> <i>Lawrence Livermore National Laboratory</i>

9:30 AM - 9:45 AM	SENTRY and ADSA Engagement	<p>Michael Silevitch <i>Director, SENTRY</i> <i>Founding Director, ALERT</i> <i>Northeastern University</i></p>
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Keynote Speaker

9:45 AM - 10:15 AM	Keynote	<p>Laura Parker <i>Senior Advisor for Sensors</i> <i>Tech Centers Division</i> <i>Science and Technology Directorate</i> <i>Department of Homeland Security</i></p>
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Decision Support Systems Development

10:15 AM - 10:40 AM	Countering Weapons of Mass Destruction Office Perspectives on Protecting Soft targets and Efforts in Decision Support System Development	<p>Kalpesh Patel <i>Executive Director for Technology & Capability Readiness</i> <i>Policy, Strategy, and Analysis</i> <i>DHS, Countering Weapons of Mass Destruction Office</i></p>
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10:40 AM - 11:05 AM	Decision Support Systems	<p>Michael Hartnett <i>Vice President, Venue Security</i> <i>Ilitch Holdings, Inc.</i></p>
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11:05 AM - 11:40 AM **Break**

11:40 AM - 12:05 PM	Technological and Architectural Design Changes for Schools	<p>Lawrence Filippelli <i>Superintendent</i> <i>Lincoln Public Schools</i></p>
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12:05 PM - 12:30 PM	Next Generation Alert Standardization Solution for Soft Target Alert Notification	<p>Kamran Atri <i>Founder</i> <i>A4SAFE</i></p>
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12:30 PM - 1:35 PM **Lunch**

Keynote

1:35 PM - 2:05 PM	Protecting Major Sporting Events <i>[Virtual]</i>	<p>Jim Bamberger <i>Director</i> <i>Multimodal & Public Area Capabilities (MPAC)</i> <i>Requirements & Capabilities Analysis</i> <i>Department of Homeland Security – TSA</i></p>
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Decision Support Systems Development - Continued

2:05 PM - 2:30 PM Leveraging Decision Support Systems to Protect Surface Transportation
[Virtual] **Kevin Gaddis**
*Division Director for Surface Operations
 Transportation Security Administration
 Department of Homeland Security*

Interoperability

2:30 PM - 2:55 PM Cross-agency Interoperability **Charlie Guddemi**
*Statewide Interoperability Coordinator
 DC Homeland Security and Emergency
 Management Agency*

2:55 PM - 3:35 PM **Break**

3:35 PM - 4:00 PM Effective Interoperability and Decision Support Across Time and Space **Scott Howard**
*Associate Professor, Electrical Engineering
 University of Notre Dame*

4:00 PM - 4:25 PM The Importance of Immediate, Clear, and Thorough Communication in Emergency Response **John McNutt**
*CEO & Co-Founder
 BluePoint Alert Systems*

4:25 PM - 4:45 PM Agent-Based Modeling to Enhance School Safety
[Virtual] **Burcin Becerik-Gerber**
*Chair and Dean's Professor of Civil and
 Environmental Engineering
 University of Southern California*

4:45 PM - 5:10 PM Protecting Commercial Soft Targets **Nick Ortyl**
*Chief Engineer
 Commercial Infrastructure
 Leidos*

5:10 PM - 5:30 PM Soft Target Security: Examining the Need and Readiness for Sector-Specific Standards **Jennifer Hesterman**
*Colonel, USAF (retired)
 Independent Security Consultant*

Adjourn **Carl Crawford**
Csuptwo

Thursday, November 14, 2024 - Day 2

	Topic	Speaker
7:30 AM - 8:00 AM	Check-in/Breakfast	
8:00 AM - 8:05 AM	Call to Order	Carl Crawford <i>Csuptwo</i>
Keynote		
8:05 AM - 8:30 AM	United Nations Perspective on Protecting Soft Targets <i>[Virtual]</i>	Ignacio Ibáñez <i>Head, UNOCT Madrid Programme Office Coordinator, Vulnerable Targets Programme United Nations Office of Counter-Terrorism</i>
Risk Assessment and Mitigation		
8:30 AM - 8:50 AM	Risk Assessment for Integrated Cyber and Physical Attacks on Stadiums and Transportation Systems	Fred Roberts <i>Distinguished Professor, Department of Mathematics Director of CCICADA DHS Emeritus Center of Excellence Rutgers University</i>
8:50 AM - 9:10 AM	A Graph Neural Network Approach for Analyzing Urban Rail Transit System Threat Deterrence	Samrat Chatterjee <i>Chief Data Scientist and Team Lead Data Sciences and Machine Intelligence Group Pacific Northwest National Laboratory</i>
9:10 AM - 9:30 AM	Risk Assessment Using Game Theory	Jun Zhuang <i>Associate Dean for Research Morton C. Frank Professor University at Buffalo</i>
9:30 AM - 9:50 AM	Agent Based Models to Help Protect Soft Targets	Rainer Hilscher <i>Senior Research Data Scientist RTI International</i>
9:50 AM - 10:15 AM	Emergency Management of Tomorrow Research (EMOTR)	Daniel Cotter <i>Executive Director Office of Science and Engineering Department of Homeland Security</i>
10:15 AM - 10:55 AM	Break	

Video Analytic Strategies for Security

10:55 AM - 11:20 AM	Video Analytics – Crowd-based Anomaly Detection	Rich Radke <i>Professor</i> <i>Electrical, Computer and Systems Engineering</i> <i>Rensselaer Polytechnic University</i>
11:20 AM - 11:40 AM	Video Analytics – Anomaly Detection	Galvin Widjaja <i>CEO</i> <i>Lauretta AI</i>
11:40 AM - 12:00 PM	Improved Video Analytics for Protecting Soft Targets	Steve O'Connor <i>Co-founder</i> <i>Flux Tensor</i>
12:00 PM - 12:20 PM	AI-based Solutions for Crowd Safety [Virtual]	M. Hadi Amini <i>Assistant Professor</i> <i>Florida International University</i>
12:20 PM - 12:35 PM	Video Analytics for Detection of Anomalous Carried Bags	Dan Crick <i>Director</i> <i>Iconal Technology</i>
12:35 PM - 12:50 PM	Using Anomalous Features	Craig Burns <i>Founder / President</i> <i>Chief Executive Office</i> <i>TACT Consulting</i>

12:50 PM - 1:40 PM **Lunch**

Emerging Technology

1:40 PM - 2:05 PM	Silicon Valley Innovation Program	Melissa Oh <i>Managing Director</i> <i>DHS S&T Silicon Valley Innovation Program</i>
2:05 PM - 2:25 PM	Nose-Computer Interface for High Explosives Detection	Travis Massey <i>Principal Investigator</i> <i>Neural Interfaces</i> <i>Lawrence Livermore National Laboratory</i>

2:25 PM - 2:45 PM Lab and Operational Assessments of Walk-Through Screening Systems for Mass Casualty Threats **Hasan Shahid**
*Test Engineer & Operations Research Analyst
National Urban Security Technology Laboratory*

Matthew Aderholdt
*General Engineer – Passenger Spectroscopy Branch
Transportation Security Laboratory
Science & Technology Directorate (DHS)*

2:45 PM - 3:10 PM Using ChatGPT and AI to Detect Active Shooters
[Virtual] **Dave Riedman**
*Founder and Researcher
K-12 School Shooting Database
k12ssdb.substack.com
k12ssdb.org*

3:10 PM - 3:30 PM Pipeline Integrity and Soft Target Protection Using Standoff Ultrasound **Ana Gutierrez**
*Director of Application Engineering
Distran Technologies*

Next Steps

3:30 PM - 3:55 PM Summary and Next Steps **Harry Martz**
*Associate Program Leader
Center for Nondestructive Characterization
Lawrence Livermore National Laboratory*

Carl Crawford
Csuptwo

3:55 PM - 4:00 PM Closing Remarks **Michael Silevitch**
*Director, SENTRY
Founding Director, ALERT
Northeastern University*

Adjourn **Carl Crawford**
Csuptwo