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Presentation Title:	<b>The Use of AI in Anomaly Detection</b>
Type of Presentation	Single Presenter
Intended Audience	Law Enforcement Ports/Port Security Private Sector
Presentation Abstract	<p>On a typical day, CBP processes over 88 thousand truck, rail, and sea containers and over 270 privately owned vehicles. To strengthen border security and ensure the movement of lawful travel and trade, CBP uses a multi-layered approach to process the large number of conveyances crossing our borders. Non-Intrusive Inspections (NII) are one facet of this approach. CBP's NII technology conducts thorough inspections quickly, efficiently, and safely without unnecessary delays. The NII technology is one of CBP's most effective tools for detecting anomalies that could indicate concealed contraband. While effective and accurate, the extensive amount of X-ray images generated required extensive resources to adjudicate.</p> <p>The use of Artificial Intelligence (AI) can serve as a tool to assist CBP Officers with detecting anomalies and effectively reviewing X-ray images. CBP is evolving the manual image adjudication process to incorporate automation and AI, enabling officers to focus on higher-risk conveyances, higher-value enforcement tasks, and increase narcotics interdictions - leading to significant operational efficiencies, improved system communication, and maximum impact.</p> <p>CBP has been actively testing and deploying AI algorithms into the adjudication process. While results are positive, identifying appropriate algorithms and training the models has presented challenges. CBP has been working to overcome these challenges and work with industry to identify avenues to advance the use of AI in the inspectional process</p>
Indicate up to 3 learning objectives that will be presented:	<ol style="list-style-type: none"> <li>1.) Define's CBP's AI anomaly detection use cases.</li> <li>2.) Describe challenges with AI in the non-intrusive inspection (NII) environment.</li> <li>3.) Identify industry partnerships in developing AI for NII.</li> </ol>
Speaker Name:	Jeni Best
Speaker Title:	(A) Director
Speaker Organization Name:	U.S. Customs and Border Protection
Speaker 2 Name:	Amy Hatfield
Speaker 2 Title:	Branch Chief
Speaker 2 Organization:	U.S. Customs and Border Protection
Speaker Bios	<b>Jeni Best</b>

Ms. Best is an officer with U.S. Customs and Border Protection and began her career with the agency in 1998. She currently serves as the Acting Director of the Non-Intrusive Inspections (NII-I)– Integration Division. Throughout her career, Ms. Best has worked with the Electronic System for Travel Authorization and the Electronic Visa Update System, Forms automation, AI development and deployment, Arrival and Departure Information System, Enhanced Passenger Processing, and the Biometric Entry – Exit Program.

Ms. Best has a bachelor's and master's degree in criminal justice and a master's degree in security studies from the Naval Postgraduate School.

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**Amy Hatfield**

Ms. Hatfield is currently the Technology Integration Division Branch Chief in Washington, D.C. and is responsible for pioneering the integration of large-scale X-ray data and building anomaly detection algorithms to support the Non-Intrusive Inspection Division. Amy has served as the Branch Chief for the Cargo Release policy branch, Manifest Cargo team at the ACE Business Office, Assistant Port Director of Trade at the Dulles International Airport, and the CTPAT Trade Compliance division before landing her current position.

Amy has a bachelors degree in Business and Information Technology and a masters certificate in Customs and International Trade Law.