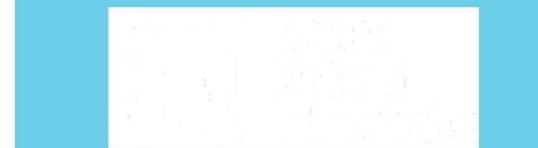
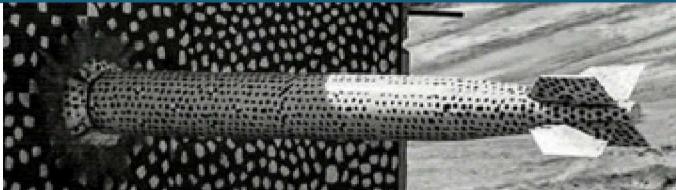


Object Classification in Multi-View X-Ray Images Using R-CNNs



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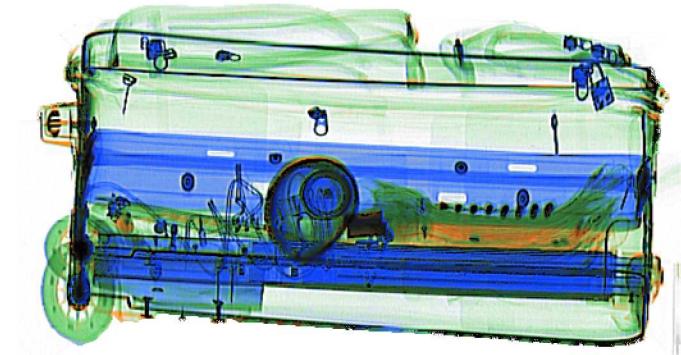
Carter Jameson (Org. 9365)



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Lynceus

- Detecting organic threat items in personal baggage using dual-view X-Ray scan data
- Using deep learning techniques to detect items, including image classification CNNs
- Leveraging a custom X-ray dataset collected onsite at SNL-NM
- Explore integration of algorithms into field environments for real-time usage



- A neural network architecture specifically designed for object detection in multi-view X-ray scan images
- Leverages the familiar Faster Region-based CNN (R-CNN) architecture, including pretraining
- Uses a novel multi-view pooling layer to create 3D feature volumes from 2D feature maps

