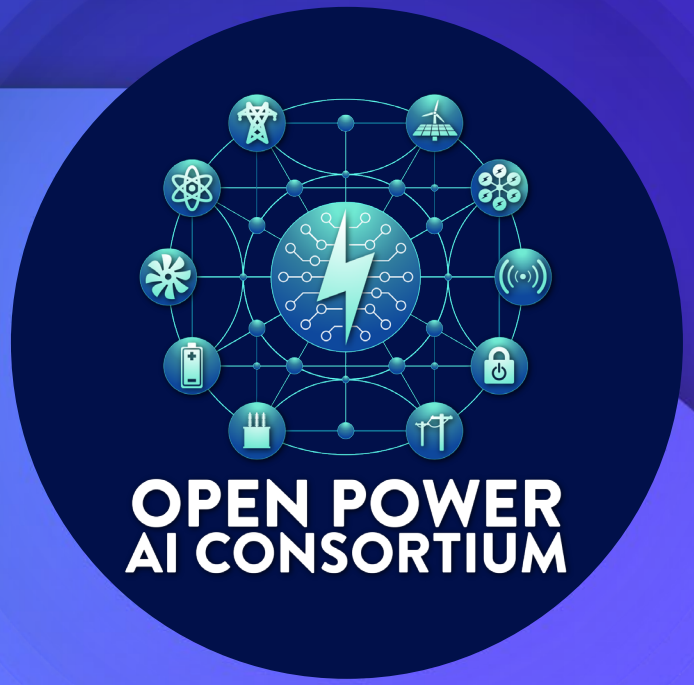
Accelerating AI Development and Deployment

National Academies of Sciences



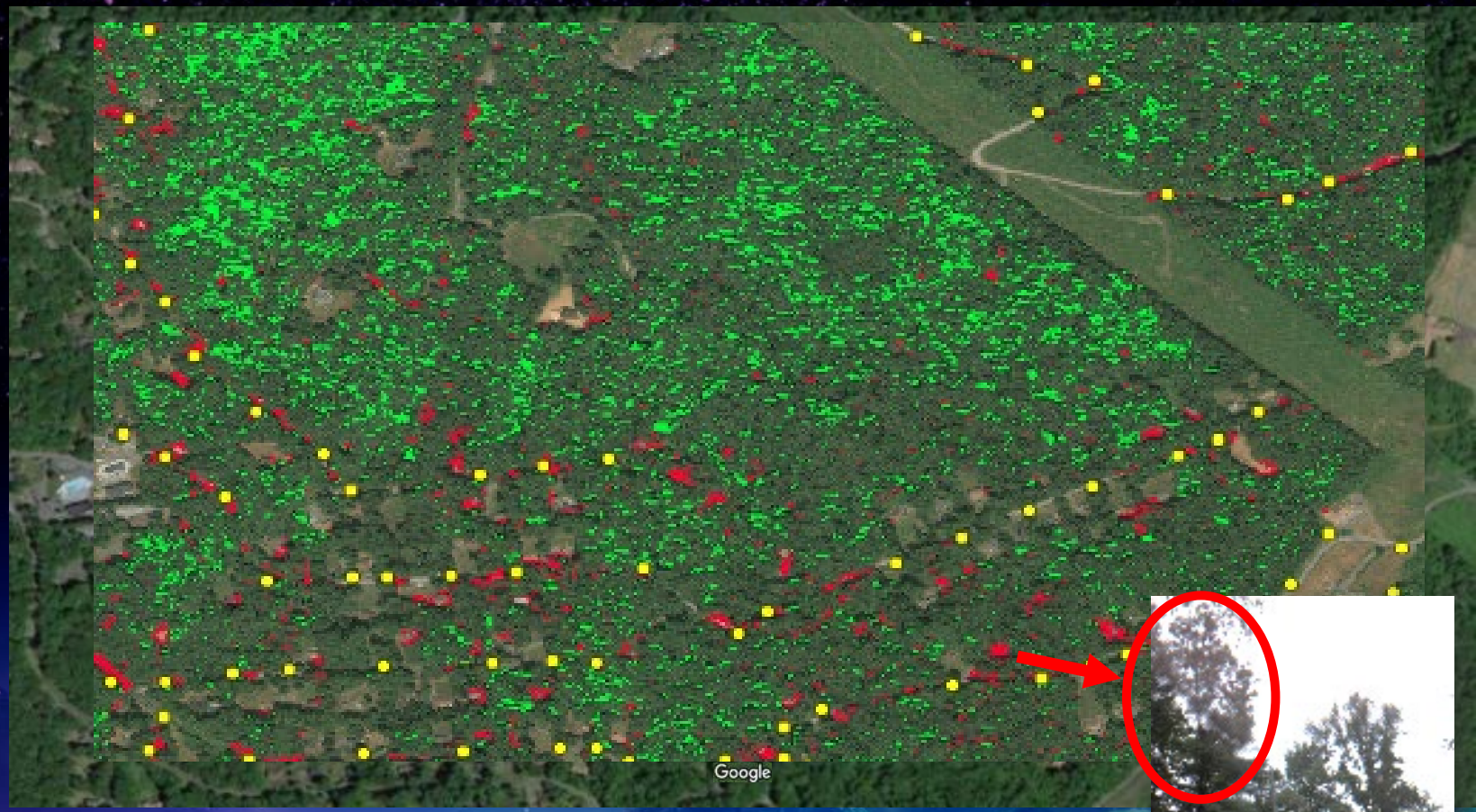
Dr. Jeremy Renshaw
26 October 2026

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Using AI for Multi-Spectral Satellite Data

Value

- Automatically identify dead and dying trees to reduce vegetation management costs
- Identify downed trees after a major storm
- Wildfire risk evaluation



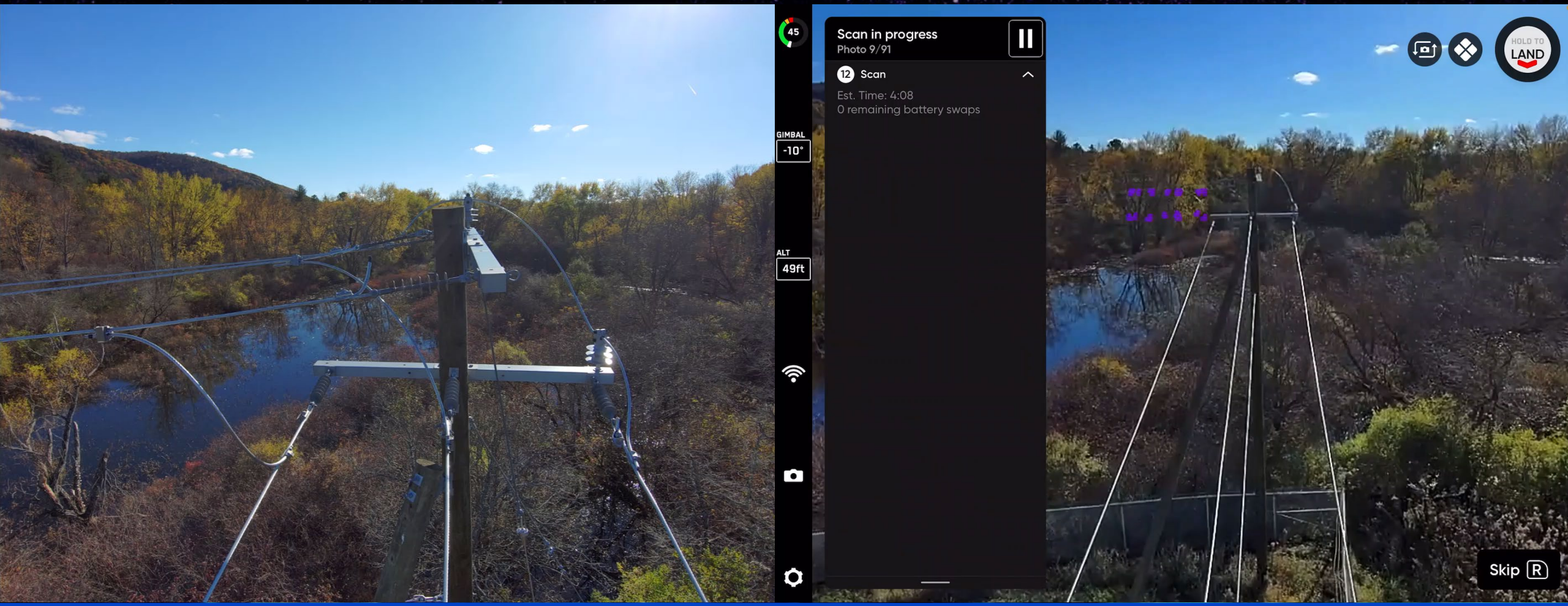


SAR and Multi-Spectral Satellite Data Can Support Dozens of Industry Use Cases

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Convergence of Drones and AI for T&D Asset Inspections

The use of drones has multiplied the ability of utilities to collect vast libraries of images

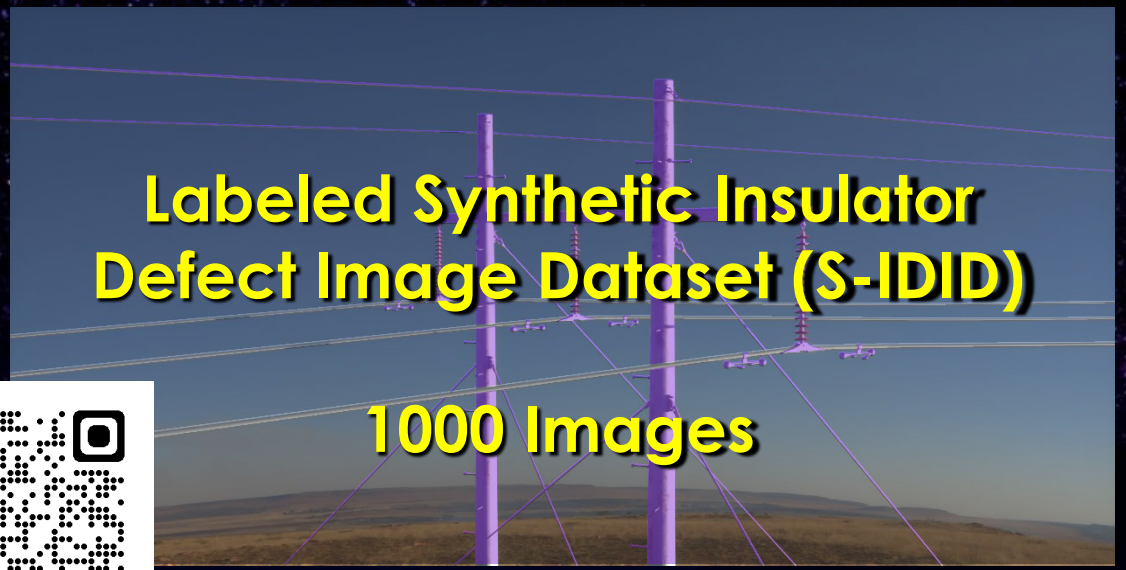


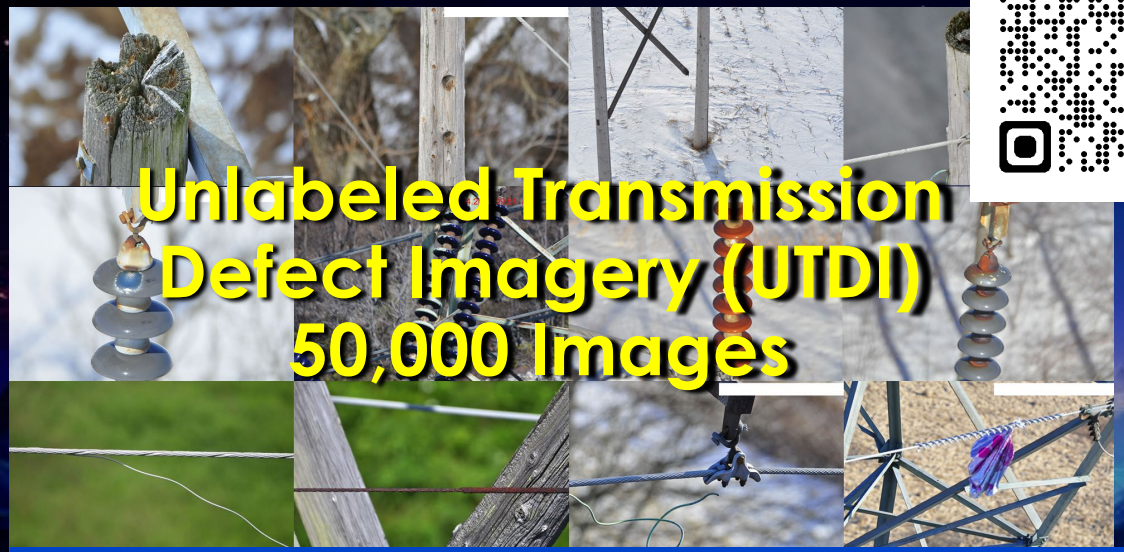
However, the ability to collect images has outpaced utilities' ability to analyze the images

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Available T&D Image Datasets









Access is available at: [EPRI Distribution Inspection Imagery | IEEE DataPort]

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Domain-Specific Model



Domain-specific models and tools trained on energy data

Use Case



Identify, prioritize, and evaluate real-world applications

Deployment & Implementation



Share methods & best practices for AI deployment and scaling

Data Sharing



Develop template data sharing agreements to obtain data

Domain-Specific Model Includes Knowledge from

>10,000 EPRI reports

250+

use cases identified for consortium prioritization and development

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