



- ChemImage Sensor Systems (CISS)
- Lead Investigator: Dr. Nathaniel Gomer
- Current Team Members:
 - Dr. Patrick Treado, CTO
 - Dr. Matthew Nelson, Chief Scientist
 - Dr. Robert Schweitzer, Lead Algorithm Scientist
 - Mr. Christopher Anderson, Lead Software Engineer
 - Mr. James Michael, Lead Hardware Engineer



Research Areas of Interest

Areas of Interest

- Explosive Detection
- Drug Screening
- Quality Control
- Control Point Screening
- Forensics

Potential Users

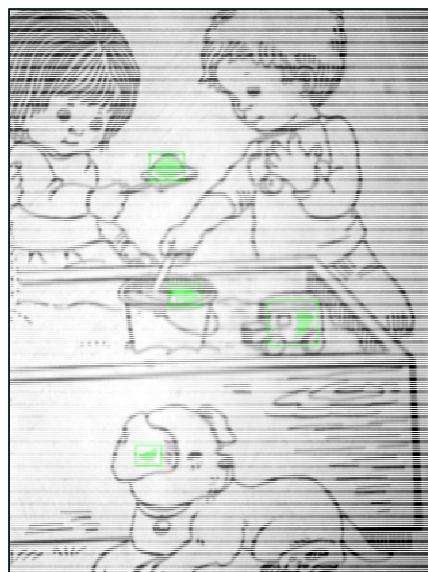
- Military Personnel
- Law Enforcement
- DHS, DOJ, TSA, Public Safety, First Responders, HazMat, OSHA
- Prisons and Courthouses

Drug Screening

Visible Image



SWIR Drug Detection Image



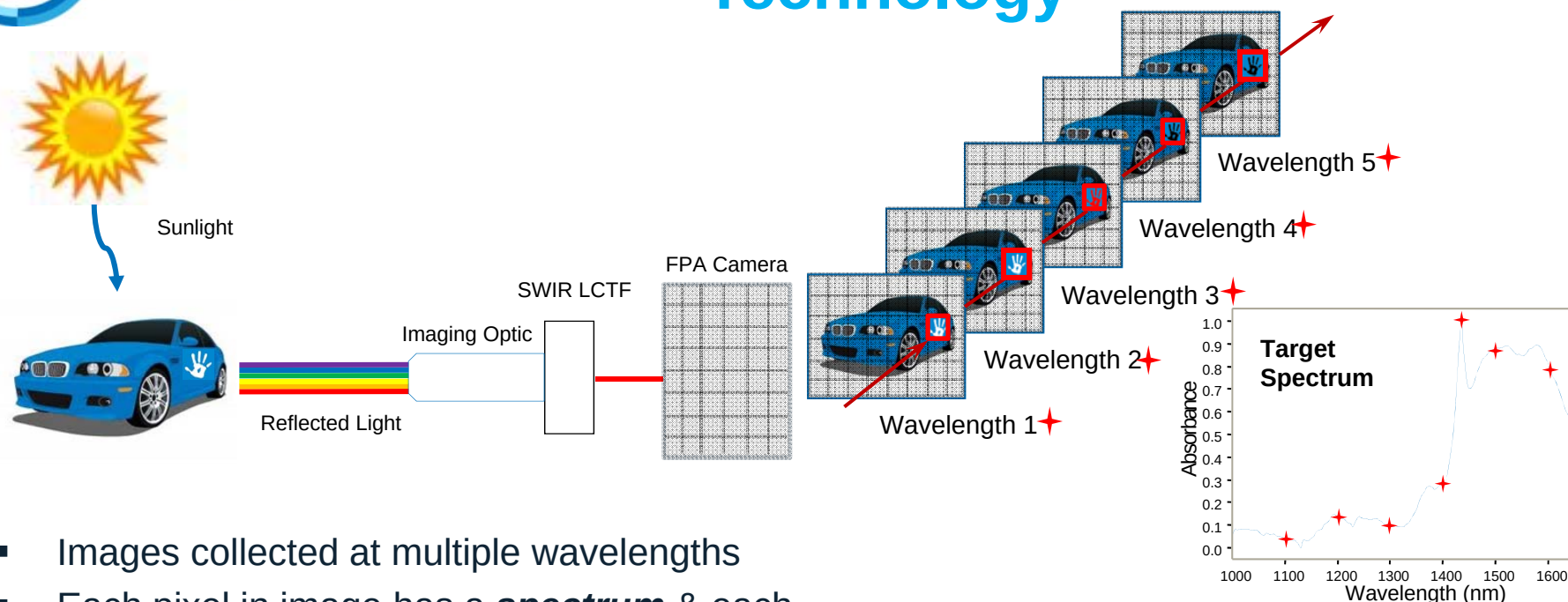
Explosive Residues



Crime Scene Investigation



CISS Hyperspectral Chemical Imaging Technology



- Images collected at multiple wavelengths
- Each pixel in image has a **spectrum** & each pixel spectrum matched against target spectral signature library
- Spectroscopy provides molecular fingerprint for the material
- Enables the ID of trace materials in complex backgrounds
- Automated target detections seen in the form of an image makes analysis intuitive

Detection Image

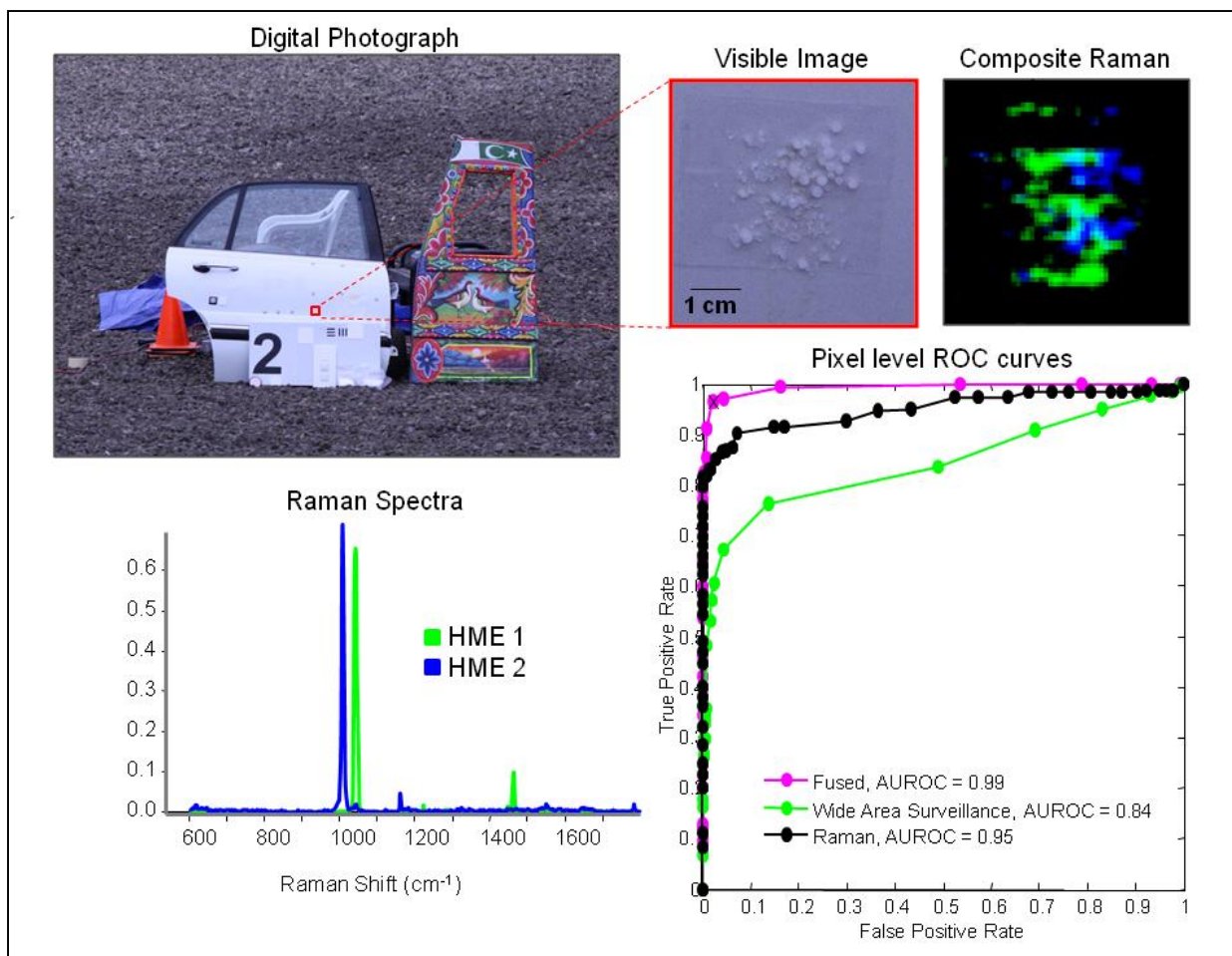


Collaboration Needs

- Sensor Fusion
- Active Sources
- Selective Light Sources



CISS Fusion SWIR/Raman System





Contact Information

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