

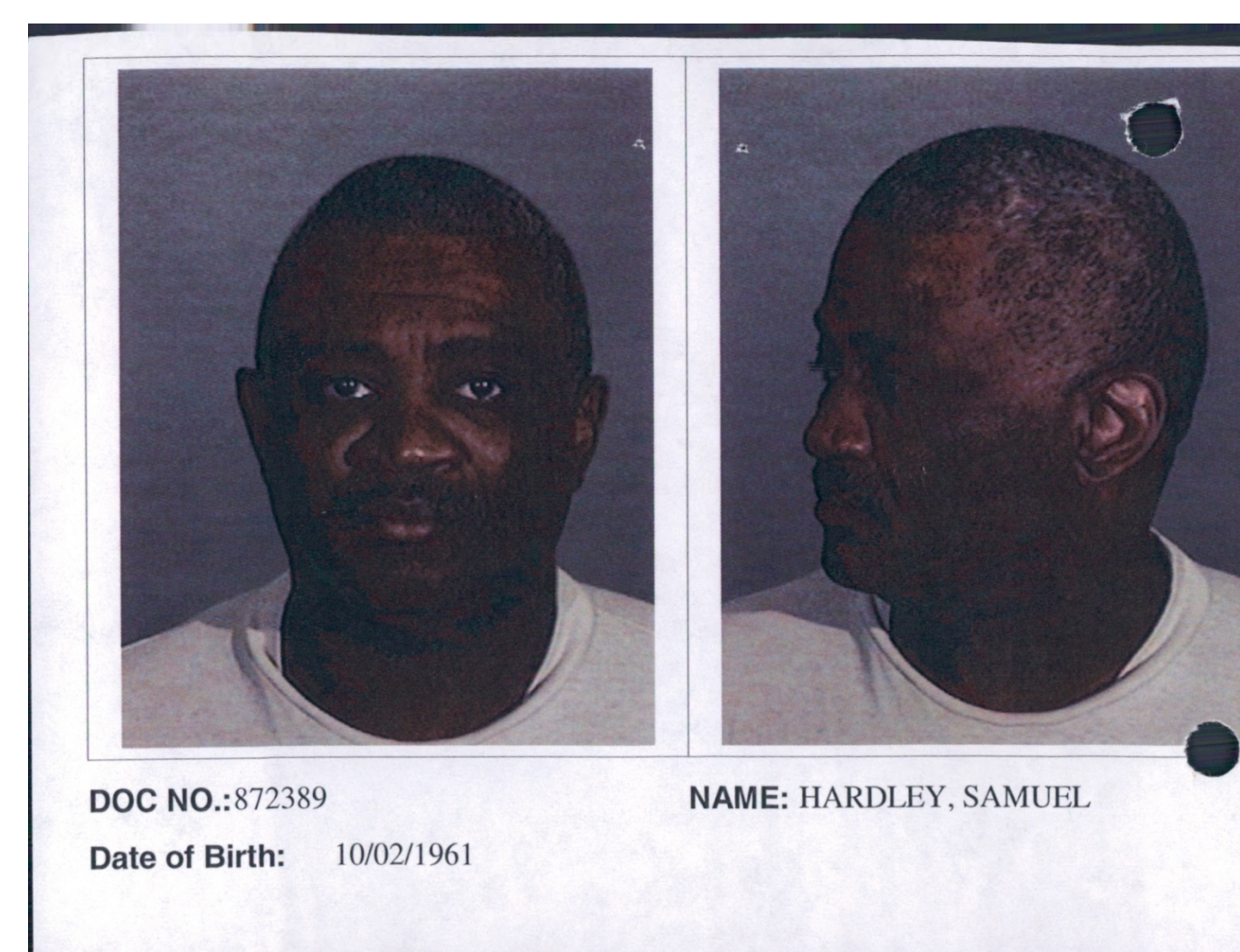
the center for education and research in information assurance and security

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## Methodology

- Difficulties monitoring, tracking, and/or identifying fugitives & persons of interest



## Scan IDOC Legacy Images

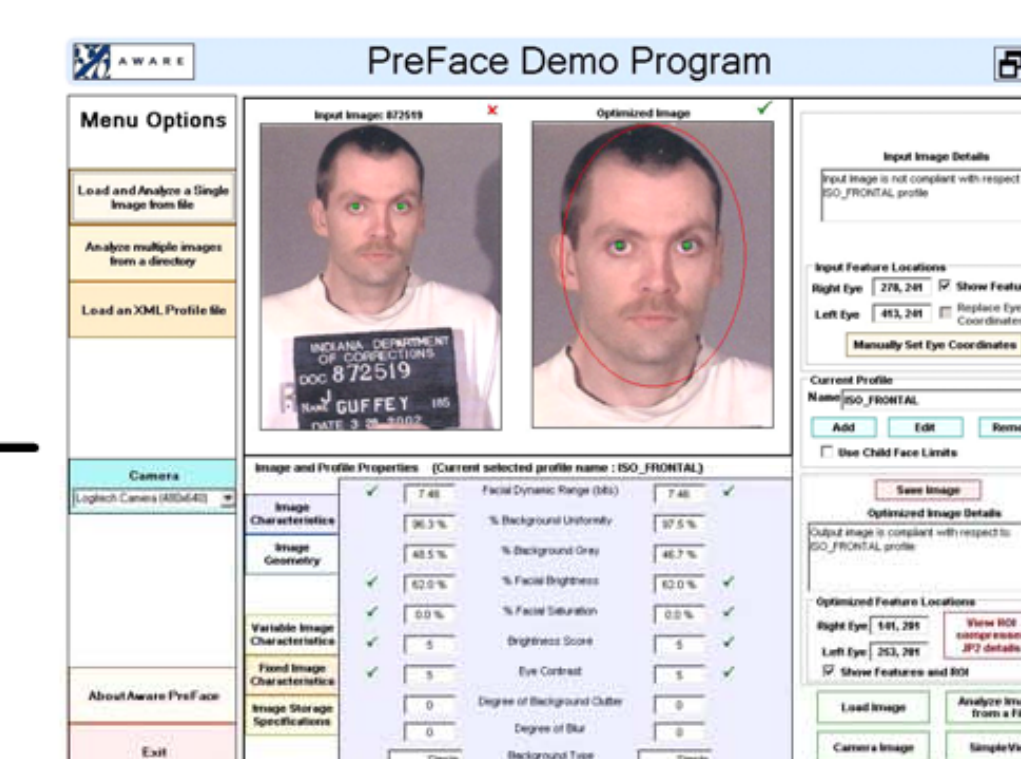


## Crop and Rename Legacy Images



Obtain Face Image Quality Metrics  
(Focus, Background Brightness, Facial Shadows)

Obtain  
Performance Data  
(Failure to Enroll,  
False Reject Rate,  
False Accept Rate)



## Check for Standard Compliance

- Assess and standardize legacy images
- Standardize face image capture process
- Integrate FRT to link Indiana's face databases
- Integrate mobile devices in law enforcement for face recognition

- Utilize Face Recognition Technology (FRT) to monitor and identify persons of interest
- Standardize DOC face image capture process
- Improve efficiency and quality of Indiana's DOC face image capture process

- Apply methodology to larger sample of legacy images
- Apply methodology to electronic database of images

A bar chart comparing the percentage of mugshots meeting NIST Mugshot Best Practices (light blue) and ISO Frontal (dark blue) across three categories: Compliant, Non-Compliant, and Optimized. The Y-axis represents the percentage from 0.00% to 120.00% in 20.00% increments. The X-axis labels are rotated 45 degrees. In the 'Compliant' category, both practices are at 0.00%. In the 'Non-Compliant' category, both are at 100.00%. In the 'Optimized' category, NIST is at 0.00% and ISO is at approximately 75.00%.

Category	NIST Mugshot Best Practices	ISO Frontal
Compliant	0.00%	0.00%
Non-Compliant	100.00%	100.00%
Optimized	0.00%	75.00%

Performance Results			
Sample	Failure To Enroll	False Accept Rate	False Reject Rate
153 Legacy Images	5.88%	60.10%	0.0243%