

# Improve Forensics Investigations with Computer Vision AI Restoration

## Forensics Investigation Challenges

Forensic investigations that depend on image or video analysis often encounter a critical obstacle—the degradation of visual data. Poor lighting, low resolution, and environmental conditions at the time of recording can obscure essential details, resulting in blurred, grainy, or obstructed visuals that hinder the accurate identification of individuals, objects, or actions. These challenges are especially common when footage is captured on security cameras or mobile devices with limited capabilities. ProHawk AI's computer vision restoration technology addresses these limitations by restoring true clarity in real time, revealing details that are otherwise lost. In legal, investigative, and insurance contexts—where even the smallest visual element can influence the outcome—ProHawk AI ensures the highest possible quality and interpretability of visual evidence.

## Integrity of Evidence

A further challenge in forensic investigations is the risk of tampering or alteration of image and video material. Digital manipulation can cast doubt on the authenticity of visual data, creating disputes in court or during insurance evaluations. Investigators must confirm that footage accurately represents the original scene, without edits that distort the truth. ProHawk AI supports this need with restoration workflows that preserve the integrity of each pixel, enabling clear detection of anomalies or inconsistencies. By combining real-time vision restoration with verification processes, ProHawk AI helps ensure that visual material remains trustworthy—reducing the risk of compromised findings, wrongful outcomes, or disputed settlements.

## Key Benefits and Outcomes

ProHawk AI's real-time, AI-enabled computer vision restoration software directly addresses the most pressing challenges in forensic image and video analysis. By restoring true clarity and preserving the integrity of visual material, ProHawk AI makes evidence more reliable and actionable for investigations, legal proceedings, and insurance claims—ultimately supporting the pursuit of justice.

### • Reduce Noise and Distortion

Patented algorithms restore degraded or noisy images and footage by improving resolution, reducing noise, correcting distortions, and even penetrating tinted windows—revealing critical details that may otherwise remain hidden.

### • Authenticate Integrity

ProHawk AI supports authentication and verification of visual data to help forensic teams ensure that material remains untampered and trustworthy.

### • Support Fair Outcomes

ProHawk AI restores clarity and verifies authenticity, reducing wrongful outcomes and giving courts and insurers trustworthy visuals for fair decisions.

### • Accelerate Case Resolution

Clearer, verifiable imagery allows investigators to identify persons, objects, and actions faster, streamlining workflows and enabling quicker, evidence-based decisions.

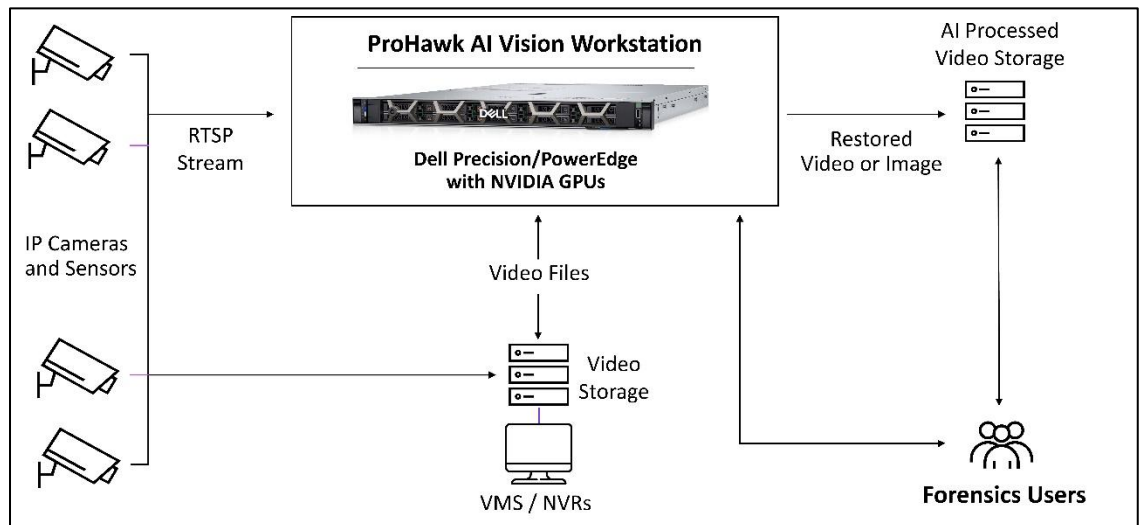
# Restoring Clarity for Investigations with NVIDIA Accelerated Computing

By leveraging accelerated computing solutions with NVIDIA GPUs, ProHawk AI Vision transforms forensic video evidence in real-time, processing footage on a pixel-by-pixel basis to overcome challenges such as poor lighting and environmental conditions, and even tinted windows. This results in enhanced video recordings and images that reveal critical details previously obscured, aiding both human investigators and AI analysis tools. This can be seen in the image below, with before and after images for tinted windows from ProHawk Vision Workstation.



ProHawk AI's vision restoration transforms forensic imagery into crystal-clear, high-fidelity visuals, enabling precise identification and interpretation of critical details. By empowering downstream analytics and legal workflows to operate with greater accuracy, it reduces false positives, minimizes redundant verification, accelerates investigations, and drives more reliable, defensible outcomes.

*ProHawk Vision Workstation software leverages NVIDIA GPUs to restore the clarity of forensic video evidence and images, improving the quality of recorded videos and image for forensics investigations.*



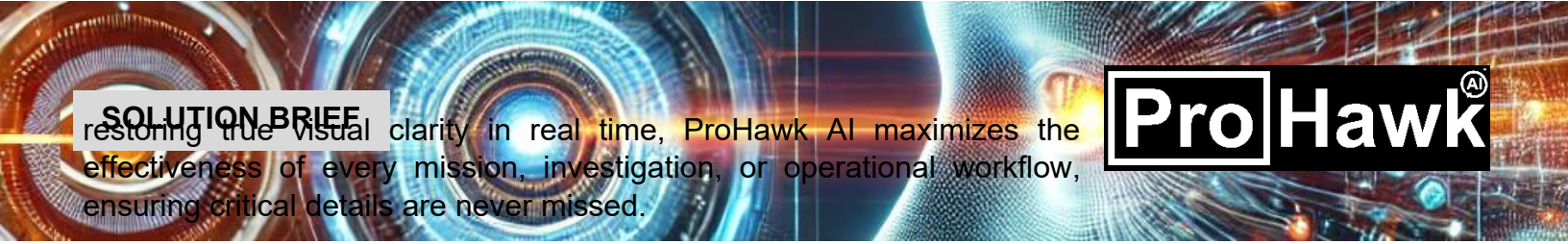
Proven through real-world deployments and rigorous benchmark testing on standard GPU-accelerated systems, **ProHawk AI Vision** consistently delivers exceptional performance gains:

- **300% increase** in object detection and tracking accuracy
- **30× faster** video stream restoration than conventional systems
- **Sub-3 millisecond** real-time processing latency

## The ProHawk AI Advantage

These results translate into faster, clearer, and more actionable visual intelligence—empowering operators, analysts, and automated systems to detect more, react sooner, and decide with greater confidence. By





**SOLUTION BRIEF**

restoring true visual clarity in real time, ProHawk AI maximizes the effectiveness of every mission, investigation, or operational workflow, ensuring critical details are never missed.

**ProHawk<sup>AI</sup>**