DATASHEET

ProHawk

ProHawk Vision Workstation

AI-Enabled Computer Vision for Actionable Insights

Overview

ProHawk Vision Workstation is an advanced computer vision restoration platform designed to deliver clear, actionable insights in real time. Built on ProHawk AI's patented, pixel-by-pixel AI-Enabled Computer Vision technology, it restores visibility in low-light, glare, fog, adverse weather, and virtually all environmentally degraded conditions. Designed for security, industrial, healthcare, transportation, and media professionals, it integrates seamlessly with Windows-based workstations and NVIDIA® GPU's to instantly restore degraded visual data. ProHawk AI boosts operational workflow efficiency and supports better decision-making by revealing actionable insights.

Key Features

AI-Enabled Computer Vision Restoration
Delivers real-time improvements by instantly restoring degraded video and images for maximum clarity, adaptive noise and blur reduction by automatically analyzing and correcting noise, motion blur, and obstructions, and contrast and exposure optimization to balance brightness and contrast for improved visibility in any condition.

Intelligent Object Detection & Alerts
AI-powered recognition to identify key objects in real time for rapid situational awareness, offers customizable detection with industry-specific datasets for tailored object identification, provides automated alerts and notifications for immediate response to detected objects or anomalies.

Advanced Image & Video Processing
Region of Interest (ROI) Spotlight, enabling up to 15x zoom with interpolation for precise analysis, pre- and post-processing adjustments to fine-tune SigmaR and SigmaS signals for enhanced detail, brightness and contrast controls for manual adjustments to optimize.

Versatile Output & Export Options
Side-by-Side Comparison Mode to view original and restored footage simultaneously. Frame annotation and redaction to highlight key details or obscure sensitive information for security and compliance.

Key Benefits and Outcomes

Unlike traditional video enhancement tools, ProHawk Vision Workstation is a real-time, AI-Enabled Computer Vision restoration system built to deliver critical visual clarity in mission-driven environments. It integrates seamlessly with NVIDIA GPU acceleration and leverages ProHawk AI's patented AI-Enabled Computer Vision technology to improve low-quality, obstructed, or degraded visual data—enabling actionable insights across industries.

- **Improved Visibility in Any Condition**
  Restores obstructed and low-quality images/video for better decision-making.
- **Real-Time or File Processing**
  Delivers instant results for live and stored footage, optimized for high-performance Windows systems with NVIDIA CUDA® parallel processing acceleration.
- **Easy to Use, AI-Driven Clarity**
  Requires little to no training, automatically detects degraded video or image quality, analyzes noise, and applies patented restoration algorithms to provide the clearest possible view in real time.
- **AI-Powered Object Detection**
  Identifies key objects and provides automatic alerts and notifications.
- **Versatile Applications**
  Designed to support a broad range of industries and use cases ensuring enhanced visibility and actionable insights.

Optimizing Videos and Images Clearly with NVIDIA Accelerated Computing

ProHawk AI's patented algorithms leverage NVIDIA GPU accelerated computing to deliver real-time, pixel-by-pixel AI-Enabled Computer Vision restoration for workstations. ProHawk AI's advanced restoration technology, combined with NVIDIA CUDA parallel processing capabilities, optimizes throughput and responsiveness, allowing businesses to deploy AI-powered vision solutions with ultra-low latency for unparalleled clarity and actionable insights, ensuring better workflow outcomes and operational efficiency. Click to view the video

ProHawk Vision Workstation restores visibility across industries, empowering faster, more informed decisions—regardless of environmental conditions. Public safety and security gain sharper video clarity, healthcare benefits from enhanced diagnostic imaging, and manufacturing sees improvements in machine vision and quality control. Transportation achieves improved better traffic monitoring and license plate recognition, while retail, energy, and media rely on ProHawk AI to strengthen safety and operational oversight.

As a **Dell Validated Design Solution** and part of the **Dell AI Factory with NVIDIA**, ProHawk AI optimizes industry applications by restoring visibility in *any* condition, improving detection accuracy, and seamless integration with existing security systems. As a critical part of the workflow, it transforms raw data into actionable insights, ensuring safer, more secure operations. Validated through deployments and benchmark testing on standard GPU accelerated systems, ProHawk AI has demonstrated robust performance improvements in both the NVIDIA Metropolis Lab and Dell Validation Lab achieving **over 300% improvement** in object detection and tracking, **30X faster** video stream restoration, **3-4X better clarity** for degraded images, and **sub-3 millisecond latency**, it delivers unmatched performance for real-time AI-driven vision applications.

Industry	Application
Broadcast & Media	Archival Footage Restoration Video Quality Improvement Media Preservation & Cleanup
Energy	Thermal & Drone Imaging Infrastructure Inspections Archive Pipelines & Plants
Healthcare	Medical Imaging Clarity Archives Image Restoration AI & Research Optimization
Manufacturing	Visual Quality Inspections Machine Vision Optimization Operational Efficiency
Public Sector	Historical & Archival Restoration Text & Visual Restoration Legal Support
Retail	Loss Prevention Security Footage Monitoring Point-of-Sale & Inventory Visibility
Smart Cities	Incident Response Analysis Environmental Visibility Restoration Public Safety Monitoring
Transportation	Vehicles & License Plates Clarity Accident & Traffic Investigations Weather-Based Visibility

Feature	Requirement
Compatible NVIDIA Hardware	NVIDIA RTX™ A-Series
Supported Input Formats	Image & Video Files, RTSP Camera Stream
Supported Operating Systems	Microsoft Windows 10/11 (64-bit)

Sales and Support: +1-800-902-6972 www.ProHawk.ai

ProHawk AI
255 Primera Blvd., Suite #160
Lake Mary, FL 32746
(800) 902-6972
www.ProHawk.ai