MD-VIDEO AI

MD-VIDEO AI is AI-powered forensic software supporting for recovery and analysis of media data from the various devices like CCTV, DVR, Car Dashcam, Camcorder, Camera module in UAV or vehicle and IoT camera
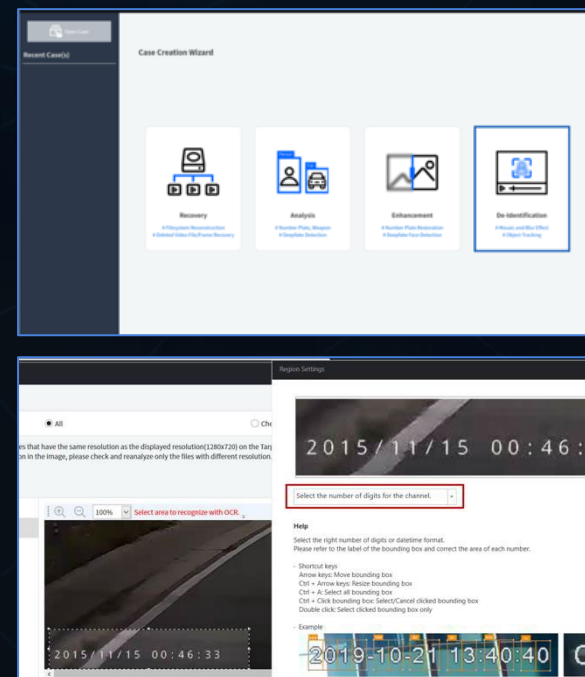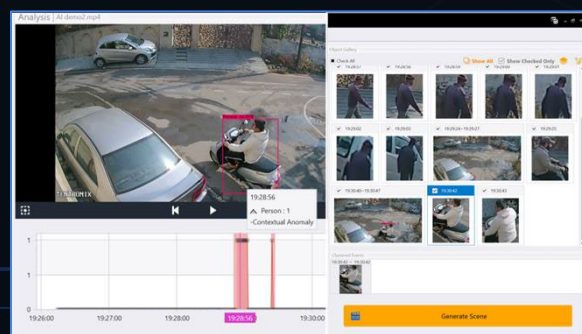
Video/Audio Recovery

Video Recovery

- Deleted video/audio recovery
- Frame extraction from damaged video files
- Codec-based frame recovery
- Partial recovery by time/metadata (H.264/H.265)
- Recovery options - Basic/Advanced/Frame/Partial
- Support for disk images of DD, E01, BIN and MDF
- Support for RAID 0 and RAID5 storage
- Support for Video format, Filesystem, DVR manufacturers

Audio Recovery

- Audio file recovery for File Slack (unused space) of format-free dashcam filesystems
- Supports extraction of audio from the selected videos

Channel / Time Information

- Supports recovery of time from the meta-data file
- Supports OCR for time/channel data creation
- Date/Time offset and adjustment

Video Analysis
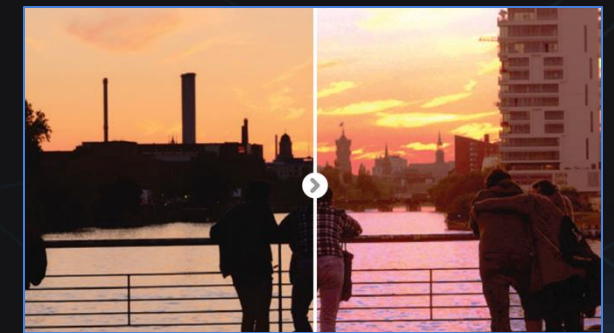
Object detection

- 80+ types of object detection
- Forensic-specific detection - Weapons (Knife, Pistol)
- Bounding box marking for detected objects
- Color and area filter
- Time/Object filter

Anomaly detection

- Abnormal scene detection
- Visual indicators - Contextual anomalies can be viewed in the Timeline as a red mark or in Object gallery
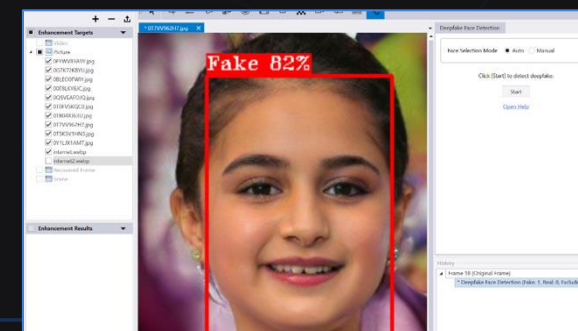
Image Enhancement

- Crop, rotate / reverse, image filter, color/brightness/contrast, super resolution, motion deblur, perspective transform
- Lens distortion correction, deinterlacing, focus correction, image overlay
- Enhancement of resolution by 4 methods of learning such as SRGAN, EDSR, ESPCN and FSRCNN
- Improved clarity by overlaying and tracking of consecutive frames in a video

Number Plate Restoration

- AI trained on country-specific plate formats for enhanced restoration
- Analysis by deblurring, tracking, OCR, overlay
- Prediction of numbers combination
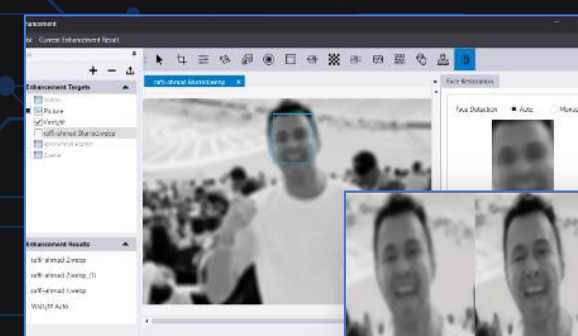- Car, bike, tricycle, rickshaw and other vehicles

Face Detection & Restoration

- Face detection and search for target face
- Restores a face by suing one or more photos
- Analysis of video files to detect deep faked faces
- Provide deep fake level percentage for each deep faked face detected

De-Identification

- Photo and Video de-identification of unrelated objects
- Select or deselect area to de-identify
- Support of "Mosaic" and "Blur" effects
- Protection of privacy and GDPR compliance

AI Hardware Acceleration

- Multi-core CPU/GPU support for AI-based video analysis acceleration (Nvidia support)