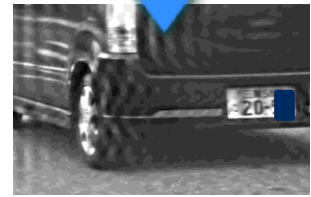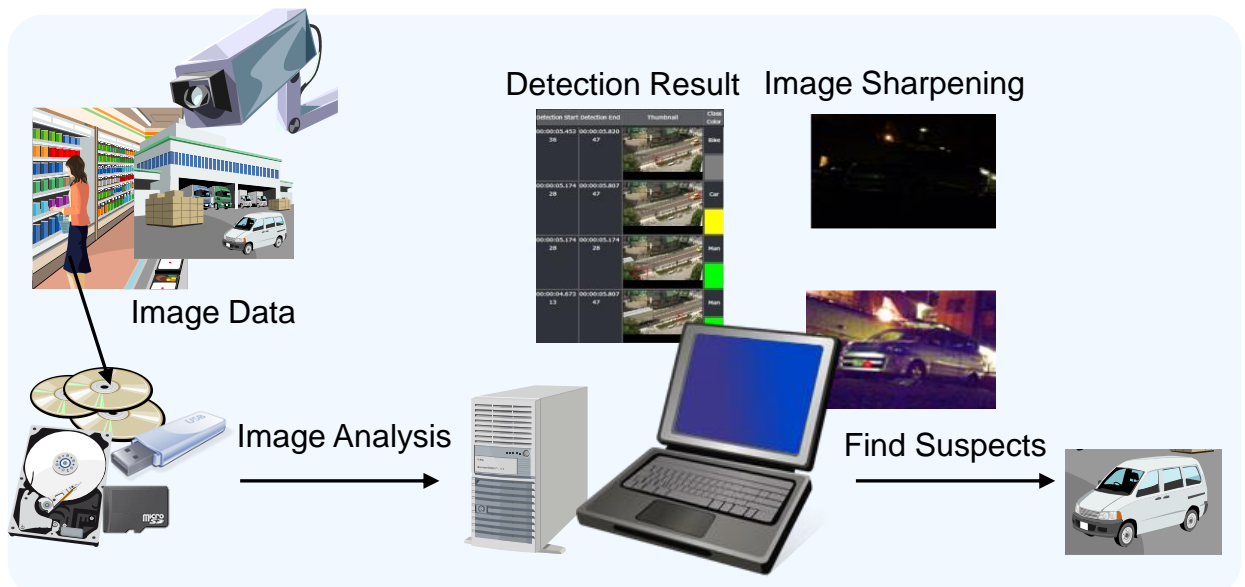# Specific Scene Analysis Software

Global

NEC has various image analysis technology with a long history of research and development, which helps to contribute to a safe and trusted society. By applying NEC's Specific Scene Analysis System, user can dramatically reduce effort and time spend on image analysis.

Image Enhancement

☐ Various image sharpening technologies such as de-noise, de-haze, de-blur and brightness adjustment.

☐ Remove blur and slur from one or multiple images to generate a clear one.

☐ Combine blur removing technology and Super Resolution technology to realize further sharpening of images.

Operation Image

Detection Result   Image Sharpening

Image Data

Image Analysis

Find Suspects

Function List

Category	Sharpening method	Description
Luminance Correction	Histogram Flattening	Adjust contrast and brightness to improve the balance of the whole image.
	Gamma Correction	Display image in a more nature color.
	Tone Reversal	Turn over tone and luminance (in negative positive state).
	Posterization	Reduce color number and display the image monotonously.
	Illumination Equalization	Enhance contrast and lightening the whole image.
Unsharp	Unsharp masking	Enhance color; light and darkness of the edge of objects.
	Laplacian	Detect and emphasize only the edge of object.
De-noise	Gaussian	Smoothening filter that delete noise from image.
	Bilateral	Removes noise without blurring the outline edge of the image.
	Median	Analysis image pixel around noise and change it into intermediate value.
	Remove block noise	Remove block noise by statistical method.
	Remove grain-like noise	Remove grain-like noise from image.
	De-haze/De-noise/HDR processing	Sharpen image taken in a bad weather or dark place.
	De-Interlace	Remove comb–like noise caused by fast movement.
	De-blur	Removes the blur caused when images go out of focus due to camera shake.
	Multiple De-Noise	Browses multiple images and generates a clear image without a single noise.
Super Resolution	Super de-blur	Removes the blur/slur from the image and increases the resolution.
	Multi Super Resolution	Generate one clear image from successive multiple frames of video and increase image resolution.
	Enlarge	Expands the small image and corrects the outline distortions when it is expanded further.
Detection	Moving object detection	Detect moving object from recorded video and recognize object by shape and color.