Image Filtering and Enhancement

Contrast adjustment, morphological filtering, deblurring, ROI-based processing

Image enhancement is the process of adjusting images so that the results are more suitable for display or further image analysis. For example, you can remove noise, sharpen, or adjust the contrast of an image, making it easier to identify key features.

Image Filtering

Convolution and correlation, predefined and custom filters, nonlinear filtering, edge-preserving filters

Contrast Adjustment

Contrast adjustment, histogram equalization, decorrelation stretching

Morphological Operations

Dilate, erode, reconstruct, and perform other morphological operations

Deblurring

Deconvolution for deblurring

ROI-Based Processing

Define and operate on regions of interest (ROI)

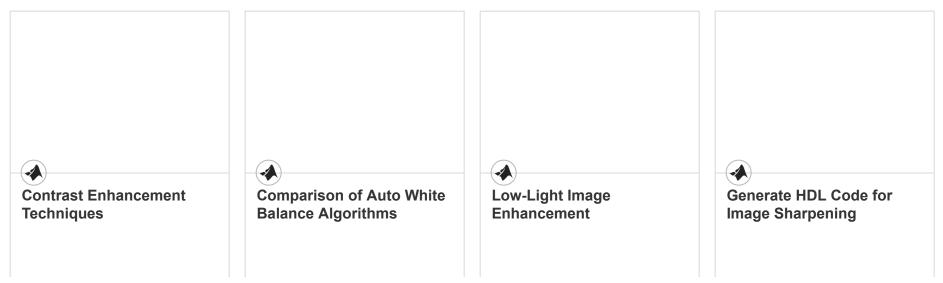
Neighborhood and Block Processing

Define neighborhoods and blocks for filtering and I/O operations

Image Arithmetic

Add, subtract, multiply, and divide images

Featured Examples



This example shows how to adjust the contrast of grayscale and color images using three techniques:

Our eyes are very good at judging what is white under different lighting

This example shows how to use haze removal techniques to

This example shows how to use
Vision HDL Toolbox™ to implement