

## SAD/SSD/NCC compute the match Cost.

It measures the similarity of the pixels (aggregated over window). The 1-D array stores the match cost of each pixel at each disparity.

matchCost - 1D array
size = [m\_NumDisparities\*height\*width]

# **FindBestDisparity**

Computes the disparity with minimum match cost for each pixel and saves it in disparities array.

disparities - 1D array
size = [height\*width]

#### **Segmentation**

**Image** 1 (I<sub>1</sub>)

Image 2 (I<sub>2</sub>)

# Segment - K-means to segment the image in *color* and *position* space

 $I_1$ 

#### GridSegmentation

Computes initial segmentation

segment - 1D array

size = [width\*height]
Stores the segment assignment for each pixel

 $I_1$ 

## ComputeSegmentMeans

Compute the mean color and position for each segment

meanSpatial[2] and meanColor[3]

size = number of segments
Store the segment's mean position and color

 $I_1$ 

#### AssignPixelsToSegments

Assign each pixel to the closest segment using position and color

**Updated segment - 1D array** 

size = [width\*height]

## ${\bf Segment Average Match Cost}$

Average the match cost for each pixel in a segment.

Updated matchCost - 1D array

 $I_1$ 

**SSD** 

matchCost - 1D array

**FindBestDisparity**