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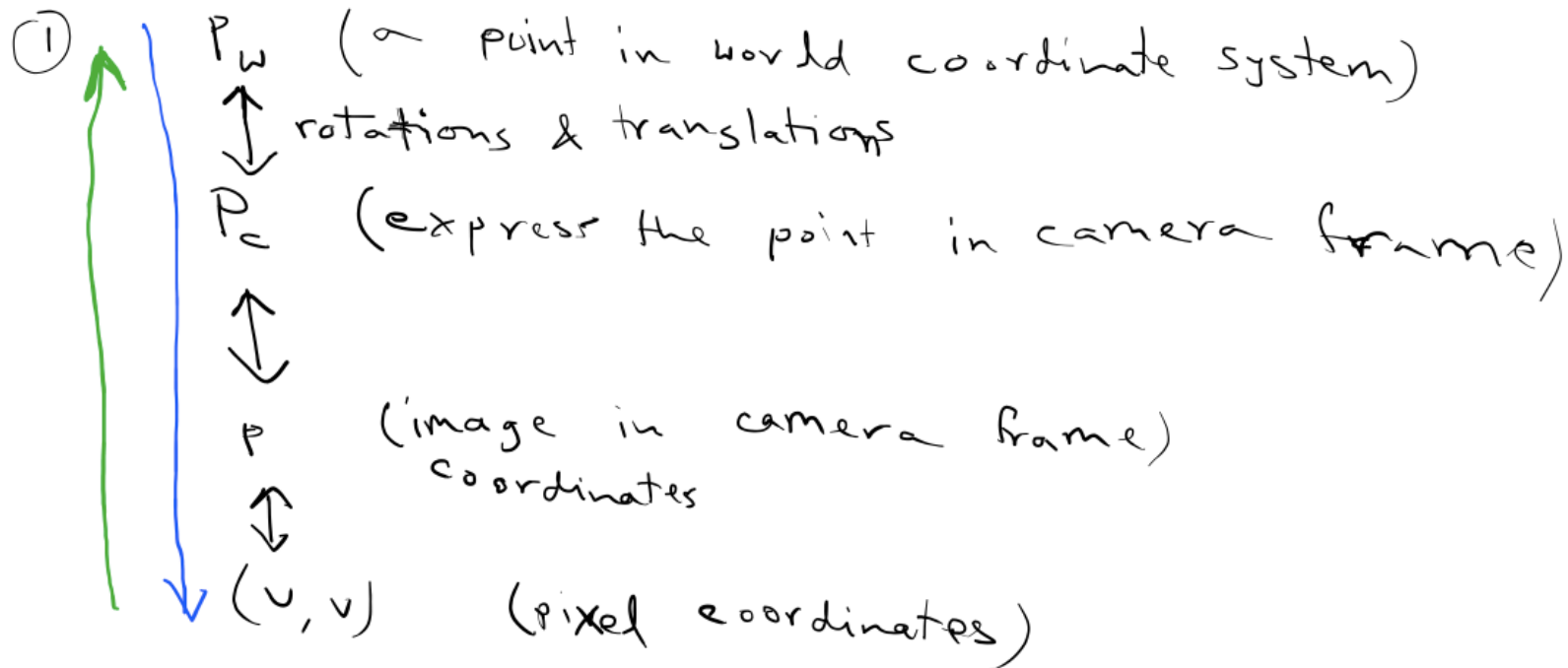
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Eraser Pen Marker Highlighter

Ink  
Color

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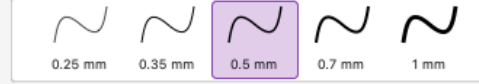
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(2) Image filtering  
Chapter 10  
Edge detection  
Corner detection

(3) Information extraction from sensor data  
Chapter 11  
Step 1 : Segmentation  
Step 2 : Fitting Geometric Primitives

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Geometric primitives : lines, circles, arcs

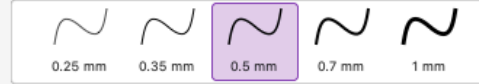
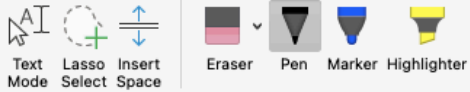
Example : HW 4, Problem 3

Create a map from Lidar data

Map  $\rightarrow$  lines & arcs

$(p_i, \theta_i)$

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## Split-and-merge

Iterative method

You can provide stop condition

## RANSAC

Inliers : # of points inside the band

Outlier : # of points outside the band

RANSAC returns the line with maximum inliers.

