

Real-time Hough Transform for Directional Orientation

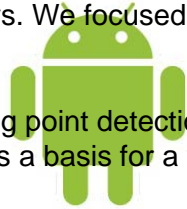
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Motivation

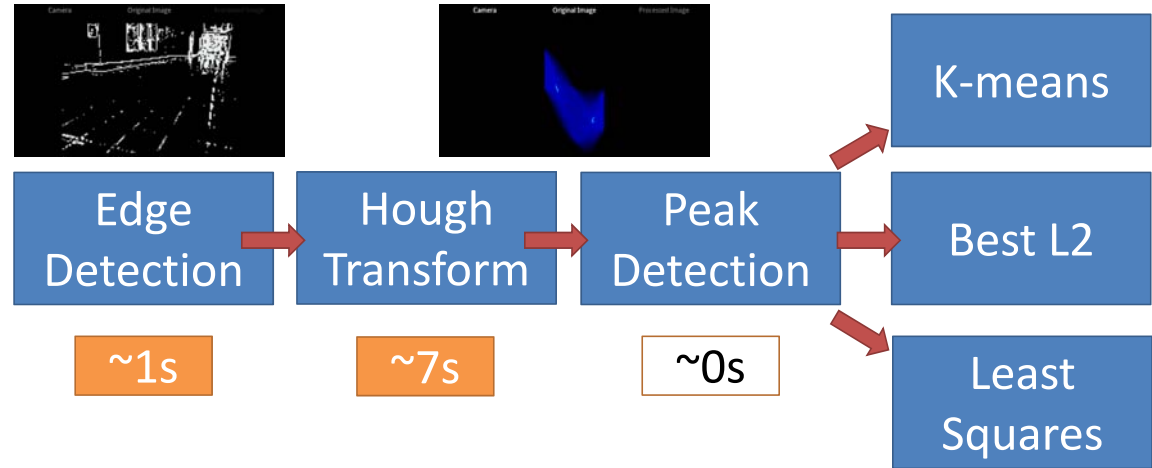
Human environments are characterized by straight lines and orthogonal edges and thus lend themselves to vanishing point estimation. A vanishing point is the intersection of parallel lines under perspective distortion.

Vanishing point estimation can be used in a vision-based system for robot localization in hallways. We focused on this hallway application.



We believe that implementing vanishing point detection on a mobile phone serves can serve as a basis for a wide range of consumer applications.

Processing Pipeline



Experimental Results

