

Line Detection using kernel And Hough Transform

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Line Detection using Kernel

-1	-1	-1
2	2	2
-1	-1	-1

Horizontal Line

-1	2	-1
-1	2	-1
-1	2	-1

Vertical Line

Line Detection using Kernel

-1	-1	2
-1	2	-1
2	-1	-1

+45° Line

2	-1	-1
-1	2	-1
-1	-1	2

-45° Line

Line Detection using Kernel



Line Detection using Hough Transform

- Points to lines
- Points to sinusoidal curves
- Accumulator matrix
- votes

Line Detection using Hough Transform

5	3			7				
6			1	9	5			
	9	8					6	
8				6				3
4			8		3			1
7				2				6
	6					2	8	
			4	1	9			5
				8			7	9

5	3			7				
6			1	9	5			
	9	8					6	
8				6				3
4			8		3			1
7				2				6
	6					2	8	
			4	1	9			5
				8			7	9

References

- http://docs.opencv.org/3.1.0/d4/d13/tutorial_py_filtering.html
- http://docs.opencv.org/3.1.0/d4/d86/group__imgproc__filter.html#ga27c049795ce870216ddfb366086b5a04
- <http://homepages.inf.ed.ac.uk/rbf/HIPR2/linedet.htm>
- http://docs.opencv.org/3.0-beta/doc/py_tutorials/py_imgproc/py_houghlines/py_houghlines.html
- <http://aishack.in/tutorials/hough-transform-basics/>