run hough test image

1. Create test image

* Input:

create\_hough\_test\_image.json

create\_hough\_test\_image.txt

L 0,3 3,0

L 4,2 7,1

L 0,6 7,6

* Operation:

transform-image-create

* Output:

hough\_test\_image\_grayscale.jpg

hough\_test\_image\_grayscale.txt

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 |
| 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 |
| 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 |
| 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 |
| 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 |
| 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 |

1. Hough on test image

Rho\_inc: 1

Theta\_inc: 15

* Input:

run\_hough\_test\_image.json

* Operation:

hough-image-create

* Output:

hough\_test\_image\_grayscale\_accumulator.bin

hough\_test\_image\_grayscale\_accumulator.txt

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | -5.66 | -4.66 | -3.66 | -2.66 | -1.66 | -0.66 | 0.34 | 1.34 | 2.34 | 3.34 | 4.34 | 5.34 | 6.34 | 7.34 | 8.34 | 9.34 |
| 0 | 0 | 0 | 2 | 2 | 3 | 2 | 3 | 4 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 15 | 0 | 1 | 2 | 2 | 1 | 3 | 5 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 30 | 0 | 1 | 1 | 2 | 2 | 2 | 4 | 4 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| 45 | 0 | 1 | 1 | 1 | 3 | 2 | 4 | 3 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| 60 | 0 | 0 | 2 | 2 | 2 | 4 | 1 | 3 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 |
| 75 | 0 | 0 | 0 | 4 | 3 | 2 | 1 | 1 | 5 | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| 90 | 0 | 0 | 0 | 0 | 8 | 1 | 0 | 1 | 5 | 3 | 2 | 0 | 0 | 0 | 0 | 0 |
| 105 | 0 | 0 | 0 | 3 | 4 | 2 | 0 | 2 | 6 | 1 | 2 | 0 | 0 | 0 | 0 | 0 |
| 120 | 0 | 0 | 1 | 2 | 3 | 2 | 1 | 6 | 0 | 3 | 2 | 0 | 0 | 0 | 0 | 0 |
| 135 | 0 | 0 | 1 | 1 | 3 | 1 | 6 | 3 | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 0 |
| 150 | 0 | 0 | 1 | 1 | 2 | 3 | 4 | 3 | 1 | 4 | 1 | 0 | 0 | 0 | 0 | 0 |
| 165 | 0 | 0 | 1 | 1 | 3 | 4 | 3 | 1 | 3 | 3 | 1 | 0 | 0 | 0 | 0 | 0 |