Object Analysis

Detect edges, circles and lines; trace boundaries; perform quadtree decomposition

**Functions**

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| [bwboundaries](http://www.mathworks.in/help/images/ref/bwboundaries.html) | Trace region boundaries in binary image |
| [bwtraceboundary](http://www.mathworks.in/help/images/ref/bwtraceboundary.html) | Trace object in binary image |
| [corner](http://www.mathworks.in/help/images/ref/corner.html) | Find corner points in image |
| [cornermetric](http://www.mathworks.in/help/images/ref/cornermetric.html) | Create corner metric matrix from image |
| [edge](http://www.mathworks.in/help/images/ref/edge.html) | Find edges in intensity image |
| [hough](http://www.mathworks.in/help/images/ref/hough.html) | Hough transform |
| [houghlines](http://www.mathworks.in/help/images/ref/houghlines.html) | Extract line segments based on Hough transform |
| [houghpeaks](http://www.mathworks.in/help/images/ref/houghpeaks.html) | Identify peaks in Hough transform |
| [imfindcircles](http://www.mathworks.in/help/images/ref/imfindcircles.html) | Find circles using circular Hough transform |
| [imgradient](http://www.mathworks.in/help/images/ref/imgradient.html) | Gradient magnitude and direction of an image |
| [imgradientxy](http://www.mathworks.in/help/images/ref/imgradientxy.html) | Directional gradients of an image |
| [viscircles](http://www.mathworks.in/help/images/ref/viscircles.html) | Create circle |
| [qtdecomp](http://www.mathworks.in/help/images/ref/qtdecomp.html) | Quadtree decomposition |
| [qtgetblk](http://www.mathworks.in/help/images/ref/qtgetblk.html) | Block values in quadtree decomposition |
| [qtsetblk](http://www.mathworks.in/help/images/ref/qtsetblk.html) | Set block values in quadtree decomposition |

**Examples and How To**

* [Detecting Edges Using the edge Function](http://www.mathworks.in/help/images/analyzing-images.html#f11-12512)
* [Detecting Corners Using the corner Function](http://www.mathworks.in/help/images/analyzing-images.html#br_9vs5-1)
* [Tracing Object Boundaries in an Image](http://www.mathworks.in/help/images/analyzing-images.html#f11-23858)
* [Detecting Lines Using the Hough Transform](http://www.mathworks.in/help/images/analyzing-images.html#f11-27827)
* [Analyzing Image Homogeneity Using Quadtree Decomposition](http://www.mathworks.in/help/images/analyzing-images.html#f11-31392)
* [Detecting Lines Using the Radon Transform](http://www.mathworks.in/help/images/radon-transform.html#f21-15119)