```
multiscale::analysis
             ::Detector
# image
# outputFilepath
# debugMode
# outputImage
# detectMethodCalled
# detectorSpecificFieldsInitialised
+ Detector()
+ ~Detector()
+ detect()
+ outputResults()
# initialise()
# initialiseDetectorSpecific
FieldsIfNotSet()
# initialiseDetectorSpecific
Fields()
# initialiseImageDependent
Fields()
# isValidInputImage()
# detect()
# detectInDebugMode()
# detectInReleaseMode()
# displayResultsInWindow()
# outputResultsToFile()
# outputResultsToImage()
# storeOutputImageOnDisk()
# outputResultsToCsvFile()
# outputResultsToCsvFile()
# processImageAndDetect()
# clearPreviousDetectionResults()
# createTrackbars()
# createTrackbarsWindow()
# createDetectorSpecificTrackbars()
# processPressedKeyRequest()
# displayImage()
# printOutputErrorMessage()
multiscale::analysis
          ::RegionDetector

    alpha

    beta

    blurKernelSize

    morphologicalCloseIterations

    epsilon

- regionAreaThresh

    thresholdValue

    origin

    regions

+ RegionDetector()
+ ~RegionDetector()
+ getAlpha()
+ getBeta()
+ getBlurKernelSize()
+ getEpsilon()
+ getMorphologicalCloseIterations()
+ getOriginXCoordinate()
+ getOriginYCoordinate()
+ getRegionAreaThresh()
+ getThresholdValue()
+ getRegions()
+ setAlpha()
+ setBeta()
+ setBlurKernelSize()
+ setEpsilon()
+ setMorphologicalCloseIterations()
+ setOriginXCoordinate()
+ setOriginYCoordinate()
+ setRegionAreaThresh()
+ setThresholdValue()

    initialiseDetectorSpecific

    initialiseImageDependent

Fields()

    createDetectorSpecificTrackbars()

    processImageAndDetect()

- changeContrastAndBrightness()
smoothImage()
- morphologicalClose()
thresholdImage()
findRegions()

    findContoursInImage()

- createRegionFromPolygon()
isValidRegion()
- regionDensity()
regionAngle()
regionAngle()

    minAreaRectCentre()

findGoodPointsForAngle()

    findGoodIntersectionPoints()

    clearPreviousDetectionResults()

    outputResultsToCsvFile()

    outputResultsToImage()

convertAlpha()
convertBeta()
```