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

    avgClusterednessDegree

    avgDensity

- alpha

    blurKernelSize

    morphologicalCloseIterations

    epsilon

    regionAreaThresh

    thresholdValue

    regions

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

    initialiseDetectorSpecific

Fields()

    initialiseDetectorSpecific

ImageDependentFields()

    createDetectorSpecificTrackbars()

    processImageAndDetect()

    changeContrastAndBrightness()

smoothImage()

    morphologicalClose()

thresholdImage()
- findRegions()
computeAverageMeasures()
findContoursInImage()
- createRegionFromPolygon()
isValidRegion()

    regionClusterednessDegree()

- regionDensity()
regionArea()
regionHolesArea()
- clearPreviousDetectionResults()

    outputResultsToCsvFile()

    outputRegionsToCsvFile()

    outputAveragedMeasuresTo

CsvFile()
```

outputResultsToImage()

convertAlpha()convertBeta()