

# Face

public class **Face** extends Object ([//developer.android.com/reference/java/lang/Object.html](http://developer.android.com/reference/java/lang/Object.html))

A human face detected in an image or video.

It is important to note that all fields described here are with regards to the image that the detector has processed. Many live apps that process images directly from the camera show the user a mirrored display of the actual image.

All coordinate values are reported as absolute image coordinates. That is, image position (0, 0) represents the upper-left corner of the image.

## Constant Summary

float	<u>UNCOMPUTED_PROBABILITY</u> ( <a href="http://android/reference/com/google/android/gms/vision/face/Face#UNCOMPUTED_PROBABILITY">/android/reference/com/google/android/gms/vision/face/Face#UNCOMPUTED_PROBABILITY</a> )	The val that a probab is set t it was r compu
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## Public Method Summary

<u>List</u> ( <a href="http://developer.android.com/reference/java/util/List.html">//developer.android.com/reference/java/util/List.html</a> )	<u>Contour</u> ( <a href="http://android/reference/com/google/android/gms/vision/face/Face#Contour">/android/reference/com/google/android/gms/vision/face/Face#Contour</a> )
float	
float	
float	
int	
float	
float	

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float

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[List](https://developer.android.com/reference/java/util/List.html) ([//developer.android.com/reference/java/util/List.html](https://developer.android.com/reference/java/util/List.html))<[Landmark](https://android.reference.com/google/android/gms/vision/face/Face) ([/android/reference/com/google/android/gms/vi](https://android.reference.com/google/android/gms/vision/face/Face)


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[PointF](https://developer.android.com/reference/android/graphics/PointF.html) ([//developer.android.com/reference/android/graphics/PointF.html](https://developer.android.com/reference/android/graphics/PointF.html))

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float

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## Inherited Method Summary

+ From class [java.lang.Object](https://developer.android.com/reference/java/lang/Object.html)

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<a href="https://developer.android.com/reference/java/lang/Object.html">Object</a> ( <a href="https://developer.android.com/reference/java/lang/Object.html">//developer.android.com/reference/java/lang/Object.html</a> )	clone()
boolean	equals( <a href="https://developer.android.com/reference/java/lang/Object.html">Object</a> ( <a href="https://developer.android.com/reference/java/lang/Object.html">//developer.android.com/reference/java/lang/</a> arg0))
void	finalize()
final <a href="https://developer.android.com/reference/java/lang/Class.html">Class</a> ( <a href="https://developer.android.com/reference/java/lang/Class.html">//developer.android.com/reference/java/lang/Class.html</a> )<?>	getClass()
int	hashCode()
final void	notify()
final void	notifyAll()
<a href="https://developer.android.com/reference/java/lang/String.html">String</a> ( <a href="https://developer.android.com/reference/java/lang/String.html">//developer.android.com/reference/java/lang/String.html</a> )	toString()
final void	wait(long arg0, int arg1)
final void	wait(long arg0)
final void	wait()

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## Constants

**ic static final float UNCOMPUTED\_PROBABILITY**

The value that a probability is set to if it was not computed.

Constant Value: -1.0

## Public Methods

**ic [List](https://developer.android.com/reference/java/util/List.html) <Contour> getContours ()**

Returns a list of [contours](https://android/reference/com/google/android/gms/vision/face/Contour) (eyes, nose, etc.) found on the face. A contour detector must be specified via [setLandmarkType\(int\)](https://android/reference/com/google/android/gms/vision/face/FaceDetector.Builder#setLandmarkType(int)) to detect contours. The contour detector may not find all possible contour on any given face.

### Returns

- a list of landmarks found on the face

**ic float getEulerY ()**

Returns the rotation of the face about the vertical axis of the image. Positive euler y is when the face turns toward the right side of the of the image that is being processed.

### Returns

- the rotation of the face about the vertical axis of the image

**ic float getEulerZ ()**

Returns the rotation of the face about the axis pointing out of the image. Positive euler z is a counter-clockwise rotation within the image plane.

### Returns

- the rotation of the face about the axis pointing out of the image

**ic float getHeight ()**

Returns the height of the face region in pixels. This is a rough estimate that is likely to be slightly larger than the exact bounds of the face and therefore may include some background.

**Returns**

- the height of the face in pixels

**ic int getId ()**

Returns the face ID. This can be used to track a Face over multiple Frames ([/android/reference/com/google/android/gms/vision/Frame](#)).

**ic float getIsLeftEyeOpenProbability ()**

Returns a value between 0.0 and 1.0 giving a probability that the face's left eye is open.

This returns UNCOMPUTED\_PROBABILITY

([/android/reference/com/google/android/gms/vision/face/Face#UNCOMPUTED\\_PROBABILITY](#)) if the probability was not computed. The probability is not computed if eye open classification is not enabled via setClassificationType(int).

([/android/reference/com/google/android/gms/vision/face/FaceDetector.Builder#setClassificationType\(int\)](#)) or the LEFT\_EYE ([/android/reference/com/google/android/gms/vision/face/Landmark#LEFT\\_EYE](#)) landmark was not found.

**Returns**

- the probability for the face's left eye being open

**ic float getIsRightEyeOpenProbability ()**

Returns a value between 0.0 and 1.0 giving a probability that the face's right eye is open.

This returns UNCOMPUTED\_PROBABILITY

([/android/reference/com/google/android/gms/vision/face/Face#UNCOMPUTED\\_PROBABILITY](#)) if the probability was not computed. The probability is not computed if eye open classification is not enabled via setClassificationType(int).

([/android/reference/com/google/android/gms/vision/face/FaceDetector.Builder#setClassificationType\(int\)](#)) or the RIGHT\_EYE ([/android/reference/com/google/android/gms/vision/face/Landmark#RIGHT\\_EYE](#)) landmark was not found.

**Returns**

- the probability for the face's right eye being open

**ic float getIsSmilingProbability ()**

Returns a value between 0.0 and 1.0 giving a probability that the face is smiling.

This returns UNCOMPUTED\_PROBABILITY

(/android/reference/com/google/android/gms/vision/face/Face#UNCOMPUTED\_PROBABILITY) if the probability was not computed. The probability is not computed if smile classification is not enabled via setClassificationType(int)

(/android/reference/com/google/android/gms/vision/face/FaceDetector.Builder#setClassificationType(int)) or the required landmarks are not found. The LEFT\_MOUTH

(/android/reference/com/google/android/gms/vision/face/Landmark#LEFT\_MOUTH), RIGHT\_MOUTH

(/android/reference/com/google/android/gms/vision/face/Landmark#RIGHT\_MOUTH), and NOSE\_BASE

(/android/reference/com/google/android/gms/vision/face/Landmark#NOSE\_BASE) landmarks are required to compute a smile probability.

#### Returns

- the probability that the face is smiling

ic ([List](http://developer.android.com/reference/java/util/List.html)) <Landmark

droid/reference/com/google/android/gms/vision/face/Landmark)> **getLandmarks ()**

Returns a list of Landmarks (/android/reference/com/google/android/gms/vision/face/Landmark) (eyes, nose, etc.) found on the face. A landmark detector must be specified via setLandmarkType(int)

(/android/reference/com/google/android/gms/vision/face/FaceDetector.Builder#setLandmarkType(int)) to detect landmarks. The landmark detector may not find all possible landmarks on any given face.

#### Returns

- a list of landmarks found on the face

ic [PointF](http://developer.android.com/reference/android/graphics/PointF.html)) **getPosition ()**

Returns the top left position of the face within the image.

ic float **getWidth ()**

Returns the width of the face region in pixels. This is a rough estimate that is likely to be slightly larger than the exact bounds of the face and therefore may include some background.

#### Returns

- the width of the face in pixels

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