AnnotateImageResponse

Response to an image annotation request.

JSON representation

```
{
  "faceAnnotations": [
    {
      object (FaceAnnotation (https://cloud.google.com/vision/product-search/docs/reference/rest/v
    }
  ],
  "landmarkAnnotations": [
    {
      object (EntityAnnotation (https://cloud.google.com/vision/product-search/docs/reference/res
    }
  ],
  "logoAnnotations": [
    {
      object (EntityAnnotation (https://cloud.google.com/vision/product-search/docs/reference/res
    }
  ],
  "labelAnnotations": [
    {
      object (EntityAnnotation (https://cloud.google.com/vision/product-search/docs/reference/res
    }
  ],
  "localizedObjectAnnotations": [
    {
      object (LocalizedObjectAnnotation (https://cloud.google.com/vision/product-search/docs/re
    }
  ],
  "textAnnotations": [
    {
      object (EntityAnnotation (https://cloud.google.com/vision/product-search/docs/reference/res
    }
  ],
  "fullTextAnnotation": {
    object (TextAnnotation (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p
  },
  "safeSearchAnnotation": {
    object (SafeSearchAnnotation (https://cloud.google.com/vision/product-search/docs/reference/
```

JSON representation

```
  },
  "imagePropertiesAnnotation": {
    object (ImageProperties (https://cloud.google.com/vision/product-search/docs/reference/rest/v1
  },
  "cropHintsAnnotation": {
    object (CropHintsAnnotation (https://cloud.google.com/vision/product-search/docs/reference/re
  },
  "webDetection": {
    object (WebDetection (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4b
  },
  "productSearchResults": {
    object (ProductSearchResults (https://cloud.google.com/vision/product-search/docs/reference/
  },
  "error": {
    object (Status (https://cloud.google.com/vision/product-search/docs/reference/rest/Shared.Types
  },
  "context": {
    object (ImageAnnotationContext (https://cloud.google.com/vision/product-search/docs/referenc
  }
}
```

Fields	
faceAnnotations[]	**object (FaceAnnotation** (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#FaceAnnotation)) If present, face detection has completed successfully.
landmarkAnnotations[]	**object (EntityAnnotation** (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#EntityAnnotation)) If present, landmark detection has completed successfully.

Fields	
logoAnnotations[]	object ([EntityAnnotation](https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#EntityAnnotation))) If present, logo detection has completed successfully.
labelAnnotations[]	object ([EntityAnnotation](https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#EntityAnnotation))) If present, label detection has completed successfully.
localizedObjectAnnotations[]	object ([LocalizedObjectAnnotation](https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#LocalizedObjectAnnotation))) If present, localized object detection has completed successfully. This will be sorted descending by confidence score.
textAnnotations[]	object ([EntityAnnotation](https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#EntityAnnotation))) If present, text (OCR) detection has completed successfully.
fullTextAnnotation	object ([TextAnnotation](https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#TextAnnotation))) If present, text (OCR) detection or document (OCR) text detection has completed successfully. This annotation provides the structural hierarchy for the OCR detected text.

Fields	
safeSearchAnnotation	object (SafeSearchAnnotation (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#SafeSearchAnnotation)) If present, safe-search annotation has completed successfully.
imagePropertiesAnnotation	object (ImageProperties (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#ImageProperties)) If present, image properties were extracted successfully.
cropHintsAnnotation	object (CropHintsAnnotation (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#CropHintsAnnotation)) If present, crop hints have completed successfully.
webDetection	object (WebDetection (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#WebDetection)) If present, web detection has completed successfully.
productSearchResults	object (ProductSearchResults (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#ProductSearchResults)) If present, product search has completed successfully.

Fields	
error	object (<ins>Status</ins> (https://cloud.google.com/vision/product-search/docs/reference/rest/Shared.Types/Operation#Status)) If set, represents the error message for the operation. Note that filled-in image annotations are guaranteed to be correct, even when `error` is set.
context	object (<ins>ImageAnnotationContext</ins> (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#ImageAnnotationContext)) If present, contextual information is needed to understand where this image comes from.

FaceAnnotation

A face annotation object contains the results of face detection.

JSON representation

JSON representation

```
{
  "boundingPoly": {
    object (BoundingPoly (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4b
  },
  "fdBoundingPoly": {
    object (BoundingPoly (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4b
  },
  "landmarks": [
    {
      object (Landmark (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4bet
    }
  ],
  "rollAngle": number,
  "panAngle": number,
  "tiltAngle": number,
  "detectionConfidence": number,
  "landmarkingConfidence": number,
  "joyLikelihood": enum (Likelihood (https://cloud.google.com/vision/product-search/docs/referen
  "sorrowLikelihood": enum (Likelihood (https://cloud.google.com/vision/product-search/docs/ref
  "angerLikelihood": enum (Likelihood (https://cloud.google.com/vision/product-search/docs/refe
  "surpriseLikelihood": enum (Likelihood (https://cloud.google.com/vision/product-search/docs/
  "underExposedLikelihood": enum (Likelihood (https://cloud.google.com/vision/product-search/d
  "blurredLikelihood": enum (Likelihood (https://cloud.google.com/vision/product-search/docs/re
  "headwearLikelihood": enum (Likelihood (https://cloud.google.com/vision/product-search/docs/
}
```

Fields

boundingPoly	object (BoundingPoly (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/projects.locations.products.referenceImages#BoundingPoly)) The bounding polygon around the face. The coordinates of the bounding box are in the original image's scale. The bounding box is computed to "frame" the face in accordance with human expectations. It is based on the landmarker results. Note that one or more x and/or y coordinates may not be generated in the **BoundingPoly** (the polygon will be unbounded) if only a partial face appears in the image to be annotated.

Fields	
`fdBoundingPoly`	object (BoundingPoly (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/projects.locations.products.referenceImages#BoundingPoly)) The **fdBoundingPoly** bounding polygon is tighter than the **boundingPoly**, and encloses only the skin part of the face. Typically, it is used to eliminate the face from any image analysis that detects the "amount of skin" visible in an image. It is not based on the landmarker results, only on the initial face detection, hence the **fd** (face detection) prefix.
`landmarks[]`	object (Landmark (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#Landmark)) Detected face landmarks.
`rollAngle`	number Roll angle, which indicates the amount of clockwise/anti-clockwise rotation of the face relative to the image vertical about the axis perpendicular to the face. Range [-180,180].
`panAngle`	number Yaw angle, which indicates the leftward/rightward angle that the face is pointing relative to the vertical plane perpendicular to the image. Range [-180,180].
`tiltAngle`	number Pitch angle, which indicates the upwards/downwards angle that the face is pointing relative to the image's horizontal plane. Range [-180,180].
`detectionConfidence`	number Detection confidence. Range [0, 1].

Fields	
landmarkingConfidence	number Face landmarking confidence. Range [0, 1].
joyLikelihood	enum (Likelihood (https://cloud.google.com/vision/product- search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#Likelih ood)) Joy likelihood.
sorrowLikelihood	enum (Likelihood (https://cloud.google.com/vision/product- search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#Likelih ood)) Sorrow likelihood.
angerLikelihood	enum (Likelihood (https://cloud.google.com/vision/product- search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#Likelih ood)) Anger likelihood.
surpriseLikelihood	enum (Likelihood (https://cloud.google.com/vision/product- search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#Likelih ood)) Surprise likelihood.
underExposedLikelihood	enum (Likelihood (https://cloud.google.com/vision/product- search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#Likelih ood)) Under-exposed likelihood.

Fields	
blurredLikelihood	enum (**Likelihood** (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#Likelihood)) Blurred likelihood.
headwearLikelihood	enum (**Likelihood** (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#Likelihood)) Headwear likelihood.

Landmark

A face-specific landmark (for example, a face feature).

JSON representation
| ```
{
  "type": enum (Type (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/
  "position": {
    object (Position (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/
  }
}
``` |

Fields	
type	enum (**Type** (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#Type)) Face landmark type.

Fields	
position	object (Position (https://cloud.google.com/vision/product- search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#Positi on)) Face landmark position.

Type

Face landmark (feature) type. Left and right are defined from the vantage of the viewer of the image without considering mirror projections typical of photos. So, LEFT_EYE, typically, is the person's right eye.

Enums	
UNKNOWN_LANDMARK	Unknown face landmark detected. Should not be filled.
LEFT_EYE	Left eye.
RIGHT_EYE	Right eye.
LEFT_OF_LEFT_EYEBROW	Left of left eyebrow.
RIGHT_OF_LEFT_EYEBROW	Right of left eyebrow.
LEFT_OF_RIGHT_EYEBROW	Left of right eyebrow.
RIGHT_OF_RIGHT_EYEBROW	Right of right eyebrow.
MIDPOINT_BETWEEN_EYES	Midpoint between eyes.
NOSE_TIP	Nose tip.
UPPER_LIP	Upper lip.
LOWER_LIP	Lower lip.
MOUTH_LEFT	Mouth left.
MOUTH_RIGHT	Mouth right.

Enums	
MOUTH_CENTER	Mouth center.
NOSE_BOTTOM_RIGHT	Nose, bottom right.
NOSE_BOTTOM_LEFT	Nose, bottom left.
NOSE_BOTTOM_CENTER	Nose, bottom center.
LEFT_EYE_TOP_BOUNDARY	Left eye, top boundary.
LEFT_EYE_RIGHT_CORNER	Left eye, right corner.
LEFT_EYE_BOTTOM_BOUNDARY	Left eye, bottom boundary.
LEFT_EYE_LEFT_CORNER	Left eye, left corner.
RIGHT_EYE_TOP_BOUNDARY	Right eye, top boundary.
RIGHT_EYE_RIGHT_CORNER	Right eye, right corner.
RIGHT_EYE_BOTTOM_BOUNDARY	Right eye, bottom boundary.
RIGHT_EYE_LEFT_CORNER	Right eye, left corner.
LEFT_EYEBROW_UPPER_MIDPOINT	Left eyebrow, upper midpoint.
RIGHT_EYEBROW_UPPER_MIDPOINT	Right eyebrow, upper midpoint.
LEFT_EAR_TRAGION	Left ear tragion.
RIGHT_EAR_TRAGION	Right ear tragion.
LEFT_EYE_PUPIL	Left eye pupil.
RIGHT_EYE_PUPIL	Right eye pupil.
FOREHEAD_GLABELLA	Forehead glabella.
CHIN_GNATHION	Chin gnathion.
CHIN_LEFT_GONION	Chin left gonion.
CHIN_RIGHT_GONION	Chin right gonion.

Position

A 3D position in the image, used primarily for Face detection landmarks. A valid Position must have both x and y coordinates. The position coordinates are in the same scale as the original image.

JSON representation

``
{
  "x": number,
  "y": number,
  "z": number
}
``

Fields	
x	**number** X coordinate.
y	**number** Y coordinate.
z	**number** Z coordinate (or depth).

Likelihood

A bucketized representation of likelihood, which is intended to give clients highly stable results across model upgrades.

Enums	
`UNKNOWN`	Unknown likelihood.
`VERY_UNLIKELY`	It is very unlikely that the image belongs to the specified vertical.
`UNLIKELY`	It is unlikely that the image belongs to the specified vertical.

Enums	
POSSIBLE	It is possible that the image belongs to the specified vertical.
LIKELY	It is likely that the image belongs to the specified vertical.
VERY_LIKELY	It is very likely that the image belongs to the specified vertical.

EntityAnnotation

Set of detected entity features.

JSON representation

```
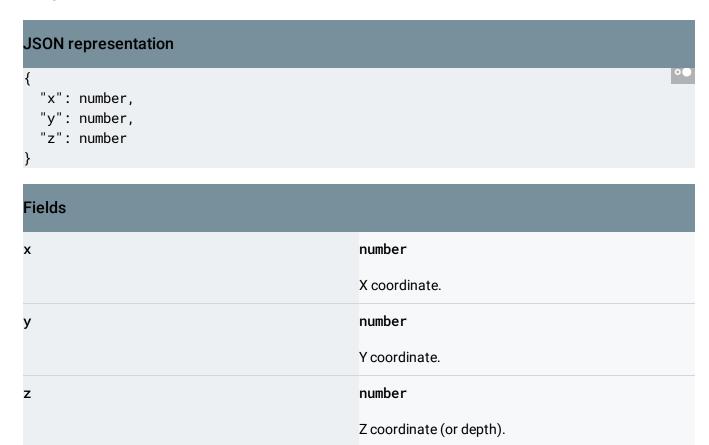{
  "mid": string,
  "locale": string,
  "description": string,
  "score": number,
  "confidence": number,
  "topicality": number,
  "boundingPoly": {
    object (BoundingPoly (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4b
  },
  "locations": [
    {
      object (LocationInfo (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p
    }
  ],
  "properties": [
    {
      object (Property (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4bet
    }
  ]
}
```

Fields

Fields	
`mid`	`string` Opaque entity ID. Some IDs may be available in Google Knowledge Graph Search API (https://developers.google.com/knowledge-graph/).
`locale`	`string` The language code for the locale in which the entity textual `description` is expressed.
`description`	`string` Entity textual description, expressed in its `locale` language.
`score`	`number` Overall score of the result. Range [0, 1].
`confidence` `(deprecated)`	`number` ⚠️ This item is deprecated! **Deprecated. Use score instead.** The accuracy of the entity detection in an image. For example, for an image in which the "Eiffel Tower" entity is detected, this field represents the confidence that there is a tower in the query image. Range [0, 1].
`topicality`	`number` The relevancy of the ICA (Image Content Annotation) label to the image. For example, the relevancy of "tower" is likely higher to an image containing the detected "Eiffel Tower" than to an image containing a detected distant towering building, even though the confidence that there is a tower in each image may be the same. Range [0, 1].
`boundingPoly`	`object (`BoundingPoly (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/projects.locations.products.referenceImages#BoundingPoly) `)` Image region to which this entity belongs. Not produced for `LABEL_DETECTION` features.

Fields	
`locations[]`	object (**LocationInfo** (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#LocationInfo)) The location information for the detected entity. Multiple `LocationInfo` elements can be present because one location may indicate the location of the scene in the image, and another location may indicate the location of the place where the image was taken. Location information is usually present for landmarks.
`properties[]`	object (**Property** (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#Property)) Some entities may have optional user-supplied `Property` (name/value) fields, such a score or string that qualifies the entity.

LocationInfo

Detected entity location information.

JSON representation
```{   "latLng": {   object (LatLng (https://cloud.google.com/vision/product-search/docs/reference/rest/Shared.Types   }}```

Fields	

Fields	
latLng	object (LatLng (https://cloud.google.com/vision/product-search/docs/reference/rest/Shared.Types/LatLng)) lat/long location coordinates.

Property

A `Property` consists of a user-supplied name/value pair.

JSON representation

{
  "name": string,
  "value": string,
  "uint64Value": string
}

Fields	
name	string Name of the property.
value	string Value of the property.
uint64Value	string Value of numeric properties.

LocalizedObjectAnnotation

Set of detected objects with bounding boxes.

JSON representation

```
{
  "mid": string,
  "languageCode": string,
  "name": string,
  "score": number,
  "boundingPoly": {
    object (BoundingPoly (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4b
  }
}
```

Fields

mid	string Object ID that should align with EntityAnnotation mid.
languageCode	string The BCP-47 language code, such as "en-US" or "sr-Latn". For more information, see http://www.unicode.org/reports/tr35/#Unicode_locale_identifier (http://www.unicode.org/reports/tr35/#Unicode_locale_identifier).
name	string Object name, expressed in its languageCode language.
score	number Score of the result. Range [0, 1].
boundingPoly	object (BoundingPoly (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/projects.locations.products.referenceImages#BoundingPoly)) Image region to which this object belongs. This must be populated.

TextAnnotation

TextAnnotation contains a structured representation of OCR extracted text. The hierarchy of an OCR extracted text structure is like this: TextAnnotation -> Page -> Block -> Paragraph -> Word -> Symbol Each structural component, starting from Page, may further have their own properties. Properties describe detected languages, breaks etc.. Please refer to the

TextAnnotation.TextProperty
 (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#TextProperty)
message definition below for more detail.

JSON representation

```
{
  "pages": [
    {
      object (Page (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/A
    }
  ],
  "text": string
}
```

Fields

`pages[]`	`object (`**Page** (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#Page)) List of pages detected by OCR.
`text`	`string` UTF-8 text detected on the pages.

Page

Detected page from OCR.

JSON representation

JSON representation

```
{
  "property": {
    object (TextProperty (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4b
  },
  "width": number,
  "height": number,
  "blocks": [
    {
      object (Block (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/
    }
  ],
  "confidence": number
}
```

Fields

property	object (TextProperty (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#TextProperty)) Additional information detected on the page.
width	number Page width. For PDFs the unit is points. For images (including TIFFs) the unit is pixels.
height	number Page height. For PDFs the unit is points. For images (including TIFFs) the unit is pixels.
blocks[]	object (Block (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#Block)) List of blocks of text, images etc on this page.
confidence	number Confidence of the OCR results on the page. Range [0, 1].

TextProperty

Additional information detected on the structural component.

JSON representation

<pre>{
  "detectedLanguages": [
    {
      object (<u>DetectedLanguage</u> (https://cloud.google.com/vision/product-search/docs/reference/res
    }
  ],
  "detectedBreak": {
    object (<u>DetectedBreak</u> (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4
  }
}</pre>

Fields	
detectedLanguages[]	**object** (**DetectedLanguage** (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#DetectedLanguage)) A list of detected languages together with confidence.
detectedBreak	**object** (**DetectedBreak** (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#DetectedBreak)) Detected start or end of a text segment.

DetectedLanguage

Detected language for a structural component.

JSON representation

JSON representation

```
{
  "languageCode": string,
  "confidence": number
}
```

Fields

languageCode	string
	The BCP-47 language code, such as "en-US" or "sr-Latn". For more information, see http://www.unicode.org/reports/tr35/#Unicode_locale_identifier (http://www.unicode.org/reports/tr35/#Unicode_locale_identifier).
confidence	number
	Confidence of detected language. Range [0, 1].

DetectedBreak

Detected start or end of a structural component.

JSON representation

```
{
  "type": enum (BreakType (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4
  "isPrefix": boolean
}
```

Fields

type	enum (BreakType (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#BreakType))
	Detected break type.

Fields	
`isPrefix`	`boolean` True if break prepends the element.

BreakType

Enum to denote the type of break found. New line, space etc.

Enums	
`UNKNOWN`	Unknown break label type.
`SPACE`	Regular space.
`SURE_SPACE`	Sure space (very wide).
`EOL_SURE_SPACE`	Line-wrapping break.
`HYPHEN`	End-line hyphen that is not present in text; does not co-occur with `SPACE`, `LEADER_SPACE`, or `LINE_BREAK`.
`LINE_BREAK`	Line break that ends a paragraph.

Block

Logical element on the page.

JSON representation

JSON representation

```
{
  "property": {
    object (TextProperty (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4b
  },
  "boundingBox": {
    object (BoundingPoly (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4b
  },
  "paragraphs": [
    {
      object (Paragraph (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4be
    }
  ],
  "blockType": enum (BlockType (https://cloud.google.com/vision/product-search/docs/reference/res
  "confidence": number
}
```

Fields

property	object (TextProperty (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#TextProperty)) Additional information detected for the block.

Fields	
boundingBox	object (<u>BoundingPoly</u> (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/projects.locations.products.referenceImages#BoundingPoly)) The bounding box for the block. The vertices are in the order of top-left, top-right, bottom-right, bottom-left. When a rotation of the bounding box is detected the rotation is represented as around the top-left corner as defined when the text is read in the 'natural' orientation. For example: • when the text is horizontal it might look like: ``` 0----1 | | 3----2 ``` • when it's rotated 180 degrees around the top-left corner it becomes: ``` 2----3 | | 1----0 ``` and the vertex order will still be (0, 1, 2, 3).
paragraphs[]	object (<u>Paragraph</u> (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#Paragraph)) List of paragraphs in this block (if this blocks is of type text).
blockType	enum (<u>BlockType</u> (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#BlockType)) Detected block type (text, image etc) for this block.

Fields	
confidence	number
	Confidence of the OCR results on the block. Range [0, 1].

Paragraph

Structural unit of text representing a number of words in certain order.

JSON representation	

```
{
  "property": {
    object (TextProperty (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4b
  },
  "boundingBox": {
    object (BoundingPoly (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4b
  },
  "words": [
    {
      object (Word (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/A
    }
  ],
  "confidence": number
}
```

Fields	
property	object (TextProperty (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#TextProperty))
	Additional information detected for the paragraph.

Fields	
boundingBox	object (<u>BoundingPoly</u> (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/projects.locations.products.referenceImages#BoundingPoly)) The bounding box for the paragraph. The vertices are in the order of top-left, top-right, bottom-right, bottom-left. When a rotation of the bounding box is detected the rotation is represented as around the top-left corner as defined when the text is read in the 'natural' orientation. For example: * when the text is horizontal it might look like: 0----1 || 3----2 * when it's rotated 180 degrees around the top-left corner it becomes: 2----3 || 1----0 and the vertex order will still be (0, 1, 2, 3).
words[]	object (<u>Word</u> (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#Word)) List of words in this paragraph.
confidence	number Confidence of the OCR results for the paragraph. Range [0, 1].

Word

A word representation.

JSON representation

JSON representation

```
{
  "property": {
    object (TextProperty (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4b
  },
  "boundingBox": {
    object (BoundingPoly (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4b
  },
  "symbols": [
    {
      object (Symbol (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1,
    }
  ],
  "confidence": number
}
```

Fields

property	**object** (**TextProperty** (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#TextProperty)) Additional information detected for the word.
boundingBox	**object** (**BoundingPoly** (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/projects.locations.products.referenceImages#BoundingPoly)) The bounding box for the word. The vertices are in the order of top-left, top-right, bottom-right, bottom-left. When a rotation of the bounding box is detected the rotation is represented as around the top-left corner as defined when the text is read in the 'natural' orientation. For example: * when the text is horizontal it might look like: 0----1 ||3----2 * when it's rotated 180 degrees around the top-left corner it becomes: 2----3 ||1----0 and the vertex order will still be (0, 1, 2, 3).

Fields	
`symbols[]`	object (Symbol (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#Symbol)) List of symbols in the word. The order of the symbols follows the natural reading order.
`confidence`	number Confidence of the OCR results for the word. Range [0, 1].

Symbol

A single symbol representation.

JSON representation
| ```
{
  "property": {
    object (TextProperty (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4b
  },
  "boundingBox": {
    object (BoundingPoly (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4b
  },
  "text": string,
  "confidence": number
}
``` |

Fields	
`property`	object (TextProperty (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#TextProperty)) Additional information detected for the symbol.

Fields	
boundingBox	object (**BoundingPoly** (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/projects.locations.products.referenceImages#BoundingPoly)) The bounding box for the symbol. The vertices are in the order of top-left, top-right, bottom-right, bottom-left. When a rotation of the bounding box is detected the rotation is represented as around the top-left corner as defined when the text is read in the 'natural' orientation. For example: * when the text is horizontal it might look like: 0----1 || 3----2 * when it's rotated 180 degrees around the top-left corner it becomes: 2----3 || 1----0 and the vertice order will still be (0, 1, 2, 3).
text	string The actual UTF-8 representation of the symbol.
confidence	number Confidence of the OCR results for the symbol. Range [0, 1].

BlockType

Type of a block (text, image etc) as identified by OCR.

Enums	
UNKNOWN	Unknown block type.
TEXT	Regular text block.
TABLE	Table block.
PICTURE	Image block.
RULER	Horizontal/vertical line box.
BARCODE	Barcode block.

SafeSearchAnnotation

Set of features pertaining to the image, computed by computer vision methods over safe-search verticals (for example, adult, spoof, medical, violence).

JSON representation

{
  "adult": enum (<u>Likelihood</u> (https://cloud.google.com/vision/product-search/docs/reference/rest/v1
  "spoof": enum (<u>Likelihood</u> (https://cloud.google.com/vision/product-search/docs/reference/rest/v1
  "medical": enum (<u>Likelihood</u> (https://cloud.google.com/vision/product-search/docs/reference/rest/
  "violence": enum (<u>Likelihood</u> (https://cloud.google.com/vision/product-search/docs/reference/res
  "racy": enum (<u>Likelihood</u> (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p
}

Fields	
adult	enum (<u>Likelihood</u> (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#Likelihood)) Represents the adult content likelihood for the image. Adult content may contain elements such as nudity, pornographic images or cartoons, or sexual activities.
spoof	enum (<u>Likelihood</u> (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#Likelihood)) Spoof likelihood. The likelihood that an modification was made to the image's canonical version to make it appear funny or offensive.
medical	enum (<u>Likelihood</u> (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#Likelihood)) Likelihood that this is a medical image.

Fields	
violence	enum (**Likelihood** (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#Likelihood)) Likelihood that this image contains violent content.
racy	enum (**Likelihood** (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#Likelihood)) Likelihood that the request image contains racy content. Racy content may include (but is not limited to) skimpy or sheer clothing, strategically covered nudity, lewd or provocative poses, or close-ups of sensitive body areas.

ImageProperties

Stores image properties, such as dominant colors.

JSON representation
| ```
{
  "dominantColors": {
    object (DominantColorsAnnotation (https://cloud.google.com/vision/product-search/docs/refere
  }
}
``` |

Fields

Fields	
dominantColors	object (DominantColorsAnnotation (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#DominantColorsAnnotation)) If present, dominant colors completed successfully.

DominantColorsAnnotation

Set of dominant colors and their corresponding scores.

JSON representation

``
{
  "colors": [
    {
      object (ColorInfo (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4be
    }
  ]
}
``

Fields	
colors[]	object (ColorInfo (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#ColorInfo)) RGB color values with their score and pixel fraction.

ColorInfo

Color information consists of RGB channels, score, and the fraction of the image that the color occupies in the image.

JSON representation

```
{
  "color": {
    object (Color (https://cloud.google.com/vision/product-search/docs/reference/rest/Shared.Types/
  },
  "score": number,
  "pixelFraction": number
}
```

Fields

color	object (Color (https://cloud.google.com/vision/product-search/docs/reference/rest/Shared.Types/Color)) RGB components of the color.
score	number Image-specific score for this color. Value in range [0, 1].
pixelFraction	number The fraction of pixels the color occupies in the image. Value in range [0, 1].

CropHintsAnnotation

Set of crop hints that are used to generate new crops when serving images.

JSON representation

```
{
  "cropHints": [
    {
      object (CropHint (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4bet
    }
  ]
}
```

Fields	
cropHints[]	object (CropHint (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#CropHint)) Crop hint results.

CropHint

Single crop hint that is used to generate a new crop when serving an image.

JSON representation
| ```
{
  "boundingPoly": {
    object (BoundingPoly (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4b
  },
  "confidence": number,
  "importanceFraction": number
}
``` |

Fields	
boundingPoly	object (BoundingPoly (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/projects.locations.products.referenceImages#BoundingPoly)) The bounding polygon for the crop region. The coordinates of the bounding box are in the original image's scale.
confidence	number Confidence of this being a salient region. Range [0, 1].

Fields	
importanceFraction	number Fraction of importance of this salient region with respect to the original image.

WebDetection

Relevant information for the image from the Internet.

JSON representation

JSON representation

```
{
  "webEntities": [
    {
      object (WebEntity (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4be
    }
  ],
  "fullMatchingImages": [
    {
      object (WebImage (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4bet
    }
  ],
  "partialMatchingImages": [
    {
      object (WebImage (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4bet
    }
  ],
  "pagesWithMatchingImages": [
    {
      object (WebPage (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta
    }
  ],
  "visuallySimilarImages": [
    {
      object (WebImage (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4bet
    }
  ],
  "bestGuessLabels": [
    {
      object (WebLabel (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4bet
    }
  ]
}
```

Fields

webEntities[]	object (WebEntity (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#WebEntity)) Deduced entities from similar images on the Internet.

Fields	
`fullMatchingImages[]`	object ([WebImage](https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#WebImage)) Fully matching images from the Internet. Can include resized copies of the query image.
`partialMatchingImages[]`	object ([WebImage](https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#WebImage)) Partial matching images from the Internet. Those images are similar enough to share some key-point features. For example an original image will likely have partial matching for its crops.
`pagesWithMatchingImages[]`	object ([WebPage](https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#WebPage)) Web pages containing the matching images from the Internet.
`visuallySimilarImages[]`	object ([WebImage](https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#WebImage)) The visually similar image results.
`bestGuessLabels[]`	object ([WebLabel](https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#WebLabel)) The service's best guess as to the topic of the request image. Inferred from similar images on the open web.

WebEntity

Entity deduced from similar images on the Internet.

JSON representation

``
{
  "entityId": string,
  "score": number,
  "description": string
}
``

Fields	
entityId	**string** Opaque entity ID.
score	**number** Overall relevancy score for the entity. Not normalized and not comparable across different image queries.
description	**string** Canonical description of the entity, in English.

WebImage

Metadata for online images.

JSON representation

``
{
  "url": string,
  "score": number
}
``

Fields

Fields	
url	string
	The result image URL.
score	number
	(Deprecated) Overall relevancy score for the image.

WebPage

Metadata for web pages.

JSON representation

```
{
  "url": string,
  "score": number,
  "pageTitle": string,
  "fullMatchingImages": [
    {
      object (WebImage (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4bet
    }
  ],
  "partialMatchingImages": [
    {
      object (WebImage (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4bet
    }
  ]
}
```

Fields	
url	string
	The result web page URL.
score	number
	(Deprecated) Overall relevancy score for the web page.

Fields	
`pageTitle`	`string` Title for the web page, may contain HTML markups.
`fullMatchingImages[]`	`object (`[`WebImage`](https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#WebImage)`)` Fully matching images on the page. Can include resized copies of the query image.
`partialMatchingImages[]`	`object (`[`WebImage`](https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#WebImage)`)` Partial matching images on the page. Those images are similar enough to share some key-point features. For example an original image will likely have partial matching for its crops.

WebLabel

Label to provide extra metadata for the web detection.

JSON representation
| ```
{
  "label": string,
  "languageCode": string
}
``` |

Fields	
`label`	`string` Label for extra metadata.

Fields	
languageCode	**string** The BCP-47 language code for **label**, such as "en-US" or "sr-Latn". For more information, see http://www.unicode.org/reports/tr35/#Unicode_locale_identifier (http://www.unicode.org/reports/tr35/#Unicode_locale_identifier).

ProductSearchResults

Results for a product search request.

JSON representation

```
{
  "indexTime": string,
  "results": [
    {
      object (Result (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/
    }
  ],
  "productGroupedResults": [
    {
      object (GroupedResult (https://cloud.google.com/vision/product-search/docs/reference/rest/v1
    }
  ]
}
```

Fields

Fields	
`indexTime`	string (<u>Timestamp</u> (https://developers.google.com/protocol-buffers/docs/reference/google.protobuf#google.protobuf.Timestamp) `format`) Timestamp of the index which provided these results. Products added to the product set and products removed from the product set after this time are not reflected in the current results. A timestamp in RFC3339 UTC "Zulu" format, accurate to nanoseconds. Example: `"2014-10-02T15:01:23.045123456Z"`.
`results[]`	object (<u>Result</u> (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#Result))) List of results, one for each product match.
`productGroupedResults[]`	object (<u>GroupedResult</u> (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#GroupedResult)) List of results grouped by products detected in the query image. Each entry corresponds to one bounding polygon in the query image, and contains the matching products specific to that region. There may be duplicate product matches in the union of all the per-product results.

Result

Information about a product.

JSON representation

JSON representation

```
{
  "product": {
    object (Product (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/p
  },
  "score": number,
  "image": string
}
```

Fields

product	**object** (**Product** (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/projects.locations.products#Product)) The Product.
score	**number** A confidence level on the match, ranging from 0 (no confidence) to 1 (full confidence).
image	**string** The resource name of the image from the product that is the closest match to the query.

GroupedResult

Information about the products similar to a single product in a query image.

JSON representation

JSON representation

```
{
  "boundingPoly": {
    object (BoundingPoly (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4b
  },
  "results": [
    {
      object (Result (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1,
    }
  ]
}
```

Fields

boundingPoly	object (BoundingPoly (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/projects.locations.products.referenceImages#BoundingPoly)) The bounding polygon around the product detected in the query image.
results[]	object (Result (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p4beta1/AnnotateImageResponse#Result)) List of results, one for each product match.

ImageAnnotationContext

If an image was produced from a file (e.g. a PDF), this message gives information about the source of that image.

JSON representation

```
{
  "uri": string,
  "pageNumber": number
}
```

Fields	
uri	**string**
	The URI of the file used to produce the image.
pageNumber	**number**
	If the file was a PDF or TIFF, this field gives the page number within the file used to produce the image.