



Facial Recognition Cloud Service

API Documentation

Version 1.0.0 Preview

Last Update: 13 Aug 2019

Detect Faces API

Overview

Detect human faces in an image and return the rectangle coordinates of their locations.

Requirements

- Format: JPG, JPEG, PNG, BMP.
- File Size: 2MB Maximum.
- Suitable Image Size.

Request URL

<https://ziface.com/api/v1/faces/detect>

Request Method

POST

Request Parameters

Name	Type	Data	Required	Description
z-api-key	Header	String	Yes	Account created API key to call this API. Use Ziface portal to Create API Key.
image_source	Body	Integer	Yes	1 for uploaded image file via POST multipart/form-data.
image_file	Body(multipart/form-data)	File	Yes(If image_source is 1)	The uploaded image file via POST multipart/form-data

Sample Response

Sample response when request has succeeded, (Status Code is 200):

```
{"total_faces":2,"faces":[{"x":45,"y":110,"w":36,"h":36},{"x":129,"y":138,"w":36,"h":36}]}
```

Error messages of this API:

HTTP Status Code	Error Message	Description
401	Api_Key_Not_Present	The API key has not sent with the request. Use Ziface portal to Create API Key .
401	Api_Key_Invalid	Invalid API key
400	Data_Error	One of required parameters is missing.
400	File_Not_Supported	File type not supported.
400	Empty_File	The sent file is empty.
400	File_Size_Exceeds_Limit	File exceeds the allowed size limits, which is 2 MB.
400	Invalid_Image	Invalid image.
500	Fail	The request did not pass correctly.
500	Error	An error occurred while executing the request.

Compare Faces API

Overview

Compare whether two faces belong to a same person.

Requirements

- Format: JPG, JPEG, PNG, BMP.
- File Size: 2MB Maximum.
- Suitable Image Size.
- Appearing faces in uploaded files must be two faces.

Request URL

<https://ziface.com/api/v1/faces/compare>

Request Method

POST

Request Parameters

Name	Type	Data	Required	Description
z-api-key	Header	String	Yes	Account created API key to call this API. Use Ziface portal to Create API Key.
image_source_1	Body	Integer	Yes	1 for uploaded image file via POST multipart/form-data.
image_file_1	Body(multipart/form-data)	File	Yes(If image_source_1 is 1)	The uploaded image file via POST multipart/form-data
image_source_2	Body	Integer	Yes	1 for uploaded image file via POST multipart/form-data.
image_file_2	Body(multipart/form-data)	File	Yes(If image_source_2 is 1)	The uploaded image file via POST multipart/form-data

Sample Response

Sample response when request has succeeded, (Status Code is 200):

```
{"same_person":true}
```

Error messages of this API:

HTTP Status Code	Error Message	Description
401	Api_Key_Not_Present	The API key has not sent with the request. Use Ziface portal to Create API Key .
401	Api_Key_Invalid	Invalid API key
400	Data_Error	One of required parameters is missing.
400	File_Not_Supported	File type not supported.
400	Empty_File	The sent file is empty.
400	File_Size_Exceeds_Limit	File exceeds the allowed size limits, which is 2 MB.
400	Invalid_Image	Invalid image.
400	Appearing_Faces_Must_Be_Two	Appearing faces in uploaded files not equal two.
500	Fail	The request did not pass correctly.
500	Error	An error occurred while executing the request.

Add Person API

Overview

Add unique person tag to a collection in order to assign it to face or list of faces.

Requirements

- Unique person tag within same collection.

Request URL

https://ziface.com/api/v1/faces/add_person

Request Method

POST

Request Parameters

Name	Type	Data	Required	Description
z-api-key	Header	String	Yes	Account created API key to call this API. Use Ziface portal to Create API Key.
collection_id	Body	String	Yes	Account created collection ID. Use Ziface portal to Create Collection.
person_tag	Body	String	Yes	A unique person tag within same collection will use later for assigning it with faces.

Sample Response

Sample response when request has succeeded, (Status Code is 200):

```
{"added_person":{"person_id":"4ea7fd24-921d-42d8-9914-e09e98b36ae5","person_tag":"adam"}}
```

Error messages of this API:

HTTP Status Code	Error Message	Description
401	Api_Key_Not_Present	The API key has not sent with the request. Use Ziface portal to Create API Key .
401	Api_Key_Invalid	Invalid API key
400	Data_Error	One of required parameters is missing.
400	Invalid_Collection	Invalid collection.
400	Person_Tag_Already_Added	Person tag already added to that collection which is mean person tag must be unique in same collection.
500	Fail	The request did not pass correctly.
500	Error	An error occurred while executing the request.

Delete Person API

Overview

Delete person from a given collection.

Requirements

- Person must exist in the given collection.
- Person must not be linked with any face.

Request URL

https://ziface.com/api/v1/faces/delete_person

Request Method

POST

Request Parameters

Name	Type	Data	Required	Description
z-api-key	Header	String	Yes	Account created API key to call this API. Use Ziface portal to Create API Key.
collection_id	Body	String	Yes	Account created collection ID.
person_tag	Body	String	Yes	A person tag to delete.

Sample Response

Sample response when request has succeeded, (Status Code is 200):

```
{"deleted_person":{"person_id":"4ea7fd24-921d-42d8-9914-e09e98b36ae5","person_tag":"adam"}}
```


Error messages of this API:

HTTP Status Code	Error Message	Description
401	Api_Key_Not_Present	The API key has not sent with the request. Use Ziface portal to Create API Key .
401	Api_Key_Invalid	Invalid API key
400	Data_Error	One of required parameters is missing.
400	Invalid_Collection	Invalid collection.
400	Invalid_Person	Invalid person.
500	Fail	The request did not pass correctly.
500	Error	An error occurred while executing the request.

Add Face API

Overview

Add face to a collection and assign it to person tag in order to use it for identification and verification.

Requirements

- Person tag defined in same collection.
- Format: JPG, JPEG, PNG, BMP.
- File Size: 2MB Maximum.
- Suitable Image Size.
- Image contains single face only.

Request URL

https://ziface.com/api/v1/faces/add_face

Request Method

POST

Request Parameters

Name	Type	Data	Required	Description
z-api-key	Header	String	Yes	Account created API key to call this API. Use Ziface portal to Create API Key.
collection_id	Body	String	Yes	Account created collection ID. Use Ziface portal to Create Collection.
person_tag	Body	String	Yes	A unique person tag within same collection.
image_source	Body	Integer	Yes	1 for uploaded image file via POST multipart/form-data.
image_file	Body(multipart/form-data)	File	Yes(If image_source is 1)	The uploaded image file via POST multipart/form-data

Sample Response

Sample response when request has succeeded, (Status Code is 200):

```
{"added_face":{"face_id":"95e3e62d-7856-4b83-905b-b6e5e03fd01d"}}
```

Error messages of this API:

HTTP Status Code	Error Message	Description
401	Api_Key_Not_Present	The API key has not sent with the request. Use Ziface portal to Create API Key.
401	Api_Key_Invalid	Invalid API key
400	Data_Error	One of required parameters is missing.
400	Invalid_Collection	Invalid collection.
400	Invalid_Person	Invalid person.
400	Appearing_Faces_Must_Be_One	Uploaded image file not contains single face.
400	File_Not_Supported	File type not supported.
400	Empty_File	The sent file is empty.
400	File_Size_Exceeds_Limit	File exceeds the allowed size limits, which is 2 MB.
400	Invalid_Image	Invalid image.

Delete Face API

Overview

Delete face from a given collection.

Requirements

- Face must exist in the given collection.

Request URL

https://ziface.com/api/v1/faces/delete_face

Request Method

POST

Request Parameters

Name	Type	Data	Required	Description
z-api-key	Header	String	Yes	Account created API key to call this API. Use Ziface portal to Create API Key.
collection_id	Body	String	Yes	Account created collection ID.
face_id	Body	String	Yes	Face ID.

Sample Response

Sample response when request has succeeded, (Status Code is 200):

```
{"deleted_face":{"face_id":"5e22be20-38c6-4290-af54-07d997fc8578"}}
```

Error messages of this API:

HTTP Status Code	Error Message	Description
401	Api_Key_Not_Present	The API key has not sent with the request. Use Ziface portal to Create API Key .
401	Api_Key_Invalid	Invalid API key
400	Data_Error	One of required parameters is missing.
400	Invalid_Collection	Invalid collection.
400	Invalid_Face	Invalid face.
500	Fail	The request did not pass correctly.
500	Error	An error occurred while executing the request.

Identify Faces API

Overview

Identify one or more human faces from a specific photo within a pre-defined collection.

Requirements

- Format: JPG, JPEG, PNG, BMP.
- File Size: 2MB Maximum.
- Suitable Image Size.
- Image contains faces.

Request URL

<https://ziface.com/api/v1/faces/identify>

Request Method

POST

Request Parameters

Name	Type	Data	Required	Description
z-api-key	Header	String	Yes	Account created API key to call this API. Use Ziface portal to Create API Key.
collection_id	Body	String	Yes	Account created collection ID. Use Ziface portal to Create Collection.
image_source	Body	Integer	Yes	1 for uploaded image file via POST multipart/form-data.
image_file	Body(multipart/form-data)	File	Yes(If image_source is 1)	The uploaded image file via POST multipart/form-data

Sample Response

Sample response when request has succeeded, (Status Code is 200):

```
{"known_faces":1,"total_faces":2,"faces":[{"person_tag":"elon","location":{"x":196,"y":47,"w":74,"h":74}},{"person_tag":null,"location":{"x":128,"y":135,"w":62,"h":63}}]}
```

Error messages of this API:

HTTP Status Code	Error Message	Description
401	Api_Key_Not_Present	The API key has not sent with the request. Use Ziface portal to Create API Key .
401	Api_Key_Invalid	Invalid API key
400	Data_Error	One of required parameters is missing.
400	Invalid_Collection	Invalid collection.
400	No_Appearing_Faces	Uploaded image file not contains any faces.
400	File_Not_Supported	File type not supported.
400	Empty_File	The sent file is empty.
400	File_Size_Exceeds_Limit	File exceeds the allowed size limits, which is 2 MB.
400	Invalid_Image	Invalid image.

Verify Faces API

Overview

Verify a new face if belongs to a specific person from a given collection of faces.

Requirements

- Person tag defined in same collection.
- Format: JPG, JPEG, PNG, BMP.
- File Size: 2MB Maximum.
- Suitable Image Size.
- Image contains faces.

Request URL

<https://ziface.com/api/v1/faces/verify>

Request Method

POST

Request Parameters

Name	Type	Data	Required	Description
z-api-key	Header	String	Yes	Account created API key to call this API. Use Ziface portal to Create API Key.
collection_id	Body	String	Yes	Account created collection ID. Use Ziface portal to Create Collection.
image_source	Body	Integer	Yes	1 for uploaded image file via POST multipart/form-data.
image_file	Body(multipart/form-data)	File	Yes(If image_source is 1)	The uploaded image file via POST multipart/form-data
person_tag	Body	String	Yes	A unique person tag within same collection.

Sample Response

Sample response when request has succeeded, (Status Code is 200):

```
{"is_verified":false}
```

Error messages of this API:

HTTP Status Code	Error Message	Description
401	Api_Key_Not_Present	The API key has not sent with the request. Use Ziface portal to Create API Key .
401	Api_Key_Invalid	Invalid API key
400	Data_Error	One of required parameters is missing.
400	Invalid_Collection	Invalid collection.
400	Appearing_Faces_Must_Be_One	Uploaded image file not contains single face.
400	File_Not_Supported	File type not supported.
400	Empty_File	The sent file is empty.
400	File_Size_Exceeds_Limit	File exceeds the allowed size limits, which is 2 MB.
400	Invalid_Image	Invalid image.

Landmark Faces API

Overview

Locate and return key points of face components, including face contour, eye, eyebrow, lip and nose contour.

Requirements

- Format: JPG, JPEG, PNG, BMP.
- File Size: 2MB Maximum.
- Suitable Image Size.

Request URL

<https://ziface.com/api/v1/faces/landmark>

Request Method

POST

Request Parameters

Name	Type	Data	Required	Description
z-api-key	Header	String	Yes	Account created API key to call this API. Use Ziface portal to Create API Key.
image_source	Body	Integer	Yes	1 for uploaded image file via POST multipart/form-data.
image_file	Body(multipart/form-data)	File	Yes(If image_source is 1)	The uploaded image file via POST multipart/form-data

Sample Response

Sample response when request has succeeded, (Status Code is 200):

```
{
  "total_faces": 1,
  "faces": [
    {
      "face": {
        "landmarks": [
          { "name": "chin", "points": [
            { "x": 302, "y": 197 },
            { "x": 308, "y": 226 },
            { "x": 314, "y": 255 },
            { "x": 322, "y": 283 },
            { "x": 333, "y": 309 },
            { "x": 354, "y": 331 },
            { "x": 379, "y": 348 },
            { "x": 409, "y": 360 },
            { "x": 442, "y": 359 },
            { "x": 471, "y": 349 },
            { "x": 494, "y": 329 },
            { "x": 510, "y": 304 },
            { "x": 522, "y": 278 },
            { "x": 524, "y": 249 },
            { "x": 522, "y": 219 },
            { "x": 518, "y": 190 },
            { "x": 515, "y": 162 }
          ]
        },
        "name": "left_eyebrow",
        "points": [
          { "x": 314, "y": 180 },
          { "x": 324, "y": 160 },
          { "x": 345, "y": 155 },
          { "x": 366, "y": 156 },
          { "x": 388, "y": 160 }
        ]
      },
      "name": "right_eyebrow",
      "points": [
        { "x": 421, "y": 153 },
        { "x": 443, "y": 145 },
        { "x": 463, "y": 136 },
        { "x": 484, "y": 136 },
        { "x": 498, "y": 151 }
      ]
    },
    {
      "name": "nose_bridge",
      "points": [
        { "x": 408, "y": 172 },
        { "x": 412, "y": 192 },
        { "x": 416, "y": 212 },
        { "x": 420, "y": 233 }
      ]
    },
    {
      "name": "nose_tip",
      "points": [
        { "x": 398, "y": 247 },
        { "x": 410, "y": 249 },
        { "x": 423, "y": 250 },
        { "x": 434, "y": 244 },
        { "x": 444, "y": 237 }
      ]
    },
    {
      "name": "left_eye",
      "points": [
        { "x": 343, "y": 191 },
        { "x": 353, "y": 183 },
        { "x": 367, "y": 181 },
        { "x": 380, "y": 186 },
        { "x": 368, "y": 191 },
        { "x": 355, "y": 193 }
      ]
    },
    {
      "name": "right_eye",
      "points": [
        { "x": 439, "y": 176 },
        { "x": 451, "y": 168 },
        { "x": 464, "y": 166 },
        { "x": 475, "y": 169 },
        { "x": 467, "y": 175 },
        { "x": 453, "y": 177 }
      ]
    },
    {
      "name": "top_lip",
      "points": [
        { "x": 384, "y": 292 },
        { "x": 401, "y": 281 },
        { "x": 415, "y": 274 },
        { "x": 428, "y": 275 },
        { "x": 440, "y": 269 },
        { "x": 456, "y": 269 },
        { "x": 472, "y": 271 },
        { "x": 466, "y": 273 },
        { "x": 442, "y": 279 },
        { "x": 429, "y": 284 },
        { "x": 417, "y": 285 },
        { "x": 391, "y": 291 }
      ]
    },
    {
      "name": "bottom_lip",
      "points": [
        { "x": 472, "y": 271 },
        { "x": 461, "y": 284 },
        { "x": 449, "y": 294 },
        { "x": 435, "y": 298 },
        { "x": 422, "y": 300 },
        { "x": 405, "y": 299 },
        { "x": 384, "y": 292 },
        { "x": 391, "y": 291 },
        { "x": 419, "y": 285 },
        { "x": 432, "y": 283 },
        { "x": 445, "y": 278 },
        { "x": 466, "y": 273 }
      ]
    }
  ]
}
```

Error messages of this API:

HTTP Status Code	Error Message	Description
401	Api_Key_Not_Present	The API key has not sent with the request. Use Ziface portal to Create API Key .
401	Api_Key_Invalid	Invalid API key
400	Data_Error	One of required parameters is missing.
400	File_Not_Supported	File type not supported.
400	Empty_File	The sent file is empty.
400	File_Size_Exceeds_Limit	File exceeds the allowed size limits, which is 2 MB.
400	Invalid_Image	Invalid image.
500	Fail	The request did not pass correctly.
500	Error	An error occurred while executing the request.