



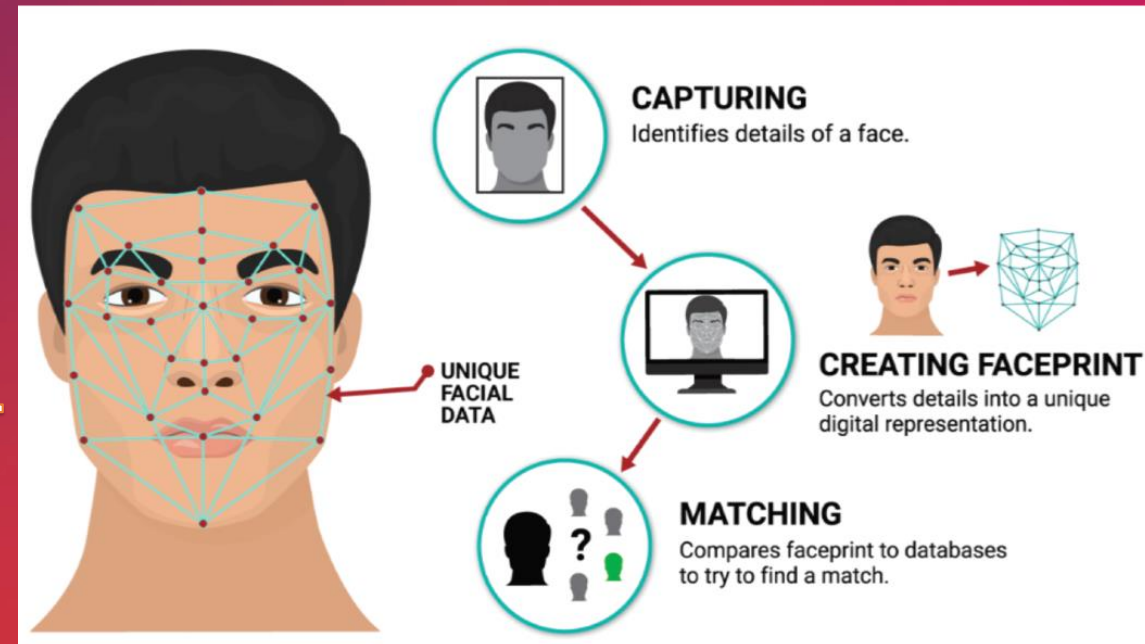
FaceR

INTRODUCTION

- FaceR is an AI based face detection and face Recognition Application.
- Our AI Technology implemented in FaceR is capable of detecting human faces from captured camera images and matching a human face against a set of enrolled faces.

- ✓ **Face Detection: Detect human faces.**
- ✓ **Face Recognition: Matching a human face.**

- FaceR is capable of Analyze Face Attributes.



CAPTURE IMAGES



CONFIGURED CAMERAS

- Configure FaceR supported IP Cameras - Snappy, HikVision, Dahua and Mxhelix in our FaceR system.
- Our FaceR system will take images from the configured devices.

FACE DETECTION

Face Detection and Face Attribute analysis

Our system detect face from captured images and analyze following facial attributes of detected face

GENDER



AGE



GLASS



MASK



EMOTION



HEAD WEAR



HAIR COLOR



HAIR TYPE



ETHNICITY



FACIAL HAIR



FACE RECOGNITION

ENROLL



Need to enroll faces for matching process.

Perform face matching on detected face against the set of enrolled faces.

RECOGNITION LOG



If face matched with our enrolled data, the face information maintained in recognition log.

UNRECOGNITION LOG



If no match found, detected face details are maintained in unrecognition log.

As well as if detected face quality is poor, this face details also maintained in unrecognition log.

Factors for Poor Quality faces mentioned below:

- Low Face detection score
- Low Face feature points score
- Small face
- Face rotated too much

Accuracy of the above values less than FaceR setting consider as unrecognition

FACER WEB CLIENT

DEVICE CONFIGURATION

IP Cameras can be configured here.

The screenshot displays the FaceR web client interface. At the top, there is a navigation bar with the FaceR logo and menu items: Dashboard, Organization, Devices, Global, Users, and Settings. Below the navigation bar, a 'Device list' table is visible, showing columns for Type, Name, Code, Brand, and Model. A 'Create device' modal form is open in the center, containing the following fields:

- Device type: Camera
- Subtype: IP Camera
- Brand: Snappy
- Model: Snappy
- Image capture type: Select image capture type
- Entry exit name: Select entry exit name
- Device name: Enter device name
- Device code: Enter device code
- IP address: Enter IP address
- Manufacture part number: Enter manufacture part number
- RTSP port: Enter RTSP port
- TCP port: Enter TCP port
- HTTP port: Enter HTTP port
- Output url: Enter output url
- User name: Enter user name
- Password: Enter password

A 'Create' button is located at the bottom right of the modal form. The background table shows four rows of device data:

Type	Name	Code	Brand	Model	Supported ch...	Connected de...	Output url	Entry exi...
R04 CH22 GF BL...	FR002	Hikvision	Hikvis				192.168.11.47	R04 CH22 GF BL...
R4 C21 BLK-5 E...	FR003	Hikvision	Hikvis				192.168.11.47	R4 C21 BLK-5 E...
R6 C22 GF MAIN...	FR001	Hikvision	Hikvis				192.168.11.47	R6 C22 GF MAIN...
R6 C6 B1 SLIDIN...	FR004	Hikvision	Hikvis				192.168.11.47	R6 C6 B1 SLIDIN...

Page 1 of 1 Showing results 1 - 4 of 4 item(s)

FACER WEB CLIENT

FACE ENROLL

- Upload images directly or capture image from camera and upload.
- To use image capture from camera option camera details need to be configured in FaceR settings.

The screenshot displays the FaceR web client interface. The top navigation bar includes 'Dashboard', 'Organization', 'Devices', 'Global', 'Users', and 'Settings'. A left sidebar lists various categories: Name, Category, Library, Camera, Gender, Age, Face image, and Face Mask. The main content area shows a 'Face enroll' modal window. This modal has an 'Upload image' section with a photo of a woman and two buttons: 'Add Photo' and 'Add Photo From Camera'. Below this, there are input fields for 'First name' (Sujitha), 'Last name' (Enter last name), 'Gender' (Female), 'Date of Birth' (Select date), 'Category' (WANTED), and 'Library' (Select library). At the bottom, there are checkboxes for 'Alert type': Alarm (checked), Notification, and Event. A 'Save' button is located at the bottom right of the modal. In the background, a list of enrolled users is visible, including 'Sirag Mahmoud AAE Staf' and 'Shabaz', both with 'Manual Enroll' status and dates from 28 Oct 2022.

FACER WEB CLIENT

FACE ENROLL

CATEGORY

- Person belongs to which category.
Ex. Wanted, VIP, General and etc.

ALARM

- We need to configure alert type as alarm when that person recognized

LIBRARY

- Person belongs to which library.
Ex. Customer library, Wanted library, Employee library and etc.
- **We can configure library order. Based on this order recognition will be performed**

NOTIFICATION

- We need to configure alert type as notification to receive notification when that person recognized.
- Alarm and notification can be set in the following module.
 - ❖ Dashboard > FaceR Log > Enroll Log
 - ❖ Global > Face Template Category
 - ❖ Global > Library

LIVE MONITORING

ALARM & NOTIFICATION INFORMATION

- Alarm & notification shown in left side view to live view
- User can take action like pending and close the alarm and notification
- Pending and closed history shown in alarm history and notification history

The screenshot displays the FaceAR live monitoring interface. On the left, the 'Alarm' and 'Notification' panels show alerts for 'Pauleshwar - EN61' with 'WANTED' status, including face images, confidence scores (97%, 100%, 99%), and timestamps. The main stream shows a grid of live camera feeds from various locations like 'R6 C6 B1 SLIDING DOOR (NR-IR)', 'R4 C21 BLK-5 ENTRANCE -2', 'R04 CH22 GF BLK-4 ENTRANCE 3', and 'R6 C22 GF MAIN ENTRANCE 2 SD04'. On the right, the 'Recognition' panel shows a list of recent recognition logs with face images, confidence scores (96%, 98%, 100%), and timestamps.

RECENT RECOGNITION INFORMATION

- Recognition Process result will be shown here.
- Latest 20 logs maintained here

LIVE VIEW

Connected cameras live view show here
Live view can be view in main stream & sub stream

LIVE MONITORING

FACE RECOGNITION HISTORY

If we click recognition **i** symbol we can see the below details:

- Detected person details.
- Recognition history of recognized person. We can view this history continuously using play button nearby slide bar.
- Similar recognized faces.
- Other person who came with detected person.
- Snapshot images of detection time.

We can filter this history using detection time, other person details.

In FaceR recognition log the same information can be viewed.

The screenshot displays the FaceR interface for a specific recognition event. The top navigation bar includes 'Dashboard', 'Organization', 'Devices', 'Global', 'Users', and 'Settings'. The main content area is divided into several sections:

- History:** A list of recognition events for 'SUJITHA - EN91' with columns for 'WANTED' status, ID, location, and time. Each entry includes a small thumbnail image and a confidence percentage.
- Detected Face / Registered Face:** A comparison of the detected face (left) and the registered face (right) with a 100% confidence score.
- Person Details:** Information for 'SUJITHA - EN91', including 'FR001 - R6 C22 GF MAIN ENTRANCE V2', '19 Mar 2023 09:47:47 PM', '46 Years', and 'Asian' ethnicity.
- Similar Registered Face(s):** A section showing a similar face with a 99% confidence score.
- Video Playback:** A video window showing the person walking in a hallway, with a timestamp of '19 Mar 2023 09:47:47 PM'.

The screenshot displays the FaceR interface for a specific recognition event. The top navigation bar includes 'Dashboard', 'Organization', 'Devices', 'Global', 'Users', and 'Settings'. The main content area is divided into several sections:

- History:** A list of recognition events for 'EN7' with columns for 'WANTED' status, ID, location, and time. Each entry includes a small thumbnail image and a confidence percentage.
- Detected Face / Registered Face:** A comparison of the detected face (left) and the registered face (right) with a 99% confidence score.
- Person Details:** Information for 'EN7', including 'FR001 - R6 C22 GF MAIN ENTRANCE V2', '16 Mar 2023 09:40:10 AM', and 'Unknown' ethnicity.
- Similar Registered Face(s):** A section showing a similar face with a 99% confidence score.
- Video Playback:** A video window showing two people walking in a hallway, with a timestamp of '16 Mar 2023 09:40:10 AM'.

FACER LOG

The screenshot displays the FaceR log interface. The top navigation bar includes 'FaceR', 'Dashboard', 'Organization', 'Devices', 'Global', 'Users', and 'Settings'. The main content area shows a grid of face detection logs for the date 20/03/2023, from 12:00:00 AM to 11:59:59 PM. Each log entry includes a face image, a confidence score (e.g., 99%, 100%), a timestamp, a camera ID (e.g., FR001 - R6 C22 GF MAIN ENTRANCE V2), and detected attributes such as age, ethnicity, and gender. A sidebar on the left lists various filters like 'Entry/Exit', 'Gender', 'Age', 'Ethnicity', 'Expression', 'Facial Hair', 'Hair Type', 'Hair Color', 'Head Wear', 'Glasses', 'Face Mask', and 'Face image'. A dropdown menu on the right shows options for 'Detection Log', 'Recognition Log', 'Unrecognition Log', 'Enroll Log', 'Alarm History', and 'Notification History'. The bottom of the page indicates 'Page 1 of 382 Showing results 1 - 20 of 7626 Item(s)'.

- We can see detection log, recognition log, un recognition log and enroll log in FaceR log.
- We can see the face attributes in FaceR log.
- We can view log by using several filters. We can also perform image search in detection log, recognition log and enroll log

STATISTICAL DASHBOARD

Camera

- Number of cameras connected in FaceR.

Registered Person

- Total enrol known as registered person.
- We can see gender wise count when expand it.

Face Enroll

- Total faces enrolled count in FaceR.

Below count shown for Alarm, Notification, Face detection log, Face recognition log and Face un recognition log.

Total count

Last 7 days

This month

This year

Category

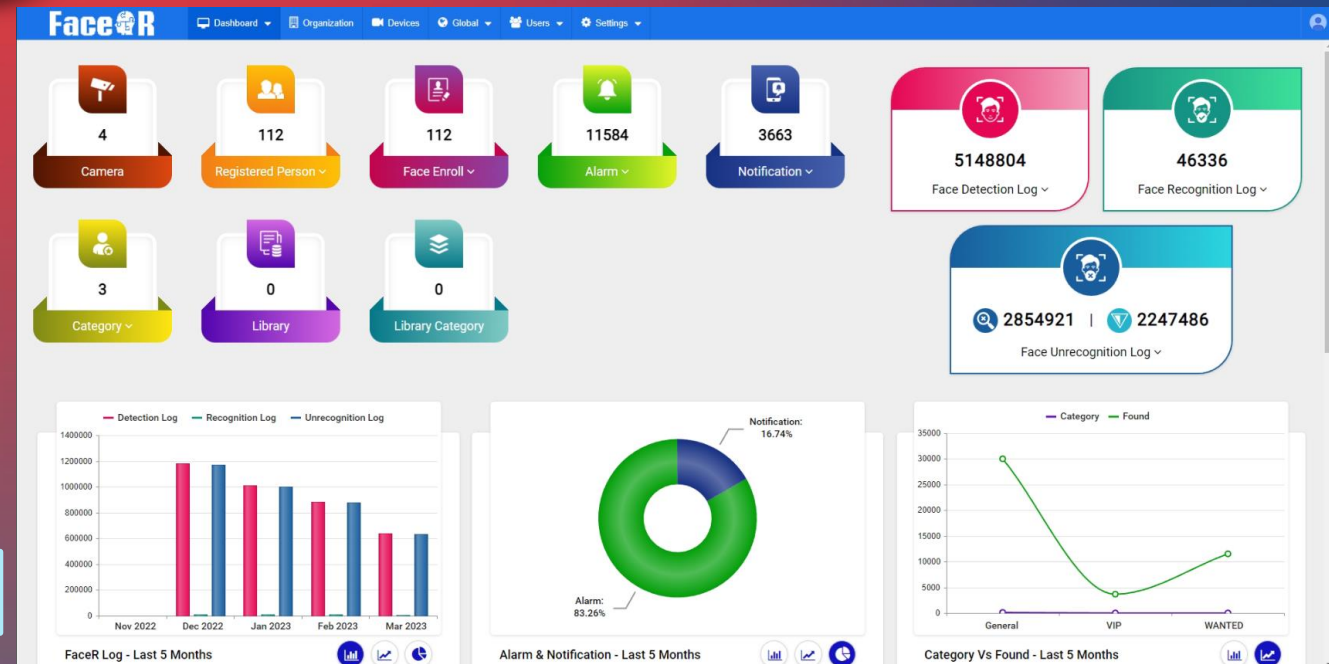
- Category wise enrolled person count.

Library

- Library wise enrolled person count.

Library Category

- Library can be grouped by library category.
- Library category wise enrolled person count.



Last 5 month log count

- Last 5 month detection, recognition, unrecognition, alarm, notification, category. vs Face found against the category bar chart, line chart.
- Last 5-Month Pie chart for Recognition vs. unrecognition percentage and alarm vs. notification percentage.

STATISTICAL DASHBOARD

Face R

Dashboard Organization Devices Global Users Settings

Latest: Alarm Notification

Name	Category	Date & time	Icons
Pauleshwar	WANTED	20 Mar 2023 11:40:23 AM	
Pauleshwar	WANTED	20 Mar 2023 11:40:19 AM	
Pauleshwar	WANTED	20 Mar 2023 11:40:18 AM	
Sujitha	WANTED	20 Mar 2023 09:52:30 AM	
Sujitha	WANTED	20 Mar 2023 09:52:28 AM	
Sujitha	WANTED	20 Mar 2023 09:52:27 AM	
Sandesh Wallet Parking	WANTED	20 Mar 2023 09:28:29 AM	
Sujitha	WANTED	19 Mar 2023 09:47:48 PM	
Sujitha	WANTED	19 Mar 2023 09:47:47 PM	
Sandesh Wallet Parking	WANTED	19 Mar 2023 09:42:50 PM	
Sandesh Wallet Parking	WANTED	19 Mar 2023 09:42:48 PM	
Sandesh Wallet Parking	WANTED	19 Mar 2023 09:40:41 PM	

Latest: Recognition Log Detection Log Unrecognition Log

Name	Category	Date & time	Icons
Chandran	General	20 Mar 2023 11:51:27 AM	
Ibrahim	General	20 Mar 2023 11:41:21 AM	
Pauleshwar	WANTED	20 Mar 2023 11:40:23 AM	
Pauleshwar	WANTED	20 Mar 2023 11:40:19 AM	
Pauleshwar	WANTED	20 Mar 2023 11:40:18 AM	
Juwel	General	20 Mar 2023 11:38:28 AM	
Juwel	General	20 Mar 2023 11:38:27 AM	
Juwel	General	20 Mar 2023 11:38:26 AM	
Juwel	General	20 Mar 2023 11:38:25 AM	
Ibrahim	General	20 Mar 2023 11:30:33 AM	
Raghu	General	20 Mar 2023 11:29:59 AM	
Raghu	General	20 Mar 2023 11:29:56 AM	

We can see latest 20 log for Alarm, Notification, Detection, Recognition, Unrecognition log.



FaceR

THANK YOU