

Datasheet Face Counting



Version 3.6

This Specification Sheet gives the details of system requirements, features and other salient points of AllGoVision Face Counting application.

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INTRODUCTION

This Specification sheet gives the details of system requirements, descriptions and salient points for features based on AllGoVision's Face Counting applications.

The product analyses rapidly the video data, detects human face, captures the face (Face Capture), tracks it and stores it and sends real time alarm based on the number of faces (Face Count) in the camera view at a single instant as well as over a period of time.

Other than Face Count, AllGoVision's Face Capture & Recognition technology also provides the data regarding time span for which any face is in the camera view (Face Presence), or even the distribution map of recognized faces (Face Frequency)

The software also provides Reporting & Analysis options.

SYSTEM REQUIREMENT

AllGoVision analytics has the following system hardware and software requirements.

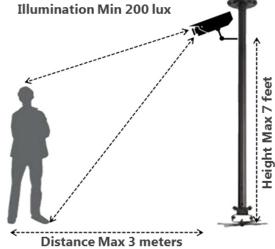
CATEGORY	REQUIREMENT
Operating System	Windows Server 2003, 2008, 2012 Window 7, 8
Hardware configuration	GPU: NVidia GTX 780 + i7 3930 6 core, 32 GB RAM, 1 TB HDD, Windows 7/8 can support up to 10 channels Or i7 3930 6 core, 32 GB RAM, 1 TB HDD, Windows 7/8 can support up to 6 channels For Client: i7 3930 6-core, 8 GB RAM, 1 TB HDD machine Database: 2 TB HDD (Minimum)
Network	Ethernet, 100 Mbit or higher recommended.
Hard Disk Space	50 GB for 1 week storage for alarm files (images & videos)
Database	My SQL 5.5.2
Resolution & Frame Rate	640x480 and above up to 1080p. Frame rate: 10 fps and above
Stand Alone Version Camera support	Models from Axis, Honeywell, Sony, Bosch, IndigoVision, Arecont Vision, Acti, IQInvision, Brickcom, Hikvision, Vision, Pelco, Panasonic
VMS Support	Milestone, Genetec, IndigoVision Note: With any other VMS supported through Alarm Center

INSTALLATION

The software is easy to install and simple to use with intuitive GUI. The AllGoVision Face Capture & Recognition supports face detection and face count for people moving towards the camera.

Camera Installation

- i) The camera installation should be Angular at a height of about 1.7 m facing the region where people can walk towards camera.
- ii) The camera installation should be generic IP cameras with good quality at Angular direction.
- iii) The illumination should be above 200 lux. Good constant illumination should be maintained throughout the day.
- iv) The height of installation depends on resolution. The pixel distance between eyes should be above 40 pixels for detection.

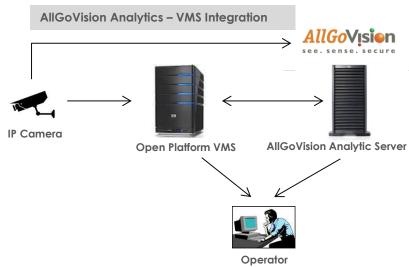


Integration

AllGoVision Face Counting application is available in 2 flavours:

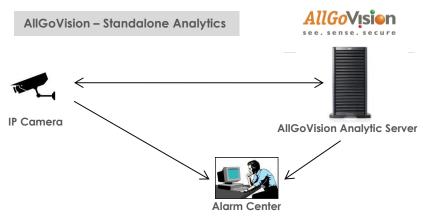
With VMS:

- AllGoVision application is based on Open Platform Standards.
- It is integrated with VMS like Milestone, Genetec, IndigoVision etc.



Without VMS:

- It is a standalone application.
- It works independent of VMS.
- Directly takes the video feed from camera.
- The statistics and alarms are seen in Alarm Center



FACE COUNTING FEATURE

- Accuracy > 90 %
- Environment: Indoor/Outdoor
- People face is visible in front of the camera.
- Face Capture: Detects face in the camera FOV, captures it and stores it
- Face Tracking: Tracks the face in camera FOV
- Face Presence: Detects the time span when any face is in camera FOV
- Face Frequency: Provides frequency distribution map for recognized faces.
- Face recognition based demographics (age and gender)
- The recognized person details can be displayed in real time.
- Works simultaneously with video analytics for other cameras

Applications

- Face Counting (for footfall statistics) at entrances and exits, service counters like ticket counters, platforms, departure and arrival gates etc.
- Face Capture for capturing and storing the faces to database for future tracking and identification and forensic search.
- Eye ball detection for different shelves in retail
- Viewership detection including demographic statistics (age, gender) for digital signage

Software Features

- Application to run as service
- The settings for Direct Camera connection
- The settings to send alarms to supported VMS clients and Alarm Center
- Scheduler to enable scheduling of Video Analytics
- Its own viewer, reporting and analysis of software

Reporting

- Report of Face Counting with different time duration, interval and plot options.
- Report of time span for Face Presence
- Frequency Distribution map for recognized people (Frequency)
- Face Analytics based demographic data (age, gender)
- Export of plot in JPEG and report in CSV format
- PDF format export supported
- Schedule of reports
- Auto Report E-mailer
- FTP upload of reports

Face Count Snapshot



ALLGOVISION GUI

AllGoVision product offers a graphical user interface with windows-oriented, tab based, point and pick interface. Extensive use of graphical icons, pull-down menus, buttons, check boxes, and radio-buttons are incorporated to reduce typing work to the minimum possible extent.

AllGoVision product GUI consists of tabs:

Server Setup Tab

The server setup tab consists of setup for VMS connection or camera connection.

Analytics Setup Tab

The Analytics setup tab gives options to set the analytics fields for different features. The face detection and counting settings are completed here.

Advanced Setup Tab

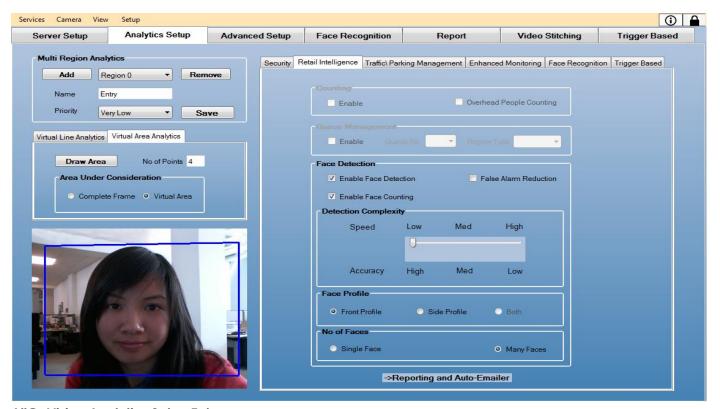
This tab gives options to select advanced settings like camera environment, analytics processing complexity, shadow removal sensitivity, camera view, predefined object size, minimum object size etc.

Report Tab

This tab gives option to plot the statistics of counting features including face counting. Both line and bar charts are possible. This also has auto e-mailer and export of plots and report.

Face Recognition Tab

This tab is used for Face Registration.



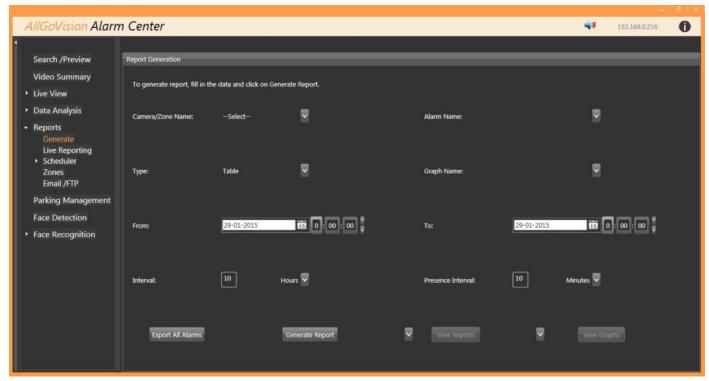
AllGoVision Analytics Setup Tab

ALLGOVISION ALARM CENTER

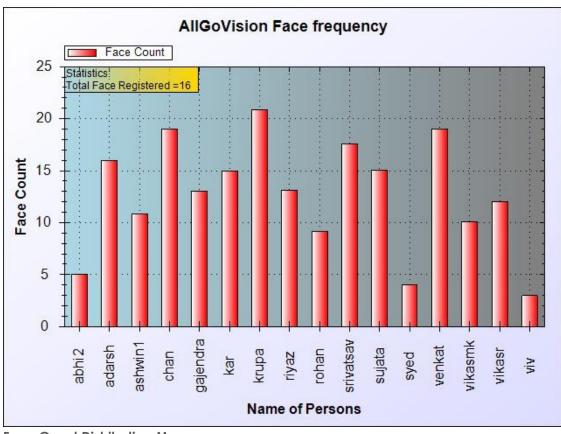
AllGoVision Alarm Center is a Client to view all the alarms generated by AllGoVision analytics running on different systems across a LAN. Database is MySQL.

Features

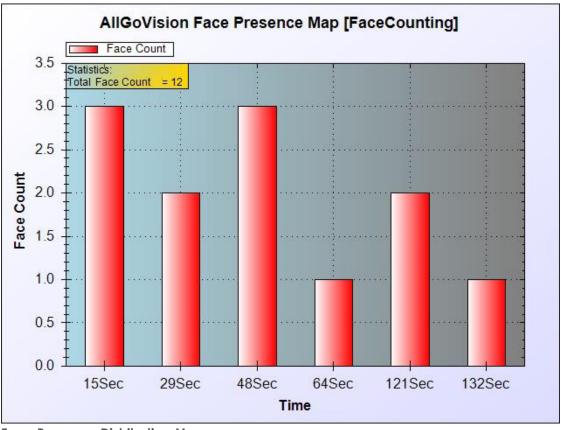
- Alarm Popup for latest alarm
- Alarm Preview and Alarm Video Playback options for any of the past alarms
- Displays alarms with date and time stamp
- Search: Filters to search alarms based on it types and properties
- Forensic Analysis based on various object properties size / color / type / time etc.
- Forensic Face Search: searching appearance of a person in recorded video
- Forensic search works with Milestone & Genetec recorded video
- Plot and Export of reports in JPEG, Excel and PDF format
- Schedule of Report
- FTP Upload / Email transmission of reports
- Report of Face Counting with different time duration, interval and plot options.
- Report of time span for Face Presence
- Frequency Distribution map for recognized people (Face Frequency)



AllGoVision Alarm Center – Generates plots of face counting, face presence, face distribution



Face Count Distribution Map



Face Presence Distribution Map