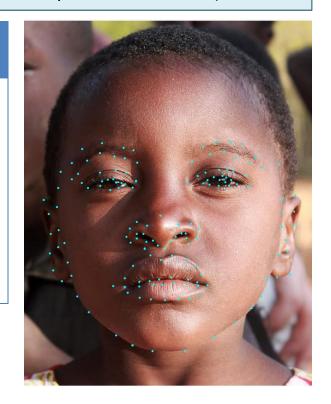


**B.S.E. face recognition** is a face detection and face match processes for verification/identification. Designed to high flexibility environment and proven used cases experiences. Using deep Learning engine which is developed under circumstance of hybrid use for on premise and on cloud use. Engine can connect with any standard source or non-standard source such data source from Photo, VDO clip, Streaming VDO, IP Camera or etc. The system also analyze automatically for best shot capture. The system implements image indexing, creating compact templates for searching. This in turn allows building a range of security applications such as real-time access control systems. Our system designed to perform equally well under varying lighting conditions. Recommended daylight, fluorescent and incandescent lighting. When testing on a system database, the library

successfully identifies individuals in 80-99% (depand on photo environment).

#### **Our Recognition Engine detection technology**

Software returns the coordinates of 150x150 facial feature points including eyes, eye contours, eyebrows, lip contours, nose tip, and so on. The detection works in real-time on desktop and mobile, which allows performing smooth real-time tracking and transformations of facial features in live video.





### **Our Recognition Engine detection technology**

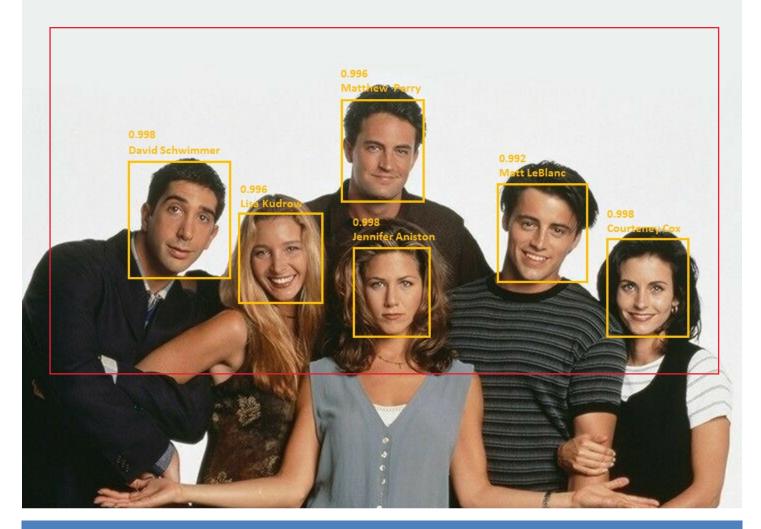
- ❖ Face matching speed 7,000,000 faces/sec
- Recognition speed under 0.2 sec
- ❖ Fast recognition in low-light environments (recommend illumination above 200lux)
- ❖ Face template size = 2.3 KB
- ❖ Automatic optimal face position recognition even changes skin or hair color.
- Unlimit database backup for face information. (capacity depend on each system)

| <u>Applications</u>                  |   |
|--------------------------------------|---|
| ❖ Blacklisted People Recognition     | Add people and images to Watchlists and set custom alarms for matches.  |
| ❖ API ready                          | Be able to integrate third-party services with the API files we provide.  |
| Organize face detection              | Detect at security checkpoints to limit access to enter area or crucial information.  |
| Real-time multiple faces recognition | Automatically real-time multiple faces recognition and tracking system equipped on the software that can detect human faces and confirm a target in an image sequence captured. |
| Multiple levels of user management   | Be able to create and adjusting levels of user in user management settings.   |

#### Solutions using facial recognition model

- Airport customs control
- Driver location tracking
- Use as access control verification
- VIP detect for hotel service

| Technical support              |   |
|--------------------------------|---|
| Operating Systems              | <ul><li>Windows 2012, 10 (32/64 bit)</li><li>Linux</li></ul>      |
| ❖ Video and image IP support   | <ul><li>MJPEG</li><li>MPEG4</li><li>H.264</li><li>MxPEG</li></ul> |
| Video and image Analog support | - NTSC<br>- PAL   |
| Image support formats          | - JPEG<br>- PNG<br>- BMP  |
| Resolution                     | - 720p or higher  |
| Frame Detection                | Min. 1.2 meter to 30 meters for detection area                    |
| <b>❖</b> Cameras               | - Fixed Camera  |



## **Output format**

- Recognition person name
- ❖ Accuracy Index (%)
- Capture snapshot Date /Time
- Capture camera ID





**Beyond Security Enterprise** 

# **Packages**

- FOC standard packagesFace recognition only
- FOC enterprise packages

Face recognition with fingerprint scanner

