Face Detection and Tracking
Real-time Identification
Demographic Analysis

SMARTFACE
Plug & play face recognition

SECURITY AND SURVEILLANCE
ACCESS CONTROL
RETAIL ANALYTICS
LOYALTY PROGRAMS

INNOVATRICS
YOUR BIOMETRIC PARTNER
SmartFace is a high-performance, scalable, face recognition server platform able to process multiple real-time video streams in parallel. Leveraging Innovatrics' industry leading algorithm, SmartFace allows system integrators to easily incorporate face recognition into their solutions.

**Key Features**

- **FACE DETECTION & TRACKING**
  Detects and tracks faces fast and accurately in multiple video streams

- **REAL-TIME FACE IDENTIFICATION**
  Quickly identifies faces from watchlists; designed to send automated real-time alerts

- **AGE & GENDER DETECTION**
  Estimates age and gender, augmenting people counting data with advanced demographics

- **WATCHLIST MANAGEMENT**
  Easy-to-configure watchlist management through REST API and GUI

- **MULTIPLE IP CAMERA PROCESSING**
  Manages multiple camera streams per server without compromising speed or accuracy

- **HARDWARE INDEPENDENT**
  Operates with wide range of IP cameras and server platforms
### Security and Surveillance

**Real-time facial identification**

Monitor large groups of people and rapidly identify potential security threats at airports, public gatherings, or sports arenas using real-time face detection and blacklist check.

- ✔ Multiple watchlists
- ✔ Blacklist monitoring
- ✔ Multiple face detection and tracking

### Access Control

**Constant people and property protection**

Provide a safer environment for your employees and visitors by using facial biometrics to control access and accurately monitor individuals on your premises.

- ✔ Seamless access
- ✔ Real-time identification
- ✔ Multiple face detection and tracking

### Retail Analytics

**Marketing data collection for the retail sector**

Carry out comprehensive analysis of in-store customers using facial biometrics to provide demographic information. Easily analyze how many people enter retail premises, time spent in-store, gender split, age demographics, and much more. Build up a profile of customers and calculate visit frequency, conversion rates, seasonal trends, and outliers.

- ✔ Statistical analysis
- ✔ Unique visitor counting
- ✔ Age & Gender detection

### Loyalty Programs

**Improved VIP customers experience**

Improve your VIP customer experience utilizing facial recognition. Identify key clients and customers immediately after they enter your premises and provide them with special services. Automatically create lists of return customers and reward the right ones accordingly.

- ✔ Real-time identification
- ✔ Dedicated VIP watchlist
- ✔ Real-time notifications
TECHNICAL SPECIFICATIONS

HW & SW REQUIREMENTS
- Operating system: Windows Server 2016 (x64), Windows 10
- Database: MS SQL Server 2016
- Storage: Minimum 2 GB for SmartFace + approx. 10 MB/camera/day
- Supported cameras: All IP cameras supporting Real Time Streaming Protocol
- Supported video formats: All standard video formats
- Supported GPU: CUDA compatible, min. 4 GB RAM

SIZING RECOMMENDATIONS
- RAM per camera*: 4 GB
- CPU per camera*: 1x 3 GHz CPU physical core
- Bandwidth per camera*: 4 – 8 Mbps
- Multiple faces tracking: Yes
  * 1 Full HD camera (1920x1080), 25 fps

INTEGRATION
- Interface: REST API
- Message notifications: ZeroMQ

Industry-leading Technology
Innovatrics face recognition technology is a top performer across all categories in NIST Face Recognition Vendor Test (FRVT).