



Tevian FaceSDK 2.2

Technical Specification

FaceSDK is a development kit that provides the face analysis engine to system integrators and other customers.

Features

- face detection
- face features detection
- face tracking
- demographic classification (gender, age, ethnicity)
- face attributes classification (glasses, hat, beard, etc.)
- face recognition
- liveness detection
- emotions classification

Minimal image requirements for facial recognition

- sharp image
- inter-pupil spacing larger than 32 pixels
- at least 64 grayscales within the face area

Target host computing performance

For Intel Core i5-7260U@2.2GHz, single threaded:

- face detection – 50 ms (ALG1), 75 ms (ALG2) per 1280x720 image
- face features detection – 1.5 ms (ALG1), 5 ms (ALG2) per face
- demographic classification – 18 ms
- attributes classification – 18 ms
- emotions classification – 18 ms, smiles only – 1 ms
- face template enrollment – 35 ms (ALG1), 150 ms (ALG2) per face
- template matching speed – 2 mln per sec

Target host minimum hardware requirements

Processor with SSE4.2 support, 4 GB RAM, 1,5 GB free disk space

Target host operating system

Windows 7 and older (ia32, amd64), Linux (amd64)

Biometric template

Enrollment template size – 2052 bytes

Documentation

Detailed manual includes API reference, user guide and fully documented examples to illustrate the main use cases

Programming languages and APIs

C++, C and C# wrappers

Development tools

Visual Studio 2015

Licensing

Licenses can be granted for the following components, with any combination possible:

- face detection module
- demographic estimation module
- attributes estimation module
- face recognition module

Activation

via SafeNet HASP HL