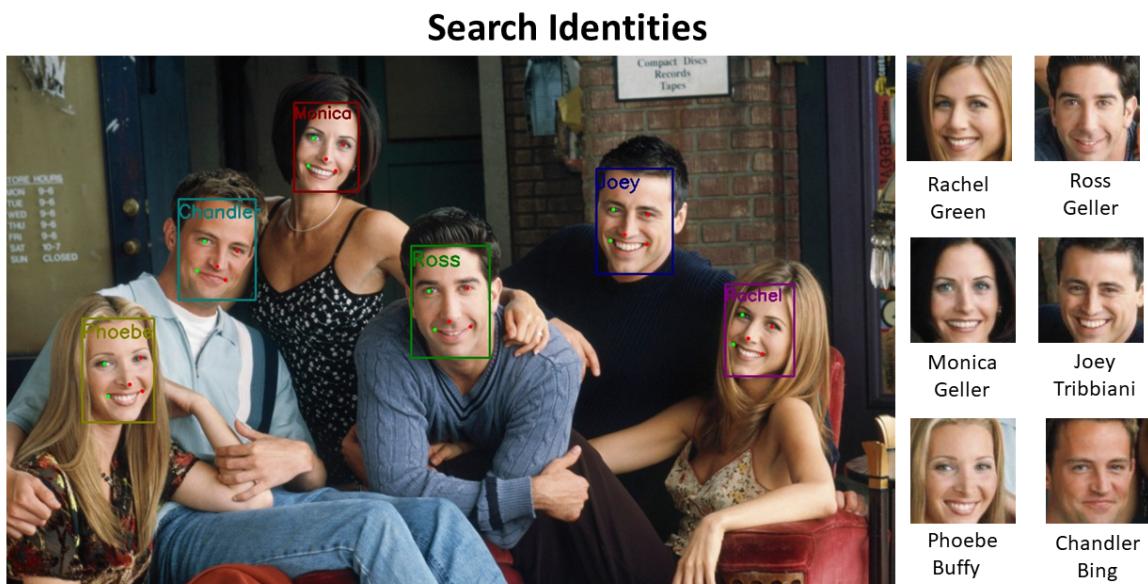


# Person Identification 오픈소스 정리

\* Search Keyword: Face Recognition, Face Verification, Face Identification

## 1. InsightFace

- **Summary:** MXNet과 PyTorch 기반의 2D, 3D 얼굴 분석 툴킷
- **GitHub - Star: 17.5K | Fork: 4.7K**
  - <https://github.com/deepinsight/insightface>



## 2. Face\_Recognition

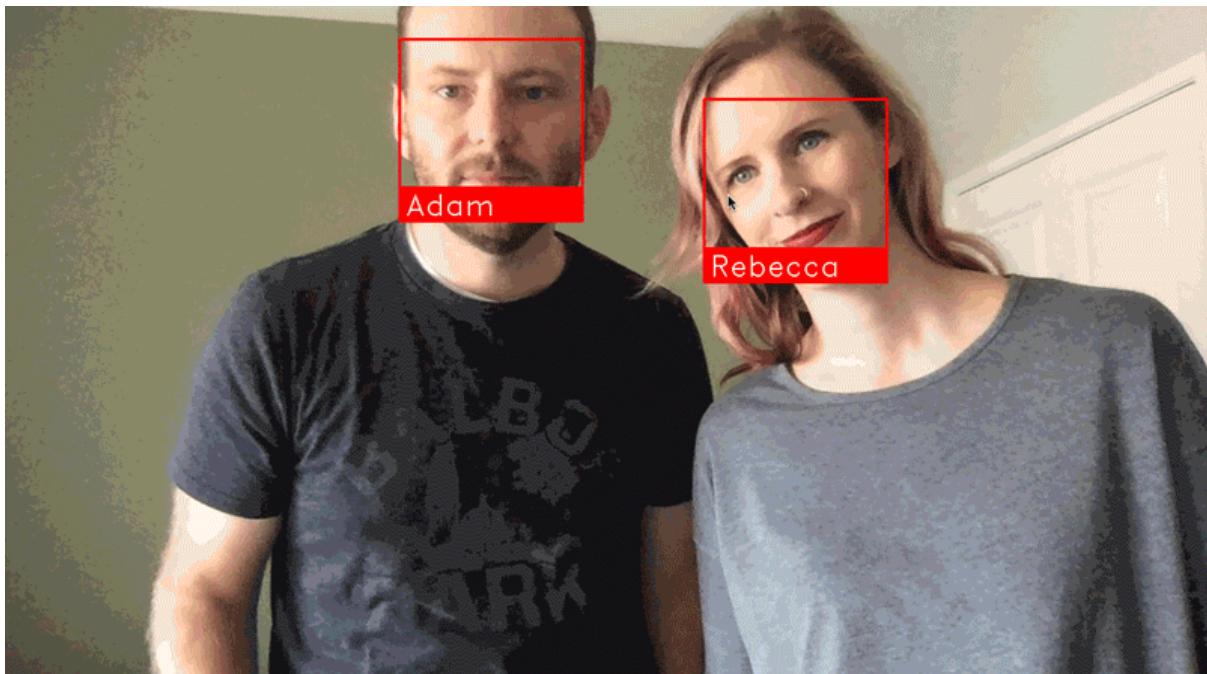
- **Summary:** 간단한 코드로 얼굴 인식을 수행할 수 있는 API
- **GitHub - Star: 49.1K | Fork: 13.1K**
  - [https://github.com/ageitgey/face\\_recognition](https://github.com/ageitgey/face_recognition)



Input

→ Picture contains  
“Joe Biden”

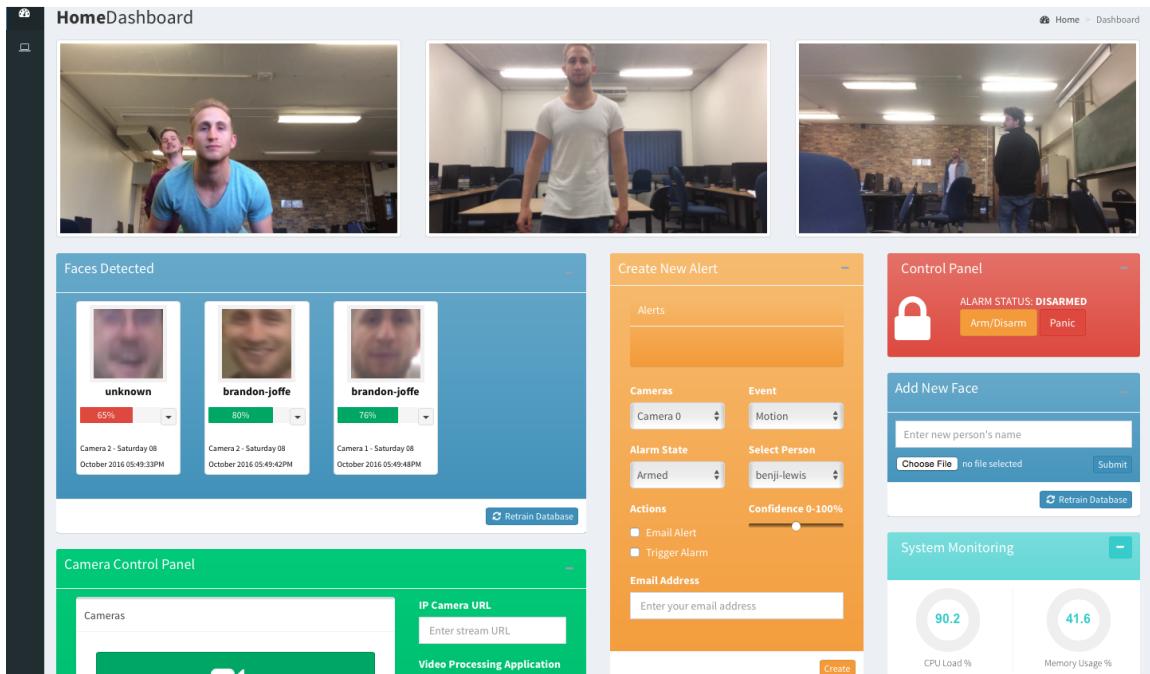
Output



### 3. OpenFace

- Official Homepage: <http://cmusatyalab.github.io/openface/>
- Summary: 얼굴 랜드마크, 머리 자세, 머리 움직임, 시선 추적, 얼굴 특징점을 추출하는 심층 인공신경망
- GitHub - Star: 6.1K | Fork: 1.8K
  - <https://github.com/TadasBaltrusaitis/OpenFace>
- GitHub - Star: 14.8K | Fork: 3.6

- <https://github.com/cmusatyalab/openface>
- **관련 프로젝트:** 집 감시  
DashBoard([https://github.com/BrandonJoffe/home\\_surveillance](https://github.com/BrandonJoffe/home_surveillance))
- **reference:** <https://www.popit.kr/openface-exo-member-face-recognition/>



## 4. CompareFace

- **Summary:** 얼굴을 등록하면 저장된 데이터들 간의 얼굴 유사성을 비교하여 얼굴 인식 및 검증(Default: FaceNet)
  - **custom builds 관련:** <https://github.com/exadel-inc/CompreFace/tree/master/custom-builds>
- **GitHub - Star: 3.2K | Fork: 454**
  - <https://github.com/exadel-inc/CompreFace>

The screenshot shows a web-based application management interface. On the left, there's a sidebar with a logo and navigation links for 'Dashboard', 'Test', and 'Face Collection'. The main area has tabs for 'Application' and 'Services'. Under 'Application', there's a section for 'Demo tutorial' with a 'DETECTION' button, an API key, and a 'TEST' button. Under 'Services', there's a search bar. On the right, there's a 'Users' section with a table showing one user: 'Alex Butkevich' with the role 'OWNER'. A note states: 'All registered CompreFace users except the first one won't see any applications. To give them access you need to add them to individual application. Global Owner and Global Administrators have full access to all applications.' There are 'CREATE' and 'ADD' buttons at the bottom.

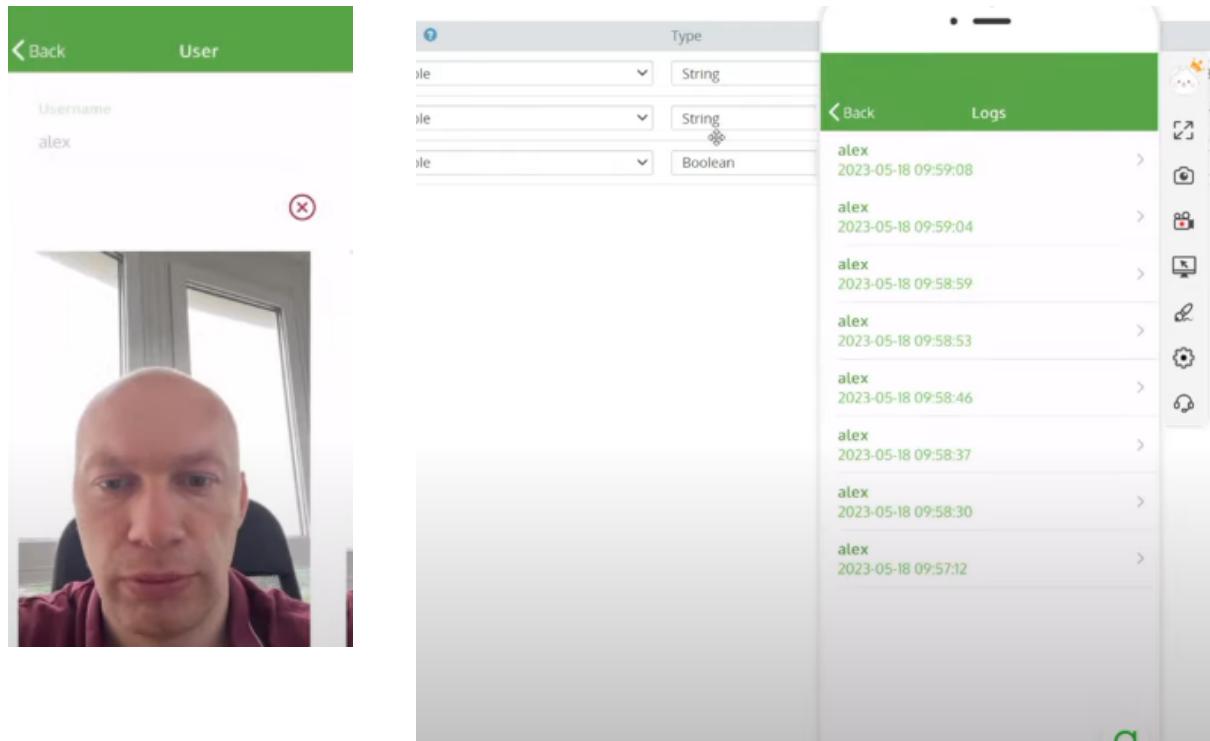
The screenshot shows the 'GuestList' feature of the Exadel CompreFace application. It displays a photo of two women with blue face detection boxes. A callout box identifies the woman on the right as 'GuestID257' with a similarity of 0.99, female, and age 25-32. Below the photo, there's a 'Request' section with a curl command and a 'Response' section with a JSON object. The request is:

```
curl -X POST "http://localhost:8000/api/v1/recognition/recognize?face_plugins=landmarks,gr" \
-H "Content-Type: multipart/form-data" \
-H "x-api-key: 09b7d047-0082-4665-871-bcb42122831r" \
-F file=@pxpexels-ketut-subiyanto-4907446.jpg"
```

The response is:

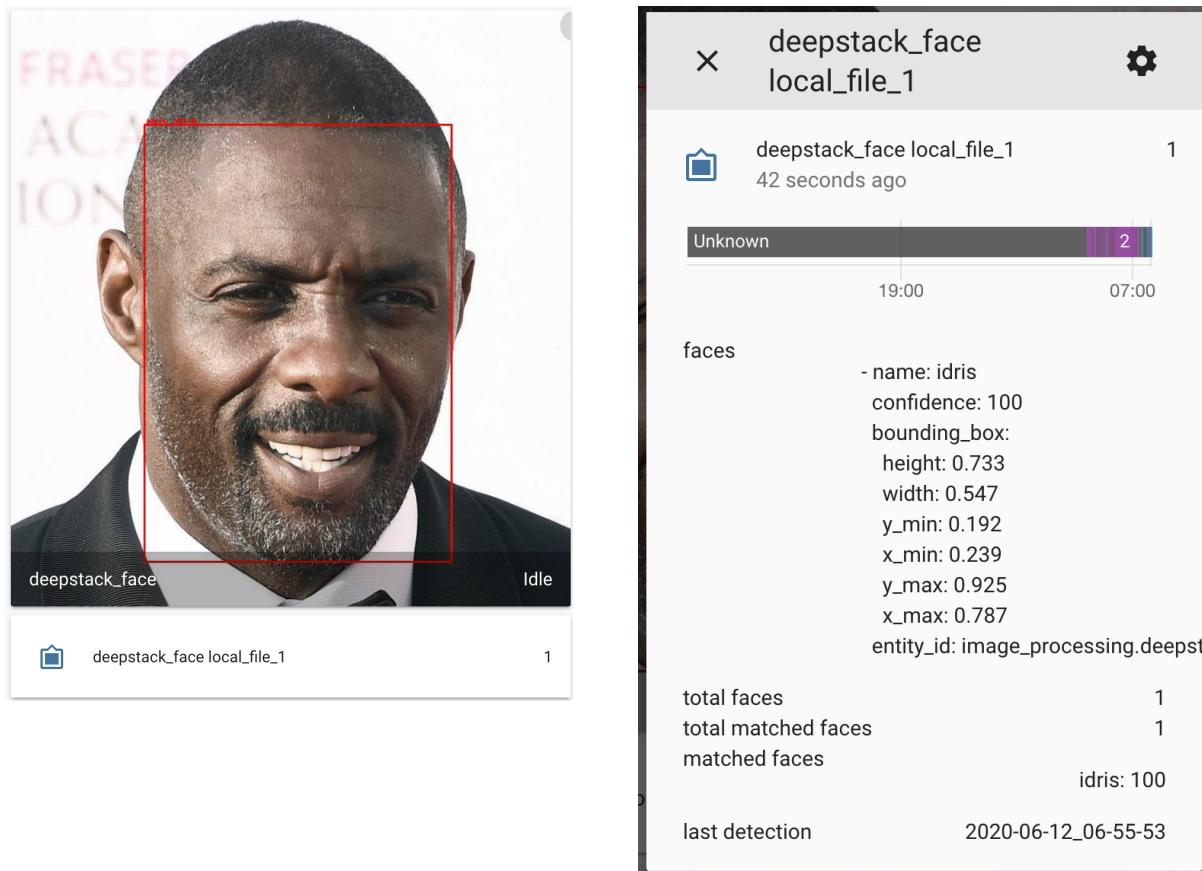
```
{
  "result": [
    {
      "age": [
        {
          "probability": 0.9999997615814209,
          "high": 32,
          "low": 25
        }
      ],
      "gender": [
        {
          "probability": 1,
          "value": "female"
        }
      ],
      "box": [
        {
          "probability": 0.999999
        }
      ]
    }
  ]
}
```

At the bottom right, it says 'Build version 1.2.0'.



## 5. HASS-Deepstack-face

- **Summary:** 홈 자동화(Home Assistant) 오픈소스의 구성 요소 중 하나, 얼굴 인식
- **GitHub - Star: 205 | Fork: 52**
  - <https://github.com/robmarkcole/HASS-Deepstack-face>



## 6. FaceNet - PyTorch

- **Summary:** 각각의 얼굴 이미지를 128차원으로 임베딩하여 유clidean 공간에서 이미지 간의 거리(가까울 수록 유사도가 높음)를 통해 분류하여 identification, verification, clustering할 수 있도록 하는 모델인 FaceNet을 PyTorch로 구현
- **GitHub - Star: 3.7K | Fork: 810**
  - <https://github.com/timesler/facenet-pytorch>



## 7. DeepFace

- **Summary:** 얼굴 인식 및 얼굴 속성 분석(나이, 성별, 감정 및 인종) 라이브러리
- **GitHub - Star: 7.2K | Fork: 1.5K**
  - <https://github.com/serengil/deepface>



*<Temporarily saved>*

## 통합 관리 UI

- Double Take

- GitHub - Star: 916 | Fork: 65: <https://github.com/jakowenko/double-take>

