

Face Detection API

This repository includes the Face Detection API. Models used for Face Recognition are MTCNN (Multi-task Cascade Convolutional Neural Network) and OpenCV haar cascades. FastApi is used on the API side.

Project Folder

- **env/**
 - This directory includes env files
- **img/**
 - This directory includes test image files
- **models/**
 - opencv
 - haarcascades
 - haarcascade_frontalface_default.xml
- **src/**
 - models.py
- .dockerignore
- .gitignore
- Dockerfile
- main.py
- ReadMe.md
- ReadMe.pdf

Install

```
pip install requirements.txt
```

1- Create New Env.

```
conda env create -f env/env.yaml
conda activate ENV_NAME
```

Run

1- Run on Local System

```
python main.py
or
uvicorn main:app --reload
```

2- Run on with Docker System

- **Step 1:** Docker Image Build

```
docker build -t face_detection_api .
```

- **Step 1 Control:**

```
docker image ls
or
docker images
```

- **Step 2:** Create and Run Container from Docker Image

```
docker run -d -p 8000:8000 face_detection_api
or
docker run --name face_detection_api_c -d -p 8000:8000 face_detection_api
```

- **Step 2.1 Control:**

```
docker ps
or
docker ps -a
```

- **Step 2.2 Control:**

```
docker logs <CONTAINER ID OR CONTAINER NAME>
```

- **Step 2.3 Control:**

```
docker container ls -a
docker rm <CONTAINER ID OR CONTAINER NAME>
docker rmi face_detection_api
```

Check Web Browser:

- <http://127.0.0.1:8000> or <http://localhost:8000>
- <http://127.0.0.1:8000/docs>
- <http://127.0.0.1:8000/redoc>

- **ToDo**

- ☐ Adult Detection
- ☐ Logging

Additional information

Joint Face Detection and Alignment using Multi-task Cascaded Convolutional Networks (MTCCN) | <https://arxiv.org/abs/1604.02878>

Contact

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