

Machine learning pipeline:

FaceNet: Preprocessing – (Face Detection) - CONVNet

Note: This is not a typical facial recognition/verification system since there is relatively large dataset available for a small group of people and no need to apply one-shot learning.

- **Layers Needed**

Preprocessing: Raw Image from Training Set – Data Augmentation – Resizing –

Rescaling – Image

CONVNet: Image – Inception Blocks –Top Layers

- **Interpretation**

Data Augmentation: Random Rotation, Random Flip

Inception Block: Inception (CONV 5x5, CONV 3x3, CONV 1x1, MAXPOOL)

With CONV2D, MAXPOOL, BatchNorm, Relu, Padding

Top Layers: AveragePOOL, Flatten, FC, SoftMax