F. Schroff, D. Kalenichenko and J. Philbin, "**FaceNet: A unified embedding for face recognition and clustering**," 2015 IEEE Conference on Computer Vision and Pattern Recognition (CVPR), Boston, MA, 2015, pp. 815-823. doi: 10.1109/CVPR.2015.7298682

The authors deeply illustrated a method which directly learns an embedding into an Euclidean space for face verification. The FaceNet model maps a tight crop alignment which is around face area to a 128-byte Euclidean embedding (unique features of face). The authors took into consideration two deep network architectures to make this model. The authors showed precise results of the two categories of this model on Labeled Faces in the Wild(LFW) dataset and the YouTube Face DB respectively. The paper also includes the future work of reducing the size of model, CPU requirements and the long training time of the model.