In this chapter, the discussion about all the research papers which were selected will be mentioned in order of the references. In this chapter , the details about data collection, accuracy , efficiency and future trends will be discussed in each paragraph for each research paper

Though the development of face recognition systems is a huge impact to the technology fields but it also may raise privacy concerns . with this highly developed technologies it may lead to sexual violations . could even lead to judging someone’s race, cast ,sexual orientation . there must be some algorithms to avoid these types of problems too

In this study a dataset about Bollywood celebrities has been used after the implementation this was the result , TP=2747 FN=11 FP=63 TN=11 and the final conclusion of this study is best combination for face recognition and detection is Face-Recognition Module and MTCNN

WebFace260M is the one of dataset which has been used in this. With the experiment testing using 120k real images they have achieved 99.33% accuracy on LFW and 93.61 on average across the five benchmarks.

The conclusion of this research is , a whole pipeline will be provided to modules by the facesdk. Other features that has been provided by the sdk are face detection, face landmark localization ,and face feature extraction . the dataset which has been used in this study is widerface dataset,MegaFace

Dataset for this research is Feret which is a larger dataset. Here the DET curve gives uniform treatment to both types of error, and uses a logarithm scale for both axes, which spreads out the plot and better distinguishes different well performing systems and usually produces plots that are close to linear. Also the multi layer perceptron can perform as a classifier

In this study it describes about the application of deep learning models in facial recognition. It improves the Googlenet and then to improve the grouping convolution method under multi gpu applications. The future step from this point will be testing the generalization ability of the network model using a larger dataset.

According to this research study CASIA-WebFace and LFW dataset has been employed for training and testing. And also a synthetic version also generated. As of the conclusion , the main purpose was to explore the potentials of synthetic data . performance has been improved constantly when enlarging the intra – clas variation of synthetic data. There’s a big impact on the performance from width and depth of the synthetic data.

For this research Megaface2 and mS!M datasets were used . as of the conclusion of this study . while the webFace260M dataset preparation , the main concern was about privacy issues . due to that fact all the images were collected from public internet sources for testing and training. This dataset consist of diverse set of birthdates , ages and poses. For the evaluation process Unbiased facial recognition was designed specially. As the end conclusion this model reduces failure rate significantly from 40%.

In this research study for training datasets MS1MV2 , MS1mV3 and webface4m were used. Those datasets consists of millions of data each. the testing has been done on 9 different datasets. Datasets have been divided into to three groups High quality, Mixed Quality and low quality and for the training process dataset has been cropped and aligned faces with five different landmarks. Since the trained method is expected be trained better with the unidentifiable data three on-the-fly augmentations have been introduced which are cropping,rescalling and photometric jittering as of the end conclusion , the problem which was addressed in this research is unidentifiable pictures in datasets. as a solution problem was approached in two ways first one is using feature norm as proxy for the image qyality and changing the margin function adaptively based on feature norm. when it comes to limitations the problem is here the loss function doesn’t give special treatment to mislabeled samples . as in the ending part it says the its better to always move on to new datasets.

In this chapter all the data collection, accuracy , testing details , social impact and the future implementation about the all the research papers are mentioned .