

Age Prediction using face images

Number of images available: 23705

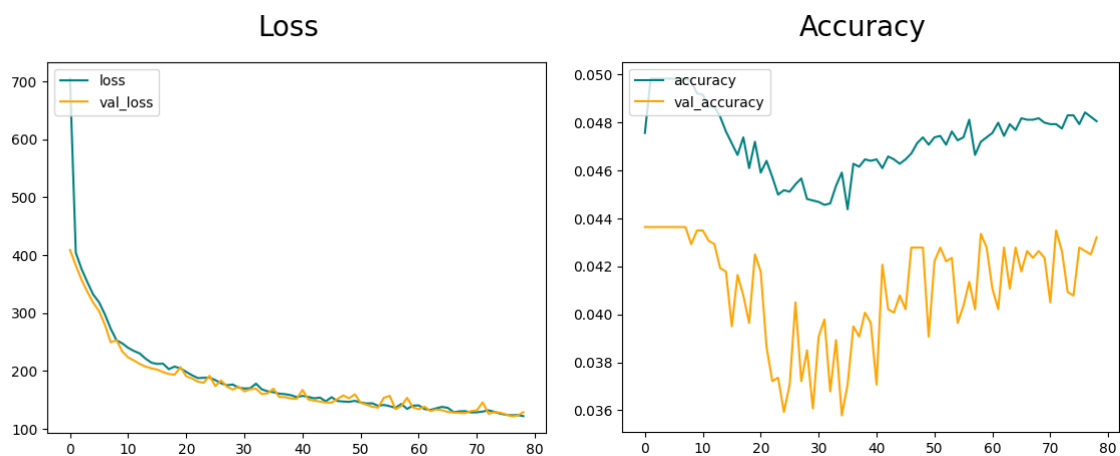
Number of duplicates: 226

Total number of unique images: 23479

Number of channels=1 (grey-scale images)

The dataset consisted of images as features, with age serving as the target variable. The training and test datasets were split into 70% and 30%, respectively. The ML model comprises three convolutional layers, each followed by max-pooling layers to reduce spatial dimensions, effectively capturing hierarchical features in the input images. A flatten layer precedes the fully connected layers, aiding in feature extraction.

To prevent overfitting, a dropout layer was introduced with a rate of 0.2. The final layer is a single-unit fully connected layer with a linear activation function, suitable for regression. I employed the mean squared error (MSE) loss function and track MSE and accuracy as training metrics. The model demonstrates some learning capability as mse decreases while accuracy increases over each epoch as shown in the plots.



In conclusion age can be predicted from grey-scale images using a CNN, where the accuracy can be improved by considering other models such as ResNet as well as additional features such as gender or ethnicity.