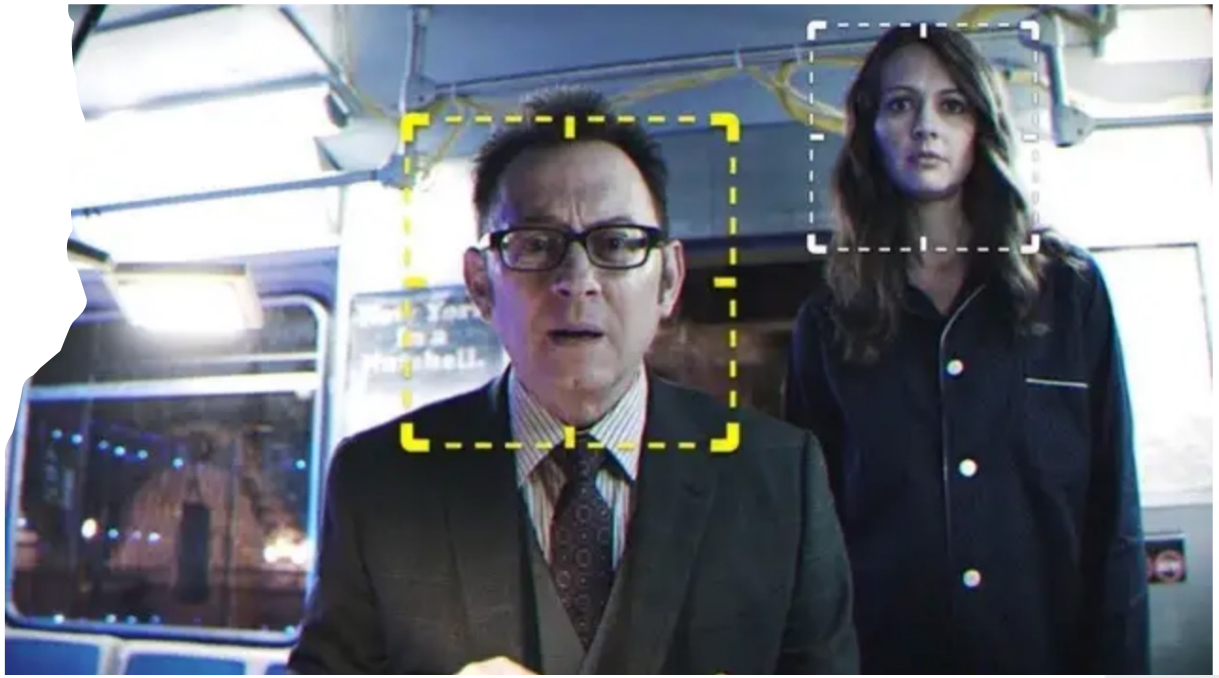
FACE AGE DETECTION USING DEEP LEARNING



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AGENDA

- Problem Statement
- Data Description
- Data Preprocessing
- Deep Learning Approaches
- Accuracy
- Conclusion

PROBLEM STATEMENT

Build two deep models - one from scratch and the other using a pretrained model to obtain embeddings of the given data.

DATASET

Faces Ages Detection Dataset available on Kaggle

DATA DESCRIPTION

- Consist a dataset of 19906 Images
- These are face images which could be used to classify as 'Young', 'Middle' and 'Old'.

DATA PREPROCESSING

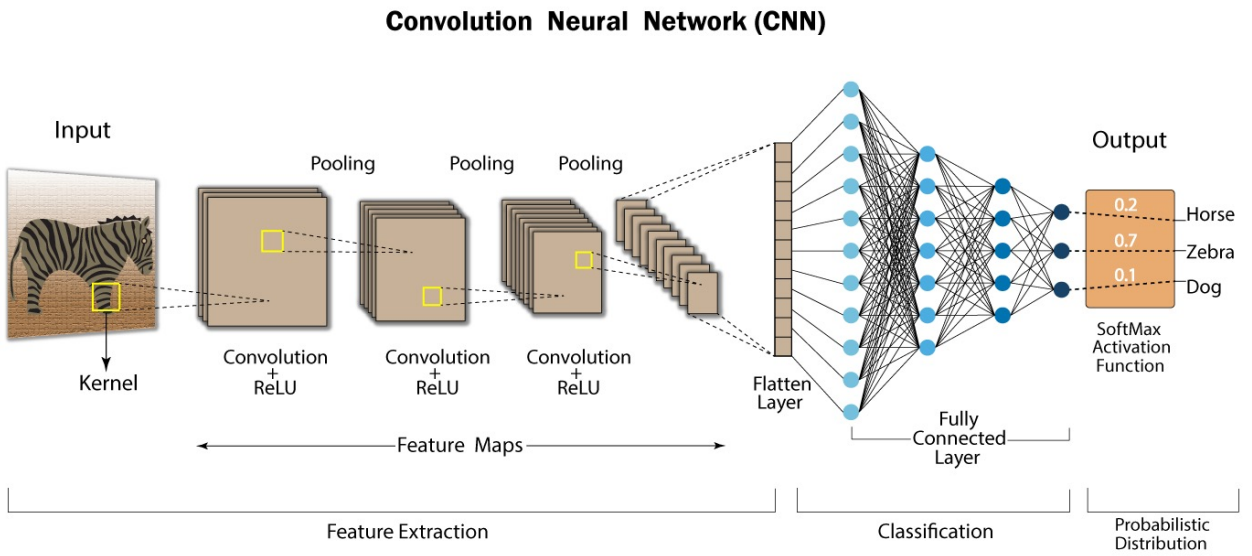
- Data augmentation
- Resize Images
- Convert to RGB image
- Change age to categorical value

DEEP LEARNING APPROACHES

- Convolutional Neural Networks from scratch
- Pre-trained model

LAYERS OF CONVOLUTIONAL NEURAL NETWORK

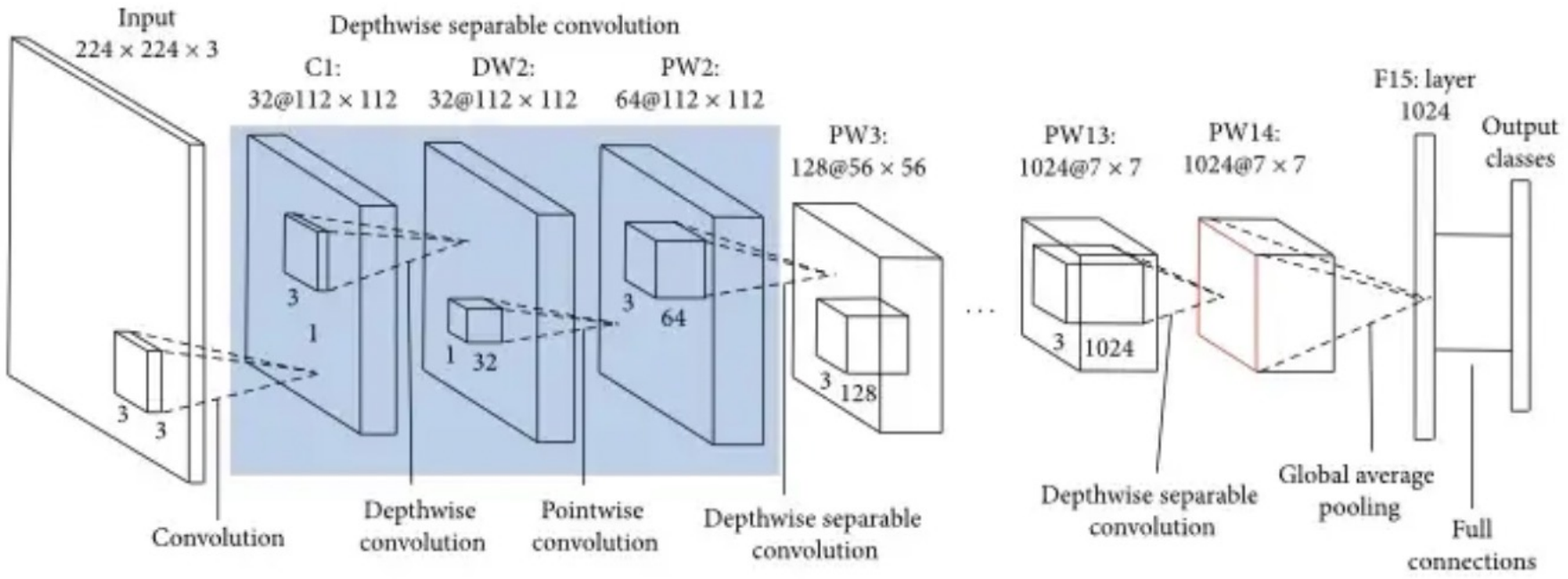
- Convolutional layer
- Pooling layer
- Fully Connected layer



Other Layers

- Drop Out layer
- Batch Normalization layer

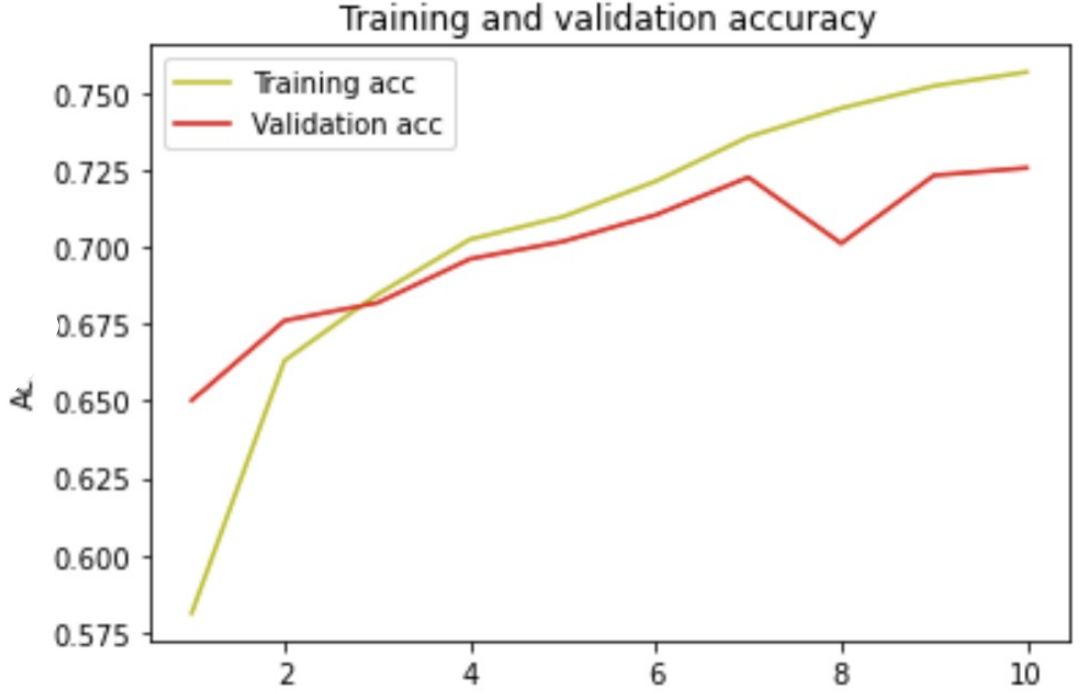
PRETRAINED MODEL - MOBILENET

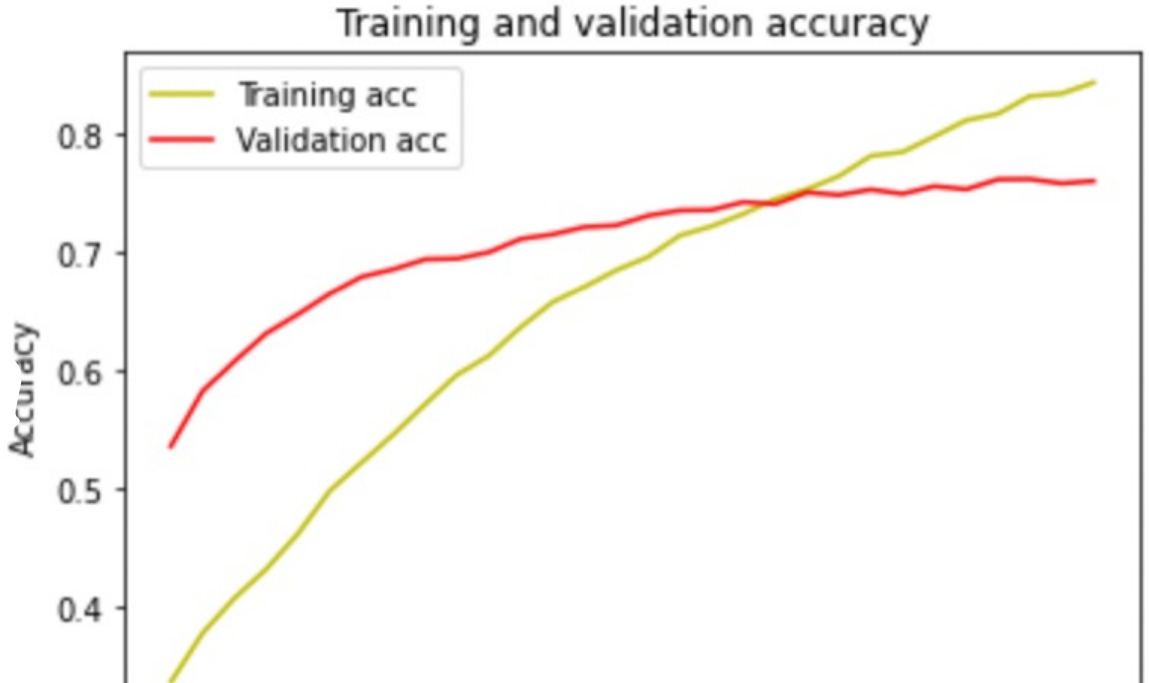


ACCURACY

- The test accuracy of CNN is 76.19%

- The test accuracy of MobileNet model is also 76.09%





CONCLUSION

Algorithms	*Accuracy*
CNN	*76.19%*
MobileNet	*76.09 %*