

DEEP LEARNING ASSIGNMENT

Task: Predicting celebrity images

Model chosen : Convolutional Neural Network(CNN)

Convolutional Neural Networks (CNNs) are a class of deep neural networks primarily used for image recognition and classification tasks. They are designed to automatically and adaptively learn spatial hierarchies of features from input images.

```
model = tf.keras.models.Sequential([
    tf.keras.layers.Conv2D(32, (3, 3), activation='relu', input_shape=(128, 128, 3)),
    tf.keras.layers.MaxPooling2D((2, 2)),
    tf.keras.layers.Flatten(),
    tf.keras.layers.Dense(256, activation='relu'),
    tf.keras.layers.Dropout(0.5),
    tf.keras.layers.Dense(512, activation='relu'),
    tf.keras.layers.Dense(5, activation='softmax') # Adjusted to 5 classes
])
```

Here