TENSORFOW CALLBACKS

***TensorFlow Callbacks***are a powerful tool for enhancing the training process of neural networks. These callbacks provide the ability to monitor and modify the behavior of the model during training, evaluation, or inference.

**Common TensorFlow Callbacks**

[TensorFlow](https://www.geeksforgeeks.org/python/introduction-to-tensorflow/)provides several built-in callbacks that can be very useful:

* [**EarlyStopping**](https://www.geeksforgeeks.org/machine-learning/regularization-by-early-stopping/): Stops training when a monitored metric has stopped improving.

early\_stopping = tf.keras.callbacks.EarlyStopping(monitor='val\_loss', patience=3)

* **ModelCheckpoint**: Saves the model at specified intervals.

model\_checkpoint = tf.keras.callbacks.ModelCheckpoint(filepath='model.h5', save\_best\_only=True)

* **LearningRateScheduler**: Schedules changes to the learning rate during training.

def scheduler(epoch, lr):  
 if epoch < 10:  
 return lr  
 else:  
 return lr \* tf.math.exp(-0.1)  
  
lr\_scheduler = tf.keras.callbacks.LearningRateScheduler(scheduler)

* **TensorBoard**: Logs data for visualization in TensorBoard.

tensorboard = tf.keras.callbacks.TensorBoard(log\_dir='./logs')