Various Neural Network Architect

Assignment Questions

1. Describe the basic structure of a Feedforward Neural Network (FNN). What is the purpose of the activation function?

2 Explain the role of convolutional layers in a CNN. Why are pooling layers commonly used, and what do they achieve?

3 What is the key characteristic that differentiates Recurrent Neural Networks (RNNs) from other neural networks? How does an RNN handle sequential data?

4 . Discuss the components of a Long Short-Term Memory (LSTM) network. How does it address the vanishing gradient problem?

5 Describe the roles of the generator and discriminator in a Generative Adversarial Network (GAN). What is the training objective for each?