CNN Fundamentals

Assignment Questions

PW SKILLS

1. Explain the basic components of a digital image and how it is represented in a computer. State the differences between grayscale and color images.

2. Define Convolutional Neural Networks (CNNs) and discuss their role in image processing.Describe the key advantages of using CNNs over traditional neural networks for image-related tasks.

3. Define convolutional layers and their purpose in a CNN.Discuss the concept of filters and how they are applied during the convolution operation.Explain the use of padding and strides in convolutional layers and their impact on the output size.

4. Describe the purpose of pooling layers in CNNs.Compare max pooling and average pooling operations.