

Quiz 2 Summary:

This quiz covers various topics related to neural networks, data augmentation, convolutional layers, and categorical encoding.

1. The quiz starts with a question about the purpose of data augmentation in computer vision, and the correct answer is to improve the model's generalization by introducing variations in the data.
2. The second question is about the concept of transfer learning in computer vision, and the correct answer is using pre-trained models on large datasets to improve performance on specific tasks.
3. The third question involves calculating the trainable parameters with bias in a neural network with a specific architecture.
4. The fourth question tests knowledge about categorical encoding, and the correct answer is that it is used to represent categorical data as numerical values.
5. The fifth question is about the number of binary columns created after one-hot encoding a categorical feature.
6. The sixth question requires providing the correct one-hot encoding for a specific category.
7. The seventh question involves calculating the partial derivatives of a given function with respect to x and y .
8. The eighth question requires applying a $3 \times 3 \times 1$ convolutional filter to a given matrix with padding and stride.
9. The ninth question is about calculating the number of parameters per layer in a convolutional neural network with a specific architecture.
10. The final question involves filling out a binary classification table with True Positive (TP), True Negative (TN), False Positive (FP), and False Negative (FN) cases.

Overall, this quiz covers a diverse range of topics related to computer vision, neural networks, and fundamental concepts used in deep learning and image processing.