

### Quiz 3 Summary:

This quiz focuses on topics related to object detection, evaluation metrics, and the Hungarian algorithm.

1. The first question is about the computer vision task that involves identifying and locating objects within an image or video, and the correct answer is object detection.
2. The second question asks about the commonly used loss function for multi-class classification problems, and the correct answer is Categorical Cross-Entropy Loss.
3. The third question inquires about the activation function often used in conjunction with Categorical Cross-Entropy Loss for multi-class classification, and the correct answer is Softmax.
4. The fourth question is about Intersection over Union (IoU) and its definition in the context of object detection.
5. The fifth question involves True Positive (TP), False Positive (FP), and False Negative (FN) cases in object detection and the definitions of Precision, Recall, and F1 score.
6. The sixth question asks about the two main components of the loss function used in object detection tasks, and the correct answer is Classification Loss and Regression Loss.
7. The seventh question presents a scenario of not having enough data to train an object detection network and asks what to do in such a situation, with the correct answer being Image Augmentation.
8. The eighth question is a True/False statement about the Hungarian algorithm, and the correct answer is not provided in the quiz.
9. The ninth question involves solving a cost matrix using the Hungarian algorithm to find the optimal match results.
10. The final question asks how Average Precision (AP) is computed for a single class in object detection, and the correct answer is by taking the area under the precision-recall curve.

This quiz covers various aspects of object detection, evaluation metrics, and optimization algorithms, providing an overview of important concepts in computer vision tasks related to object detection.