

Computer Vision - Fall 2022

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|---------------------|------------------------------------|
| Started on | Thursday, 1 December 2022, 4:43 PM |
| State | Finished |
| Completed on | Thursday, 1 December 2022, 4:53 PM |
| Time taken | 9 mins 29 secs |
| Marks | 7.00/15.00 |
| Grade | 2.33 out of 5.00 (47%) |

Quiz navigation

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Finish review

The most efficient algorithm from the region-based object detection methods is _____.

- ☒ a. Fast R-CNN
- ☐ b. Faster R-CNN
- ☐ c. R-CNN
- ☐ d. Fastest R-CNN

✗

Your answer is incorrect.

The correct answer is:
Faster R-CNN

Question **1**

Incorrect

Mark 0.00 out of 1.00

Flag question

The earliest/oldest algorithm from the region-based object detection approaches is _____.

- ☐ a. Fast R-CNN
- ☐ b. Faster R-CNN
- ☒ c. R-CNN
- ☐ d. Fastest R-CNN

✓

Your answer is correct.

The correct answer is:
R-CNN

Question **2**

Correct

Mark 1.00 out of 1.00

Flag question

The advantage of using an encoder is to restore the information lost by the decoder to produce better segmentation masks.

- ☒ a. true
- ☐ b. false

✗

Your answer is incorrect.

The correct answer is:
false

Question **3**

Incorrect

Mark 0.00 out of 1.00

Flag question

The normal CNN architecture used for image classification is also known as _____.

- ☐ a. decoder
- ☒ b. encoder

✓

Your answer is correct.

The correct answer is:
encoder

Question **4**

Correct

Mark 1.00 out of 1.00

Flag question

The encoder-decoder architecture is typically useful for performing _____.

- ☒ a. image segmentation
- ☐ b. object detection

✓

Question **5**

Correct

Mark 1.00 out of 1.00

Flag question

- ☐ c. image classification only

Your answer is correct.

The correct answer is:
image segmentation

The _____ segmentation algorithm can be used to count the number of the segmented objects from each class in addition to producing their segmentation masks.

- ☒ a. instance
- ☐ b. semantic



Your answer is correct.

The correct answer is:
instance

Question **6**

Correct

Mark 1.00 out of 1.00

🚩 Flag question

Because the regions of interest generated in the region proposal phase might have different sizes, they are first applied _____ operation to resize them all with the same fixed size before sending them to CNNs in the later layers for classification and bounding box regression.

- ☒ a. warping
- ☐ b. convolution
- ☐ c. concatenation
- ☐ d. deconvolution



Your answer is correct.

The correct answer is:
warping

Question **7**

Correct

Mark 1.00 out of 1.00

🚩 Flag question

Which of the following segmentation algorithms is the combination of both semantic segmentation and instance segmentation?

- ☒ a. pyramid segmentation
- ☐ b. polynomial segmentation
- ☐ c. paranoma segmentation
- ☐ d. panoptic segmentation



Your answer is incorrect.

The correct answer is:
panoptic segmentation

Question **8**

Incorrect

Mark 0.00 out of 1.00

🚩 Flag question

Region proposals produce regions that have a high likelihood of having an object in them.

- ☐ a. false
- ☒ b. true



Your answer is correct.

The correct answer is:
true

Question **9**

Correct

Mark 1.00 out of 1.00

🚩 Flag question

Which of the following is NOT an algorithm belonging to region-based object detectors?

- ☒ a. R-CNN
- ☐ b. Fastest R-CNN
- ☐ c. Fast R-CNN
- ☐ d. Faster R-CNN



Question **10**

Incorrect

Mark 0.00 out of 1.00

🚩 Flag question

Fastest R-CNN

Your answer is incorrect.

The correct answer is:
Fastest R-CNN

Region-based object detection algorithms are usually faster than single-shot algorithms.

- ☒ a. true
- ☐ b. false

✖

Your answer is incorrect.

The correct answer is:
false

Question **11**

Incorrect

Mark 0.00 out of 1.00

🚩 Flag question

Non-maximum suppression is used to discard the extra/additional bounding boxes generated by the algorithms and to retain the ones that are nearest to the ground truth box.

- ☒ a. true
- ☐ b. false

✔

Your answer is correct.

The correct answer is:
true

Question **12**

Correct

Mark 1.00 out of 1.00

🚩 Flag question

Which of the following methods uses a deep learning-based technique to find the regions of interest instead of using the conventional computer vision algorithm?

- ☒ a. R-CNN
- ☐ b. Fast R-CNN
- ☐ c. Fastest R-CNN
- ☐ d. Faster R-CNN

✖

Your answer is incorrect.

The correct answer is:
Faster R-CNN

Question **13**

Incorrect

Mark 0.00 out of 1.00

🚩 Flag question

Object detection is a task that performs

- ☐ a. classification and grouping of pixels
- ☐ b. classification and localization
- ☐ c. classification only
- ☐ d. localization only

Your answer is incorrect.

The correct answer is:
classification and localization

Question **14**

Not answered

Marked out of 1.00

🚩 Flag question

Single-shot object detection algorithms, like SSD and YOLO, are generally less accurate than region-based methods, like the ones from the R-CNN family.

- ☐ a. true
- ☐ b. false

Your answer is incorrect.

Question **15**

Not answered

Marked out of 1.00

🚩 Flag question

The correct answer is:
true

Finish review