


▶ 

Remaining Time: 1 hour, 43 minutes, 18 seconds.

⌵ **Question Completion Status:**

⋮ → Question 1 of 34 > >>

⚠ Moving to another question will save this response.

Question 1

1 points

Save Answer

The filter which has equal weights (values) is
..... Filter

- median
- sobel
- mean
- Gaussian



⋮ → Question 1 of 34 > >>

⚠ Moving to another question will save this response.

Take Test: Final computer vision

Test Information



Remaining Time: 1 hour, 42 minutes, 14 seconds.

Question Completion Status:

⏪ ⏩ Question 2 of 34 ⏪ ⏩



Moving to another question will save this response.

Question 2

1 points

Save Answer

The MATLAB function `imnoise` used to

- Remove noise from image
- Add noise to image
- Detect noise
- Segment noise



⏪ ⏩ Question 2 of 34 ⏪ ⏩



Moving to another question will save this response.

Test Information



Remaining Time: 1 hour, 40 minutes, 43 seconds.

Question Completion Status:

⏪ ⏩ Question 3 of 34 ⏪ ⏩

⚠️ Moving to another question will save this response.

Question 3

1 points

Save Answer

"..... refer to a pattern or distinct structure found in an image, such as a point, edge, or small image patch."

- Local features
- Edges
- Descriptors
- class



⏪ ⏩ Question 3 of 34 ⏪ ⏩

⚠️ Moving to another question will save this response.

vision

Test Information



Remaining Time: 1 hour, 39 minutes, 58 seconds.

Question Completion Status:

⏪ ⏩ Question 4 of 34 ⏪ ⏩

⚠️ Moving to another question will save this response.

Question 4

1 points

Save Answer

..... is measured in pixels and indicates the relative size of the object.

- Center of area
- Perimeter
- Area
- Center



⏪ ⏩ Question 4 of 34 ⏪ ⏩

⚠️ Moving to another question will save this response.

vision

Test Information

Remaining Time: 1 hour, 39 minutes, 15 seconds.

Question Completion Status:

⏪ ⏩ Question 5 of 34 ⏪ ⏩

⚠️ Moving to another question will save this response.

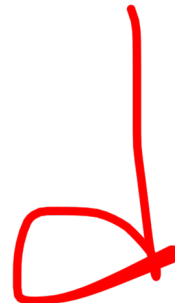
Question 5

1 points

Save Answer

Which of the following is a disadvantage of a smoothing filter?

- Sharp edges
- sharp transitions
- Blur inner pixels
- Blur edges



⏪ ⏩ Question 5 of 34 ⏪ ⏩

⚠️ Moving to another question will save this response.

13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34		

⏪ ⏩ Question 7 of 34 ⏪ ⏩



Moving to another question will save this response.

Question 7

1 points

Save Answer

A region is perceived as a texture if the number of primitives in the field of view is sufficiently

- Low
- Median
- Zero
- High



⏪ ⏩ Question 7 of 34 ⏪ ⏩



Moving to another question will save this response.



Moving to another question will save this response.

Question 8

1 points

Save Answer

The following kernel (filter) used to compute

0	-1	0
-1	4	-1
0	-1	0

- Second Image Derivatives
- Finite differences
- First image Derivative
- Sobel operator

A



Moving to another question will save this response.

13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31 📄	32 📄	33 📄	34 📄		

⏪ ⏩ Question 10 of 34 ⏪ ⏩

⚠️ Moving to another question will save this response.

Question 10

1 points

Save Answer

Which filter of the following filters is better at removing Salt & Pepper noise

- Mean filter
- Gaussian filter
- Laplacian filter
- Median filter



⏪ ⏩ Question 10 of 34 ⏪ ⏩

⚠️ Moving to another question will save this response.

19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34		

⏪ ⏩ Question 11 of 34 ⏪ ⏩



Moving to another question will save this response.

Question 11

1 points

Save Answer

Second derivative is better localized edges than

- Mean filter
- Median filter
- First Derivative
- Laplacian Filter



⏪ ⏩ Question 11 of 34 ⏪ ⏩



Moving to another question will save this response.

19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34		

⏪ ⏩ Question 12 of 34 ⏪ ⏩



Moving to another question will save this response.

Question 12

1 points

Save Answer

..... Identification of the class the considered texture belongs to within a given set of classes

- texture recognition
- texture segmentation
- texture classification
- texture features



⏪ ⏩ Question 12 of 34 ⏪ ⏩



Moving to another question will save this response.



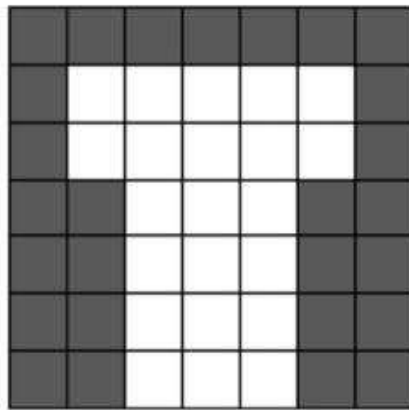
Moving to another question will save this response.

Question 15

1 points

Save Answer

The Perimeter of the binary object below is



- 14
- 16
- 22
- 6



Moving to another question will save this response.



⏪ ⏩ Question 16 of 34 ⏪ ⏩

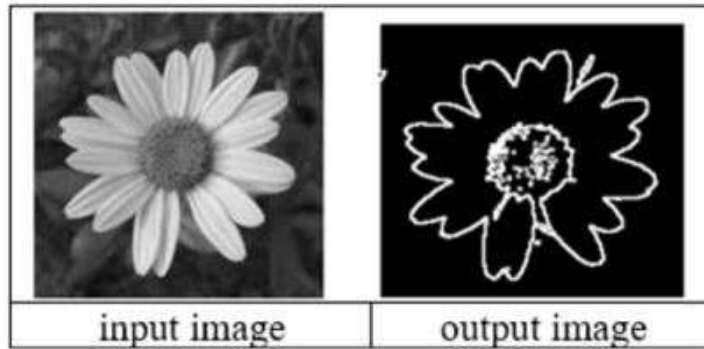
⚠️ Moving to another question will save this response.

Question 16

1 points

Save Answer

"For the input image in the opposite figure, what is the computer vision method used to compute the output image."



- Image segmentation
- Edge detection
- Image classification
- Image registration

A



⏪ ⏩ Question 16 of 34 ⏪ ⏩

⚠️ Moving to another question will save this response.

25 26 27 28 29 30
31 32 33 34

⏪ ⏩ Question 17 of 34 ⏪ ⏩



Moving to another question will save this response.

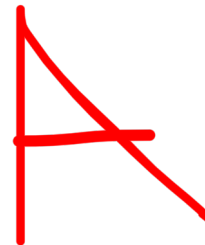
Question 17

1 points

Save Answer

..... to start with the whole image as a single region and subdivide the regions that do not satisfy a condition of homogeneity.

- Region Splitting
- Region growing
- Region Merging
- Thresholding



⏪ ⏩ Question 17 of 34 ⏪ ⏩



Moving to another question will save this response.

25 26 27 28 29 30
31 32 33 34

⏪ ⏩ Question 18 of 34 ⏪ ⏩



Moving to another question will save this response.

Question 18

1 points

Save Answer

If the object is brighter than the background the segmentation can be used

- Thresholding
- Region Growing
- Region Splitting
- Region Merging

b

⏪ ⏩ Question 18 of 34 ⏪ ⏩



Moving to another question will save this response.

25 26 27 28 29 30
31 32 33 34

⏪ ⏩ Question 19 of 34 ⏪ ⏩



Moving to another question will save this response.

Question 19

1 points

Save Answer

..... is a procedure that groups pixels or subregions into larger regions.

- Region Splitting
- Region growing
- Region Merging
- Thresholding

A

⏪ ⏩ Question 19 of 34 ⏪ ⏩



Moving to another question will save this response.

25 26 27 28 29 30
31 32 33 34

⏪ ⏩ Question 20 of 34 ⏪ ⏩

⚠️ Moving to another question will save this response.

Question 20

1 points

Save Answer

Partition the images into N clusters. Find the centroids of each cluster in

- Clustering
- Classification
- Edge detection
- Feature extraction

b

⏪ ⏩ Question 20 of 34 ⏪ ⏩

⚠️ Moving to another question will save this response.



Moving to another question will save this response.

Question 21

1 points

Save Answer

The horizontal projection of the following object is

0	1	1	0
1	1	1	0
0	0	1	0
0	0	1	0

- "1 2 3 0"
- "2 3 1 1"
- "0 1 1 0"
- "2"

b



Moving to another question will save this response.

19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34		

⏪ ⏩ Question 22 of 34 ⏪ ⏩



Moving to another question will save this response.

Question 22

1 points

Save Answer

..... used in image processing to transform a local pixel neighborhood into a compact vector representation.

- Features
- Descriptors
- Edges
- segment

b

⏪ ⏩ Question 22 of 34 ⏪ ⏩



Moving to another question will save this response.

25 26 27 28 29 30
31 32 33 34

⏪ ⏩ Question 23 of 34 ⏪ ⏩



Moving to another question will save this response.

Question 23

1 points

Save Answer

"if we need to classify images contain of bacteria cells, which detector will be used?"

- corner detector
- blob detector
- edge detector
- line detector



⏪ ⏩ Question 23 of 34 ⏪ ⏩



Moving to another question will save this response.

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25	26	27	28	29	30
31	32	33	34		

⏪ ⏩ Question 24 of 34 ⏪ ⏩

⚠️ Moving to another question will save this response.

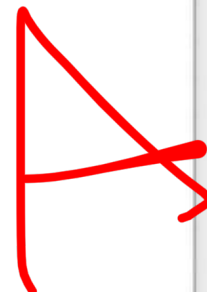
Question 24

1 points

Save Answer

"Descriptors, such as rely on local gradient computations."

- BRISK
- FREAK
- SIFT
- ORB



⏪ ⏩ Question 24 of 34 ⏪ ⏩

⚠️ Moving to another question will save this response.

25 26 27 28 29 30
31 32 33 34

⏪ ⏩ Question 25 of 34 ⏪ ⏩



Moving to another question will save this response.

Question 25

1 points

Save Answer

Which of the following is a disadvantage of a median filter?

- slow
- sharp
- Blur pixels
- Blur edges

b

⏪ ⏩ Question 25 of 34 ⏪ ⏩



Moving to another question will save this response.

25 26 27 28 29 30
31 32 33 34

⏪ ⏩ Question 26 of 34 ⏪ ⏩
⚠️ Moving to another question will save this response.

Question 26

1 points

Save Answer

We assume different objects are separated by other kind of perceptual boundaries in..... segmentation

- Edge-based
- Region-based
- Contour-based
- classification

b

⏪ ⏩ Question 26 of 34 ⏪ ⏩
⚠️ Moving to another question will save this response.



⏪ ⏩ Question 27 of 34 ⏪ ⏩
⚠️ Moving to another question will save this response.

Question 27

1 points

Save Answer

The MATLAB function `im2bw` used to

- Generate blue image
- Generate threshold segmentation image
- Generate color image
- Generate region growing segmentation



⏪ ⏩ Question 27 of 34 ⏪ ⏩
⚠️ Moving to another question will save this response.

13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34		

⏪ ⏩ Question 28 of 34 ⏪ ⏩

⚠️ Moving to another question will save this response.

Question 28

1 points

Save Answer

is a measure of the relationship between the dimensions of the bounding box of an object.

- Aspect Ratio
- Eccentricity
- Thinness Ratio
- Perimeter



⏪ ⏩ Question 28 of 34 ⏪ ⏩

⚠️ Moving to another question will save this response.

⚠️ Moving to another question will save this response.

Question 29

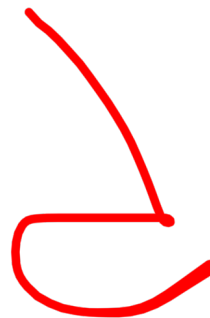
1 points

Save Answer

The following kernel (filter) is..... filter

$$\frac{1}{16} \begin{bmatrix} 1 & 2 & 1 \\ 2 & 4 & 2 \\ 1 & 2 & 1 \end{bmatrix}$$

- mean
- median
- Gaussian
- sobel



⚠️ Moving to another question will save this response.

25 📄 26 📄 27 📄 28 📄 29 📄 30
31 📄 32 📄 33 📄 34 📄

⏪ ⏩ Question 30 of 34 ⏪ ⏩



Moving to another question will save this response.

Question 30

1 points

Save Answer

Which of the following properties doesn't used to describe texture properties in image processing?

- structural
- Spectral
- Statistical
- Color

A

⏪ ⏩ Question 30 of 34 ⏪ ⏩



Moving to another question will save this response.

⚠ Moving to another question will save this response.

Question 10

1 points

Save Answer

a boundary representation technique by which a contour is represented as a sequence of straight line segments uses eight directions instead of four is

.....

- chain code
- Freeman code
- first difference
- shape number



⚠ Moving to another question will save this response.



Question 30

1 points

Save Answer

The following kernel (filter) is..... filter

$$\frac{1}{16} \cdot \begin{array}{|c|c|c|} \hline 1 & 2 & 1 \\ \hline 2 & 4 & 2 \\ \hline 1 & 2 & 1 \\ \hline \end{array}$$

- mean
- median
- Gaussian
- sobel

