

First and last name

Question 1/20

What can be represented by using histograms or empirical frequency distributions?

- A. Color
- B. Texture
- C. Words
- D. Both Color & Texture

Question 2/20

Which of the following algorithm is uses in neural networks to provide real-time object detection faster.

- A. RNN
- B. YOLO
- C. CNN
- D. Resnet

Question 3/20

Machine translation is an example of which of the following component of NLP?

- A. None of the above
- B. NLG
- C. NLU
- D. Both NLU and NLG

Question 4/20

How the distance between two shapes can be defined?

- A. Size of the shape
- B. Weighted sum of the shape
- C. None of the mentioned
- D. Shape context
- E. Shape context

Question 5/20

Which vision includes object recognition and 3D scene Interpretation?

- A. All of the above
- B. Low-level vision
- C. Intermediate-level vision
- D. High-level vision

Question 6/20

----- is the inverse proportional to probability.

- A. Naïve Bayes Theorem
- B. Perplexity
- C. Recall
- D. Bays Theorem

Question 7/20

What are the input and output of an NLP system?

- A. Noise and value
- B. speech and noise
- C. noise and speech
- D. speech and text

Question 8/20

Which of the following quantifiers means "match 0 or 1 times"?

- A. *
- B. #
- C. ?
- D. +

Question 9/20

What is the size of the vocabulary in the following sentence?

"I own the fastest car in the world."

- A. 9
- B. 8
- C. 7
- D. 6

Question 10/20

Reset gate and update gate are available in -----

- A. GRU
- B. LSTM
- C. CNN
- D. RNN

Question 11/20

----- represents the direction of the most rapid change in intensity in mage.

- A. Canny Edge Detector
- B. Gradient
- C. Discrete Laplacian
- D. Laplacian

Question 12/20

What is the hamming distance of the following pairs of strings: "rocket, rockstar" ?

- A. 1
- B. 4
- C. 3
- D. Cannot be calculated

In information theory, the **Hamming distance** between two strings of equal length is the number of positions at which the corresponding symbols are different. In other words, it measures the minimum number of substitutions required to change one string into the other, or the minimum number of errors that could have transformed one string into the other.

Question 13/20

. Which of the python function is used to find all occurrences of a tiger from the following sentence?
“Tiger is the national animal of India. Tiger lives in forest “

- A. findall()
- B. match()
- C. search()
- D. sub()

Question 14/20

Which among the following is not an application of natural language programming (nlp)?

- A. Market Basket Analysis
- B. Speech recognition
- C. chatbot
- D. Sentiment Analysis

Question 15/20

In NLP, the algorithm decreases the weight for commonly used words and increases the weight for words that are not used very much in a collection of documents.

- A. word2vec
- B. Term Frequency (TF)
- C. Inverse Document Frequency (IDF)
- D. Latent Dirichlet Allocation

One measure of how important a word may be is its *term frequency* (tf), how frequently a word occurs in a document.

Another approach is to look at a term's *inverse document frequency* (idf), which decreases the weight for commonly used words and increases the weight for words that are not used very much in a collection of documents.

Question 16/20

. Find the Levenshtein distance of word “Text” and “ Team”?

- A. 4
- B. 2
- C. 1
- D. 3

Informally, the Levenshtein distance between two words is the minimum number of single-character edits (insertions, deletions or substitutions) required to change one word into the other.

Question 17/20

Which of the following stemmer is not used by nltk.stem?

- A. snowballstemmer
- B. Porterstemmer
- C. Langstemmer
- D. Lancasterstemmer

- [nltk.stem.api module](#)
- [nltk.stem.arlstem module](#)
- [nltk.stem.arlstem2 module](#)
- [nltk.stem.cistem module](#)
- [nltk.stem.isri module](#)
- [nltk.stem.lancaster module](#)
- [nltk.stem.porter module](#)
- [nltk.stem.regexp module](#)
- [nltk.stem.rslp module](#)
- [nltk.stem.snowball module](#)
- [nltk.stem.util module](#)
- [nltk.stem.wordnet module](#)

Question 18/20

Compute the Levenshtein distance for the two strings: "transform" and "transmit".

- A. 1
- B. 2
- C. 3
- D. 4

Question 19/20

Finite difference filters in image processing are very susceptible to noise. To cope up with this, which of the following methods can you use so that there would be minimal distortions by noise?

- A. Smooth the image
- B. Downsample the image
- C. Convert the image to grayscale from RGB
- D. None of the above

Smoothing helps in reducing noise by forcing pixels to be more like their neighbours

Question 20/20

. In dependency parsing, a dependency tag represents the relationship among -----words.

- A. 5
- B. 4
- C. 3
- D. 2