

According to the class discussion, text prefiltering is often used as input for a neural network to deal with a large text input making the networks able to classify the input.

Scegli un'alternativa:

- ☒ True, using the hamming distance as prefiltering
- ☐ True, using the cosine distance as prefiltering
- ☐ True, using the string approximate match distance as prefiltering
- ☐ True, using the discrete gradient descent as prefiltering
- ☐ True, using the so-called "word embeddings" technique

Feedback

La risposta corretta è: True, using the so-called "word embeddings" technique

According to the class discussion, what is Greedy Layer-Wise Training?

Scegli un'alternativa:

- ☒ A supervised training step to improve auto-encoders
- ☐ An unsupervised training step to classical feedforward networks
- ☐ An unsupervised training step to improve auto-encoders
- ☐ A supervised training step to classical feedforward networks

Feedback

La risposta corretta è: An unsupervised training step to improve auto-encoders

The following activity: a) Data Selection; b) Data Filtering; c) Data Enhancing ...

Scegli un'alternativa:

- ☐ Are part of the classical machine learning approaches and they are (correctly) used also in deep learning applications
- ☐ All the other options are correct
- ☐ Are part of the job of the artificial intelligent specialist in normal activities
- ☒ Contribute to keep lower the complexity of the learning task
- ☐ a), b) and c) are extremely important in the final behavior of the trained model and the complexity of the training task

Feedback

La risposta corretta è: All the other options are correct

The Inception-v3 deep learning pretrained model discussed during the course is a model for

Scegli un'alternativa:

- ☐ Post processing
- ☐ None of the other options
- ☒ Segmentation
- ☐ Image Enhancing
- ☐ Image classification

Feedback

La risposta corretta è: Image classification

Intelligent vision systems can achieve Semantic segmentation by

Scegli un'alternativa:

- ☐ A hybrid approach by blob detection to select candidate ROIs and then image classification of the ROIs
- ☐ A complete fully convolutional solution
- ☒ A hybrid approach by blob detection to select candidate ROIs and then image segmentation of the ROIs
- ☐ None of the other options

Feedback

La risposta corretta è: A complete fully convolutional solution

Considering the possible Intelligent Vision tasks which is the correct option?

Scegli un'alternativa:

- ☐ Instance Segmentation is more complex than Object Detection
- ☐ Instance Segmentation is less complex than Object Detection
- ☐ Instance Segmentation and Object Detection have a similar complexity
- ☐ The other options are not Intelligent Vision tasks

Feedback

La risposta corretta è: Instance Segmentation is more complex than Object Detection

Commenti

[Commenta o inserisci punteggio a mano](#)

Storico delle risposte

| Passo | Data/Ora | Azione |
|----------|-------------------------|----------------------------|
| <u>1</u> | 16/06/2020 11:48 | Iniziato |
| 2 | 16/06/2020 12:28 | Tentativo terminato |

In a given picture ImmA you see 1 car and 5 people in a city background. Considering the Intelligent systems IS processing the image ImmA and producing in output the label "humans", what Intelligent Vision task is performing?

Scegli un'alternativa:

- ☐ Image classification
- ☐ Instance segmentation
- ☒ Object detection
- ☐ Semantic segmentation

Feedback

La risposta corretta è: Image classification

According to the class discussion, considering the training of deep learning models on standard CPUs and standard commercial GPUs boards, what is the gain in training performance (time) and efficiency (energy) for a medium/large-size project?

Scegli un'alternativa:

- ☐ About 100x in performance and 10x in efficiency
- ☒ More than 100x in performance and more than 5x in efficiency
- ☐ About 10x in performance and 5x in efficiency
- ☐ About 2x in performance and 2x in efficiency

Feedback

La risposta corretta è: About 10x in performance and 5x in efficiency

A basic industrial setup for Intelligent vision systems is typically composed by the following elements

Scegli un'alternativa:

- ☒ Standard industrial smart camera with optics, external processing HW and SW units, illumination system

- ☐ Standard industrial camera with optics, illumination system
- ☐ Just a standard industrial camera with optics
- ☐ Standard industrial camera with optics, processing HW and SW units, illumination system
- ☐ Standard industrial camera with optics, processing HW and SW units

Feedback

La risposta corretta è: Standard industrial camera with optics, processing HW and SW units, illumination system