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**Iniziato** venerdì, 20 maggio 2022, 16:04

**Stato** Completato

**Terminato** sabato, 21 maggio 2022, 16:57

**Tempo  
impiegato** 1 giorno

**Valutazione** **6,51** su un massimo di 10,00 (**65%**)

**Domanda 1**

Risposta errata

Punteggio  
ottenuto -0,11  
su 1,00

Considering the Mel-frequency Cepstral coefficients, select which among the following statements is **wrong**.

Scegli un'alternativa:

- ☐ They are computed on a uniform frequency grid.
- ☒ Spectrum can be computed on partially overlapping segments.
- ☐ They are the output of a DCT transform.
- ☐ They can be computed from the logarithm of absolute FFT coefficients.



Your answer is incorrect.

La risposta corretta è: They are computed on a uniform frequency grid.

**Domanda 2**

Risposta  
corretta

Punteggio  
ottenuto 1,00  
su 1,00

Considering the Mel-frequency Cepstral coefficients in voice recognition, select which among the following statements is **wrong**.

Scegli un'alternativa:

- ☐ They are computed on overlapping segments.
- ☒ A DCT transform is applied directly on the original signal.
- ☐ They are generated computing logarithm of the power spectrum.
- ☐ They are computed on a Mel frequency grid.



Your answer is correct.

La risposta corretta è: A DCT transform is applied directly on the original signal.

**Domanda 3**

Risposta  
corretta

Punteggio  
ottenuto 1,00  
su 1,00

Select which set of model-free modellings for gait recognition uses binary (bilevel) images.

Scegli un'alternativa:

- ☐ Motion-Energy Image and Gait-Energy Image
- ☐ Motion-History Image and Active-Energy Image
- ☒ Motion-History Image and Motion-Silhouette Image



Your answer is correct.

La risposta corretta è: Motion-History Image and Motion-Silhouette Image

**Domanda 4**

Risposta  
corretta

Punteggio  
ottenuto 1,00  
su 1,00

Among the following techniques, which can not be mentioned among the most popular text-independent voice identification strategies:

- ☐ a. SVM
- ☒ b. Linear regression
- ☐ c. Gaussian mixture model
- ☐ d. Deep neural network



Risposta corretta.

La risposta corretta è:  
Linear regression

**Domanda 5**

Risposta  
corretta

Punteggio  
ottenuto 1,00  
su 1,00

Given a GMM-based speaker modelling, select the **wrong** statement among the following one.

- ☐ a. Normal distributions may have different means
- ☒ b. Normal distributions must have the same variance.
- ☐ c. Speakers are identified by a set of probabilities  $P_j$  that weight different normal distributions.
- ☐ d. The number of distributions determines the accuracy of modelling



Risposta corretta.

La risposta corretta è:  
Normal distributions must have the same variance.

**Domanda 6**

Parzialmente  
corretta

Punteggio  
ottenuto 0,33  
su 1,00

Select the steps of a stance phase in gait cycle analysis

- ☐ a. initial contact
- ☒ b. mid-swing
- ☒ c. terminal swing
- ☐ d. loading response
- ☒ e. pre-swing



Risposta parzialmente esatta.

Hai selezionato correttamente 1.

Le risposte corrette sono:

initial contact,

pre-swing,

loading response

**Domanda 7**

Parzialmente  
corretta

Punteggio  
ottenuto 0,40  
su 1,00

Select the correct pipeline order for a model-based gait recognition system:

- A) image/video capture ✓
- B) feature computation ✗
- C) silhouette extraction ✗
- D) salient points extraction ✗
- E) classification/user identification ✓

Risposta parzialmente esatta.

Hai selezionato correttamente 2.

La risposta corretta è:

Select the correct pipeline order for a model-based gait recognition system:

- A) [image/video capture]
- B) [silhouette extraction]
- C) [salient points extraction]
- D) [feature computation]
- E) [classification/user identification]

**Domanda 8**

Risposta  
corretta

Punteggio  
ottenuto 1,00  
su 1,00

Among the following, select the feature extraction strategies that can be used for gait classification:

- ☐ a. RNN
- ☐ b. PCA
- ☒ c. All of them
- ☐ d. CNN
- ☐ e. None of them



Risposta corretta.

La risposta corretta è:  
All of them

**Domanda 9**

Risposta errata

Punteggio  
ottenuto -0,11  
su 1,00

Which of the following processing steps is **not** used in model-free gait analysis and identification.

Scegli un'alternativa:

- ☐ skeleton-fitting
- ☐ silhouette extraction
- ☒ dimensionality reduction
- ☐ feature computation



Your answer is incorrect.

La risposta corretta è: skeleton-fitting

**Domanda 10**

Risposta  
corretta

Punteggio  
ottenuto 1,00  
su 1,00

Among the following factors, select the low-level factors in voice recognition

- ☐ a. phonotactics
- ☒ b. speech rate
- ☐ c. idiolectal
- ☒ d. intonation
- ☒ e. spectral related to articulatory actions



Risposta corretta.

Le risposte corrette sono:

intonation,

speech rate,

spectral related to articulatory actions

◀ Lecture 21 - Gait analysis

Vai a...

Lecture 22 - DNA recognition ▶

DOCUMENTAZIONE

Moodle

Kaltura