In agreement to the class discussion, what kind of labelling error is generally the worst case for the accuracy of the generalization of the model? ERR1 = Duplications with same labels, EER2 = Duplications with different labels

Scegli un'alternativa:

- ERR1 is equalt to EER2 by definition
- ERR2 is the worst case
- ERR1 is the worst case
- ERR1 is roughly equalt to EER2 in general

Feedback

La risposta corretta è: ERR2 is the worst case

According to the discussion presented in class about the data visualization, and considering the following steps of the design workflow 1) Get Data, 2) Clean Manipulate Data, 3) Train models, 4) Test Data, 5) Improve the design, which are the main step/steps where data visualization should be involved?

Scegli un'alternativa:

- #2 and #5
- #4
- #3 and #5
- #5
- #1

Feedback

La risposta corretta è: #2 and #5

According to the class discussion, the convolution/correlation operations are of foundamental relevance for many deep learning models. What is the characteristic of the autocorrelation map produced by a generic image?

Scegli un'alternativa:

- It is not possible to create an autocorrelation map from one single images, two different images are needed
- None of the other options
- A flat and noisy central plateau
- An evident spike at the center with a very well defined maximum

Feedback

La risposta corretta è: An evident spike at the center with a very well defined maximum

Considering the class discussion about feature preprocessing/engineering, alogarithmic scaling to one feature values is typically applied in a case of

Scegli un'alternativa:

- A very large range in the values (>0)
- Input coming from the preprocessing of long texts
- Negative values
- Outliers presence
- Feature values are integer numbers

Feedback

La risposta corretta è: A very large range in the values (>0)

According to the notation used in class, which kind of a model is described by the equation
$f(x) = sgn(w\ x + b)$

Scegli un'alternativa:

- Liner regressor
- Soft-max neuron
- Liner classifier
- Sigmoidal neuron
- Gradient descent formula
- Number of the model's parameters

Feedback

La risposta corretta è: Liner classifier

A tensor processing unit (TPU) is

Scegli un'alternativa:

- A part of a model of the Convolutional Neural Network used to process dedicated tensorial activation functions in the neurons
- An internal unit of the Arm processor architecture introduced to support 8-bit fixed-point matrix multiplication for deep learning models
- An AI accelerator application-specific integrated circuit (ASIC) and the related board developed specifically for neural network machine learning
- None of the other options

Feedback

La risposta corretta è: An AI accelerator application-specific integrated circuit (ASIC) and the related board developed specifically for neural network machine learning

ou have a feature in your dataset with the following values F2 = [-13 0 1 2 4 128], which normalization will give you the following F2_norm = [0 0 1 2 4 10]

Scegli un'alternativa:

- Z-score
- Min-MAX
- Clipping
- A different type of normalization

Feedback

La risposta corretta è: Clipping

You have a feature in your dataset with the following values F2 = [-13 0 1 2 4 128], which normalization will give you the following F2_norm = [0 0 1 2 4 10]

Scegli un'alternativa:

- Z-score
- Min-MAX
- Clipping
- A different type of normalization

Feedback

La risposta corretta è: Clipping

The design of intelligent systems for Industry 4.0 applications should be compliant to the following main design principles.

Scegli un'alternativa:

- Interoperability, Information transparency, Improved technical assistance, Decentralized decisions
- Interoperability, Information transparency, Improved technical assistance
- Interoperability, Information transparency, Improved technical assistance, Wireless connectivity
- Interoperability, Information transparency, Decentralized decisions

Feedback

La risposta corretta è: Interoperability, Information transparency, Improved technical assistance, Decentralized decisions

Machine Learning on CPUs offer the following advantages

Scegli un'alternativa:

- Ease of portability and use-case flexibility, Market availability at different performance and prices
- Ease of portability and use-case flexibility, Market availability at different performance and prices, Deployment across a wide spectrum of devices
- Ease of portability and use-case flexibility, Deployment across a wide spectrum of devices
- Market availability at different performance and prices, Deployment across a wide spectrum of devices

Feedback

La risposta corretta è: Ease of portability and use-case flexibility, Market availability at different performance and prices, Deployment across a wide spectrum of devices

The GoogLeNet deep learning pretrained model discussed during the course is model for

Scegli un'alternativa:

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

Feedback

La risposta corretta è: Image classification