

Lezione 15 - Finale - 20/12/2024

Self-supervised Learning refers to learning methods in which the models are trained:



Complimenti!



with supervisory signals that are generated from the data itself by leveraging its structure



with supervisory signals provided by human annotated labels

without the need of any supervisory signal

What is called the task designed for networks to solve with pseudo labels automatically generated based on data attributes?

Pretext task

Self-supervised task

Primary task

Context task

Image generation cannot be used as a pretext task



Complimenti!



True

False



**When we use image generation as the pretext task,
after training we are interested to use**

The generator

The discriminator

Both

Quando vogliamo imparare a generare le immagini vogliamo il generator, in self supervised learning ci interessa il discriminator.

The performance of SSL models are usually measured comparing their accuracy on the pretext task



Complimenti!



True

False



Usiamo una downstream task, anche perchè spesso non sappiamo neanche che dati sono stati usati per il training della pretext task.

Pretext tasks cannot exploit multimodal properties of the data



Complimenti!



True

False



Si può sia per multistream che per multimodal, come per esempio in un video si può usare il video e l'audio.

Esame

Topics covered (second half)

- CNNs (introduction, famous architectures, transfer learning)
- Model compression
- RNNs
- Federated Learning
- Transformers
- Self Supervised Learning