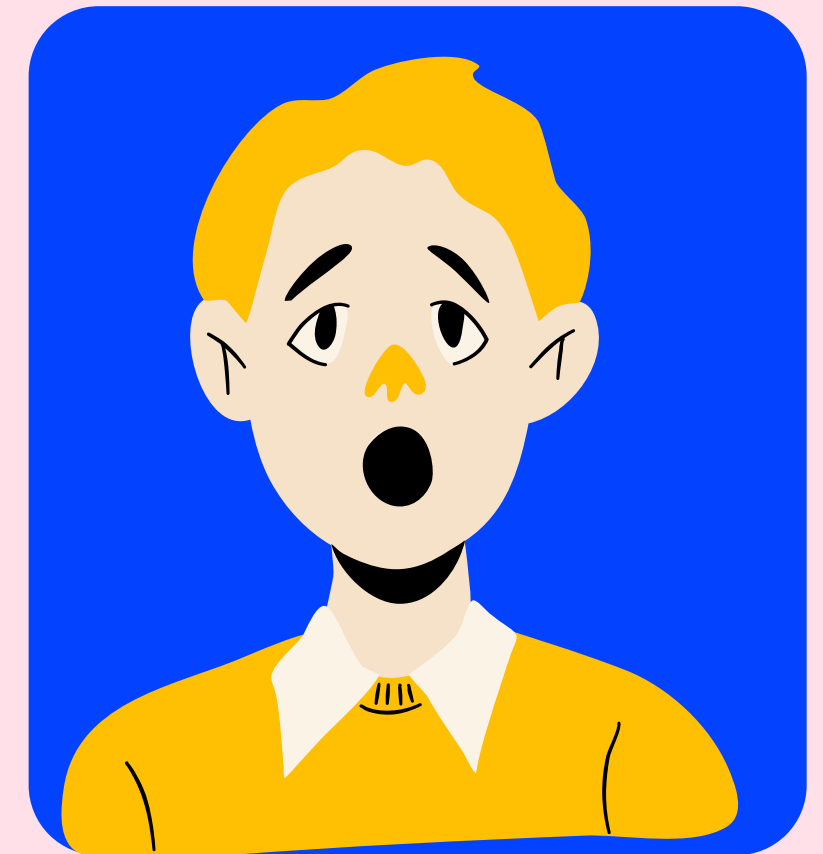
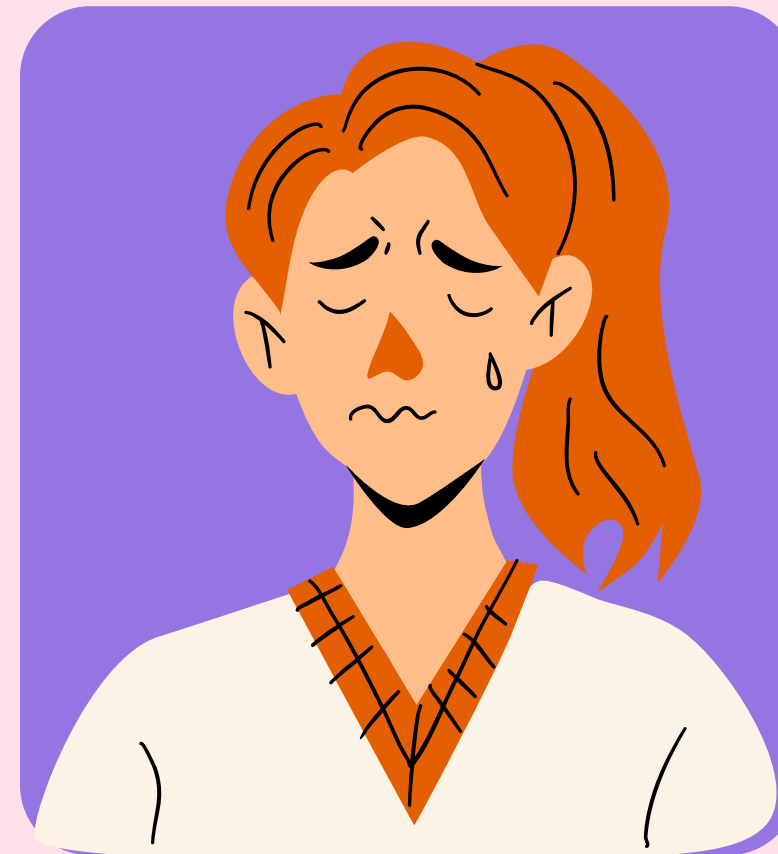


# Rilevamento di emozioni facciali

**DATASET: FER 2013**  
**(Kaggle)**



# Preparazione e lavoro sui dati

## Preparazione del Dataset:

Le immagini del dataset vengono lette, ridimensionate e convertite in array.

Viene fatto del preprocessing nel training generator

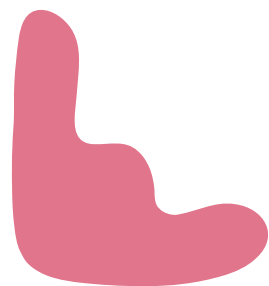
```
train_datagen = ImageDataGenerator(  
    width_shift_range = 0.1,      # Randomly shift the width of images by up to 10%  
    height_shift_range = 0.1,    # Randomly shift the height of images by up to 10%  
    horizontal_flip = True,      # Flip images horizontally at random  
    rescale = 1./255,           # Rescale pixel values to be between 0 and 1  
    validation_split = 0.2       # Set aside 20% of the data for validation  
)
```



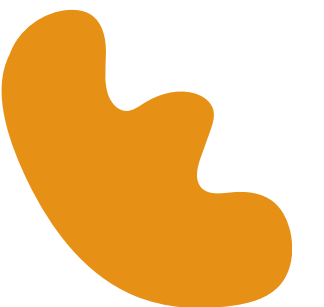
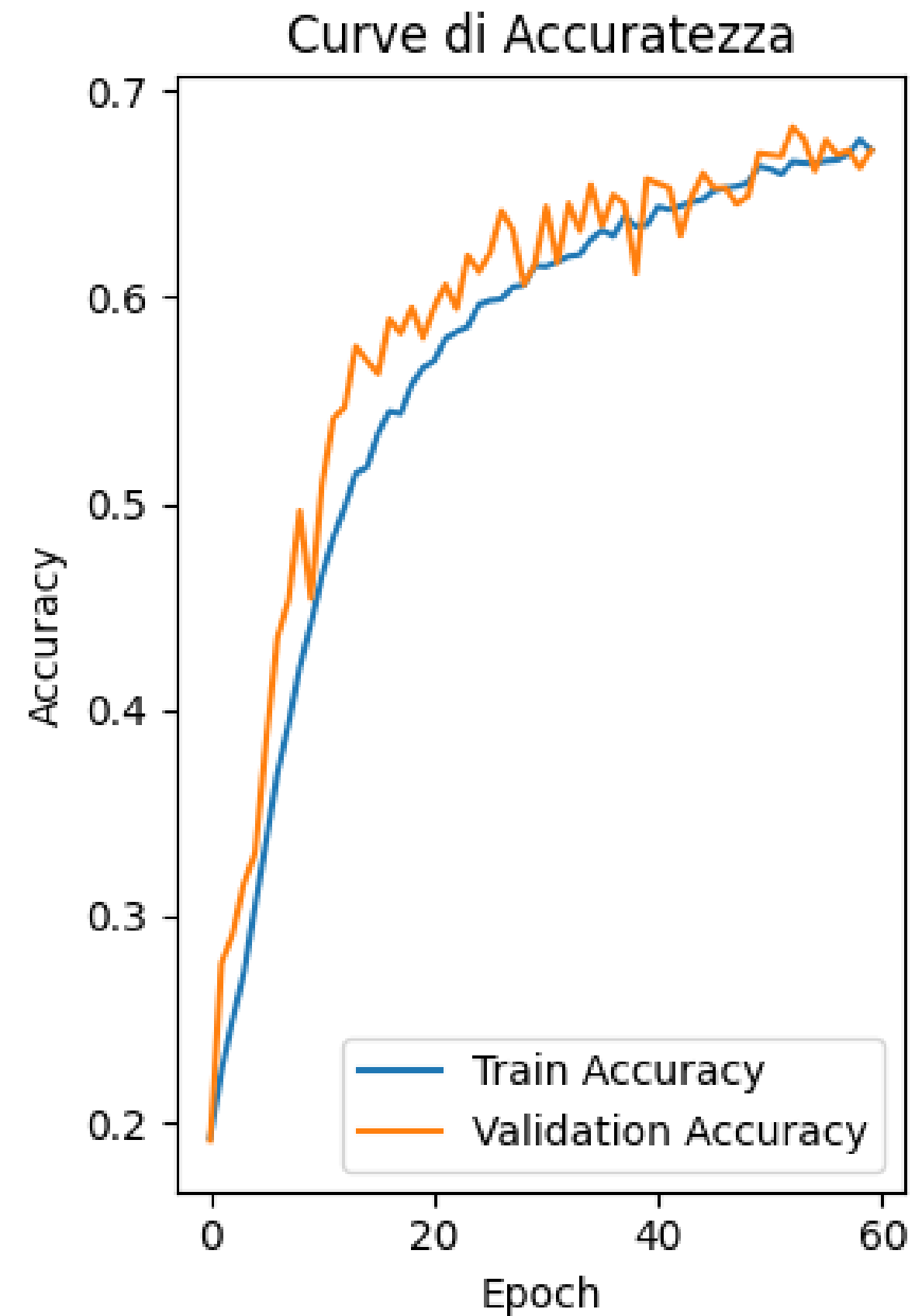
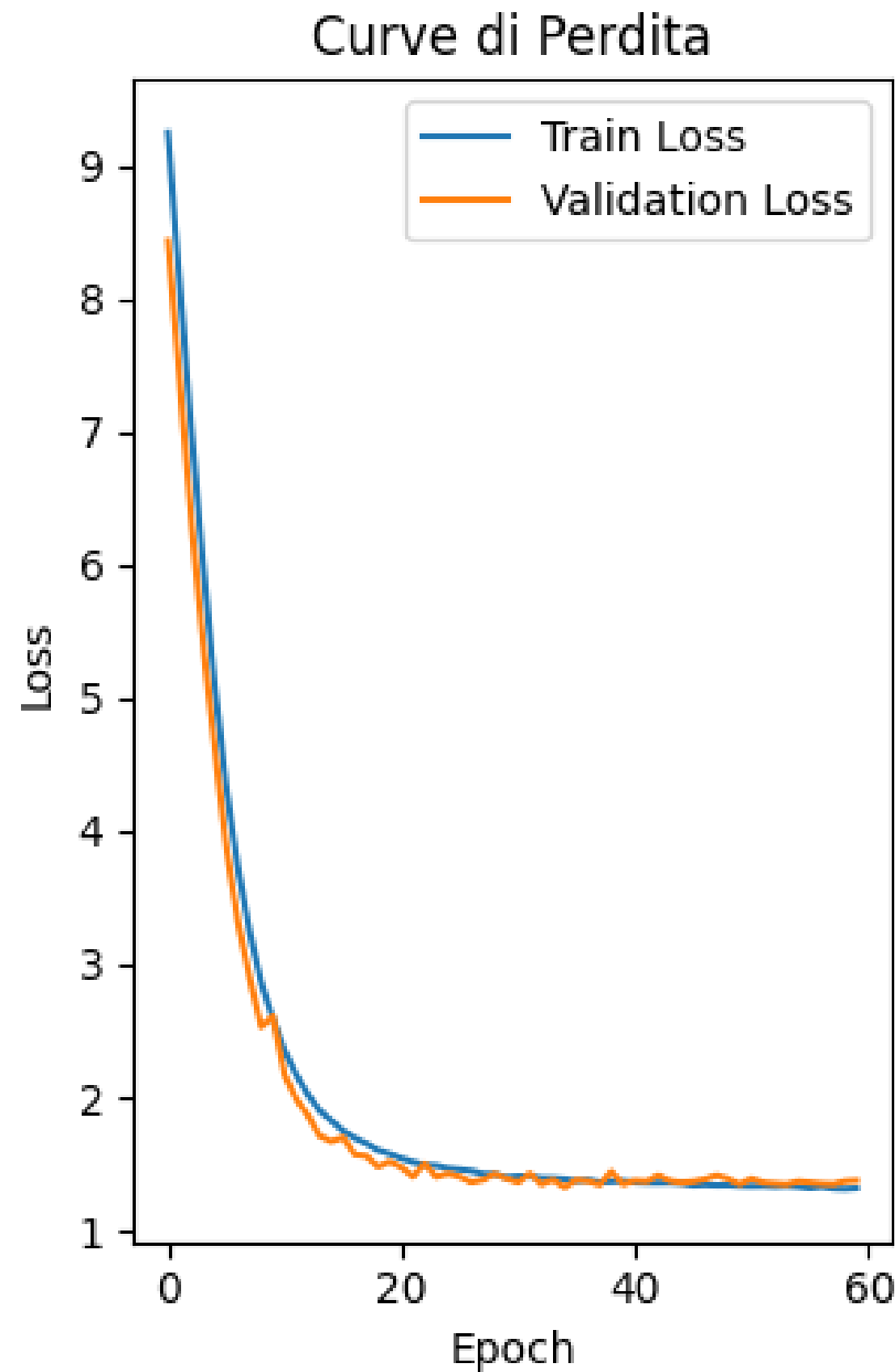
# Problemi con il modello

**Il modello ha problemi a riconoscere i visi con la barba dato che copre le microespressioni facciali e risulta difficile per il modello capire l'espressione.**

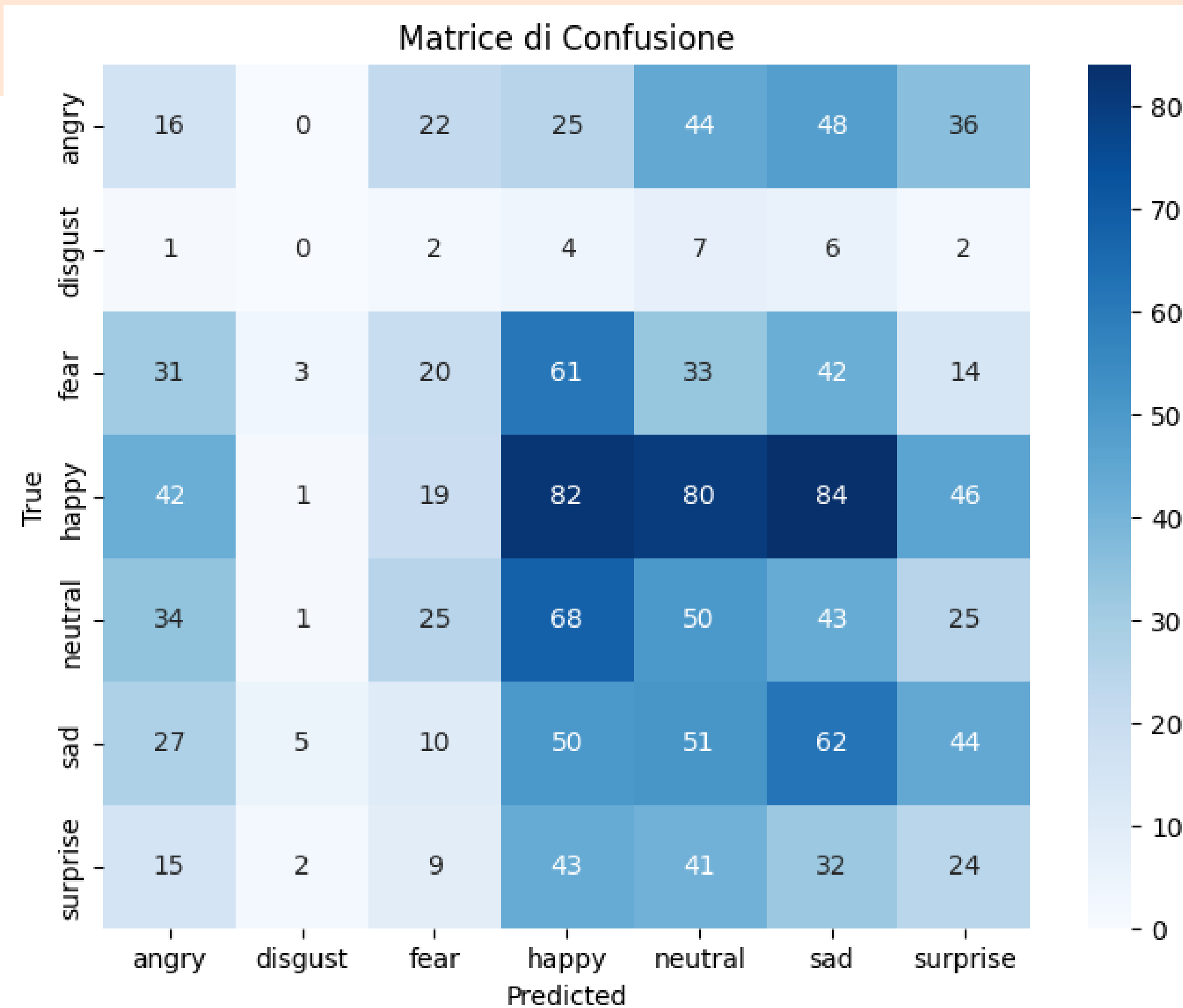
**Questo perché il dataset è fatto solo di visi "puliti" senza barba o oggetti a dar fastidio**

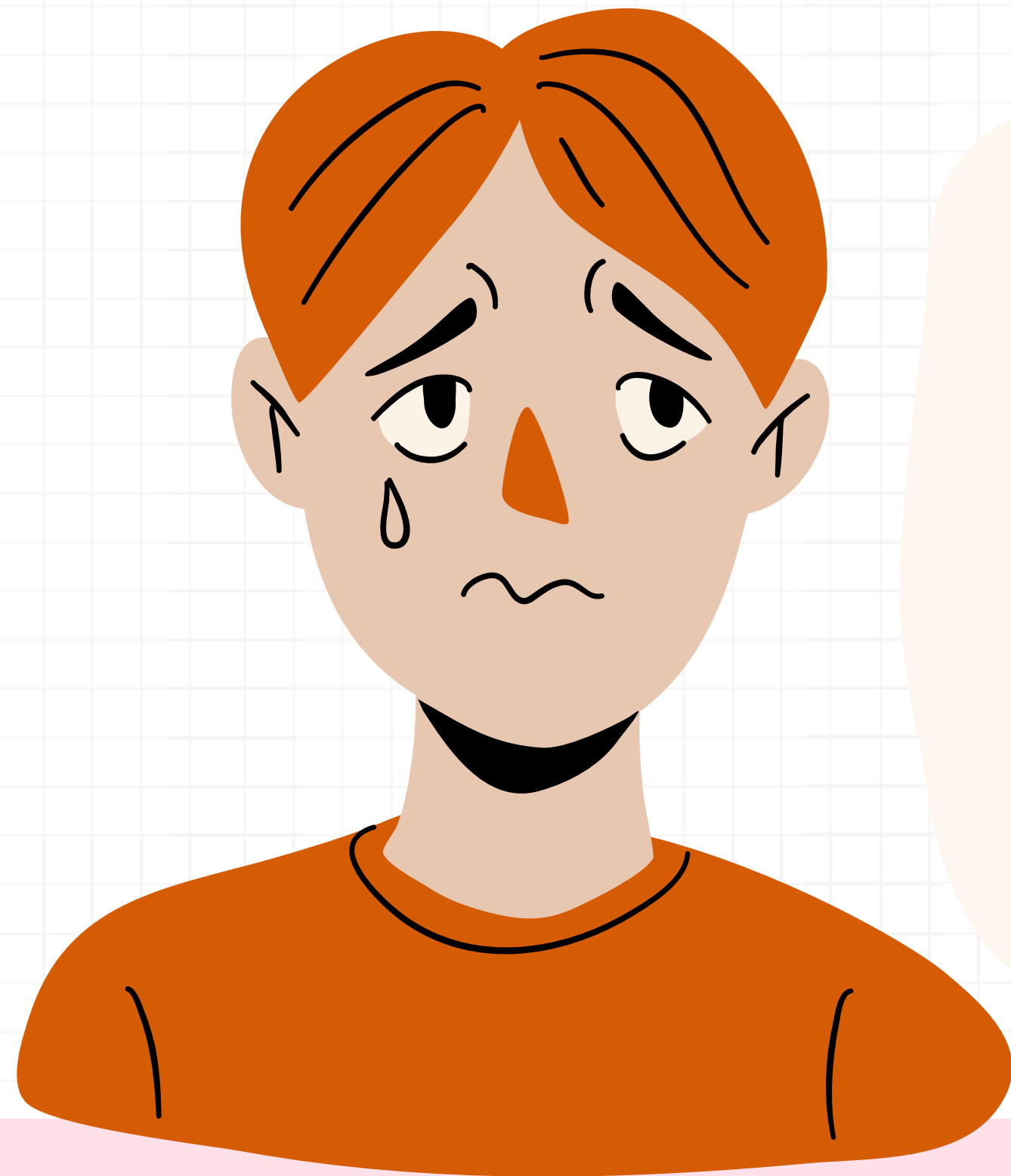


# Risultati modello



# Risultati modello





**Viene fatto il test del  
modello con immagini  
con Haarc**