

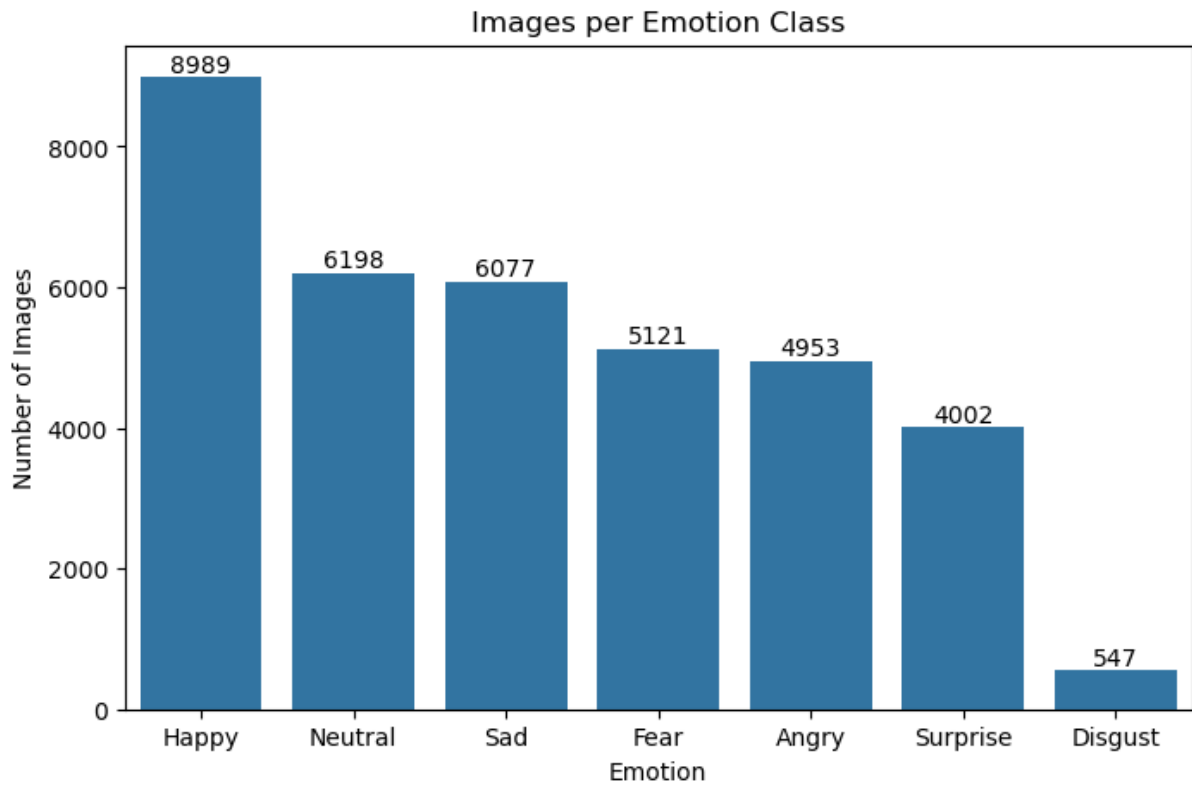
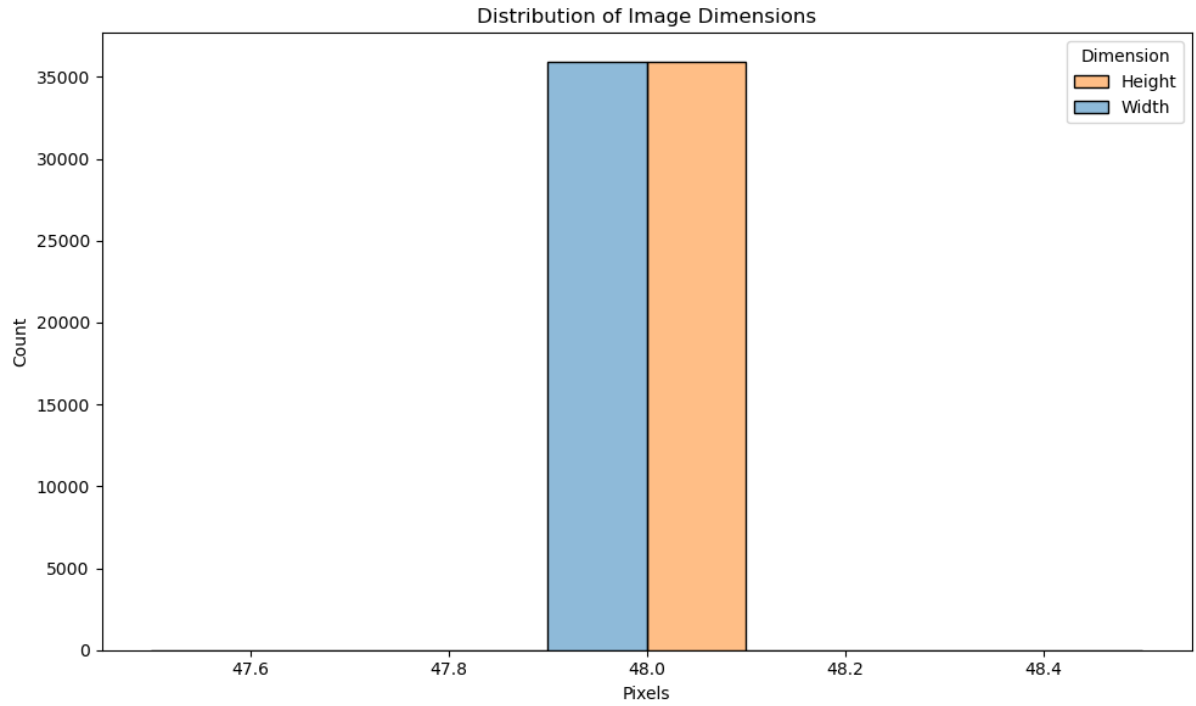
# Experimental Data Analysis: FER-2013 Dataset

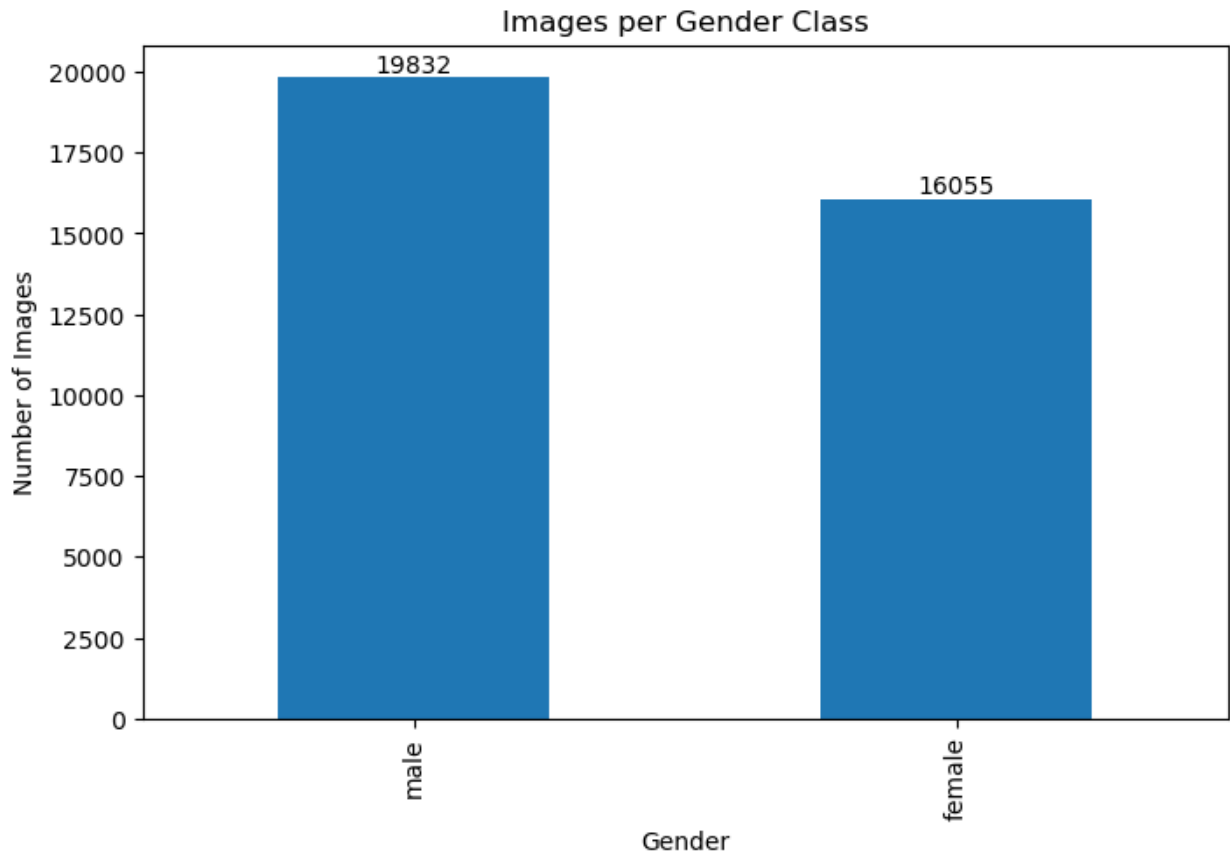
We plotted random images (7 from each dataset), following the same procedure as in the EDA of CK+. Here, we only use a single frame per person. The images are all JPGs (instead of PNGs) and are provided in grayscale format.



The single-frame format made me think about potential research directions: one could compare architectures that use only a single frame with those that employ an LSTM or other sequence-preserving models to capture both spatial and temporal information.

# Statistics





## Summary:

All images are 48×48, which is a major difference from the CK+ dataset — there are significantly fewer pixels, meaning less information can be fed to the model. There is an almost **1650% difference** between the largest and smallest class, so we should definitely consider applying techniques to balance this enormous class imbalance. The difference in gender is not that big so I wouldn't worry about that one.