# ROB311:

# Facial Expression Recognition-KNN

The task is to classify the emotions given a static face image with KNN. Emotions have seven categories (0=Angry, 1=Disgust, 2=Fear, 3=Happy, 4=Sad, 5=Surprise, 6=Neutral). The database contains **48x48** pixel grayscale images of faces. You can download the database from [link](https://www.kaggle.com/msambare/fer2013). To get a good result, you should use the feature extraction technology of image processing, for example, Local Binary Patterns (LBP). LSP library can be found in [scikit-image](https://scikit-image.org/). And you can use the [KNN library](https://scikit-learn.org/stable/modules/generated/sklearn.neighbors.KNeighborsClassifier.html) of [scikit-learn](https://scikit-learn.org/stable/index.html) directly.

Submit: Report and related code ([jupyter notebook](https://jupyter.org/install) format code is recommended). You can use [github](https://github.com/) to submit the link.