% Purpose

The purpose of this code is to train a novel CNN model with Shared Normalization Statistics for image steganalysis. The implementation is based on the MatConvNet platform.

% Files

run_experiment: this is the main function, which can be used to test a trained model for S-UNIWARD steganography at 0.4bpp. For the BOSSbase dataset, the detection error rate is about 16.53%.

cnn_steganalysis_setup_data: the function to testing samples. In our implementation,
'1' represents the training sample while '2' represents the testing sample.

test_model: the function to test a trained model.

getBatchFn, getDagNNBatch: the function to read images from specified paths

setup: the function to setup environment for the proposed model

% Folders

dependencies: this folder contains basic functions of constructing a CNN model with the MatConvNet platform. It contains two sub-folders, i.e. matconvnet and vlfeat.

model: the trained model is saved in this folder.

index: the folder contains index that determines training samples and testing samples.