**Introduction to Image Processing**

*Homework #7 (DUE: 2024.05.15)*

(Please attach your codes either in separate files or copy it into your report. You can use word or powerpoint to organize your figures. You can also describe what you observe from your result.)

# Image compression

Image A: einstein.tif

Image B: one of your own images

1. Display the original image and calculate the histogram of the images.
2. According to definition of information (entropy), calculate the value of bits required to store one pixel.
3. According to the ideal of lossless predictive coding, use linear predictor and calculate the error image. You can also derive the histogram and entropy of the error image.
4. (Optional) Write your own Huffman encoding and calculate the average value of bits for the images.