# Homework 3

**Histogram Equalization**

· Detail description of equalization can be found at Reference [2] pp. 173~180.

· Due date: **2018/10/09 2:20pm**

· Grading policy
  − Please include the histogram of the final image. (As in the previous assignment).
  − Please read "Regulation #3".
  − Please do hardcore programming.

## Histogram Equalization (Homework)

- histogram equalization histogram linearization

$$s_k = 255 \sum_{j=0}^{k} \frac{n_j}{n}$$

- $k = 0, 1, ..., 255,\ n_j$: number of pixels with intensity $j$

- $n$: total number of pixels

- for every pixel if $I(im, i, j) = k$ then $I(imhe, i, j) = s_k$