

#### Project 4: Image Restoration

The scoring method for this project is as follows:

1. Implement a blurring filter using the equation (5.6-11, 数字图像处理 (第三版)) in textbook, and blur the test image 'book\_cover.jpg' using parameters  $a=b=0.1$  and  $T=1$ . (20%)
2. Add Gaussian noise of 0 mean and variance of 500 to the blurred image. (10%)
3. Restore the blurred image and the blurred noisy image using the inverse filter. (30%)
4. Restore the blurred noisy image using the parametric Wiener filter with at least 3 different parameters, and compare and analyse results with that of 3. (40%)

要求:

- (1) 三个部分, 算法描述和文档、代码和有关结果图像
- (2) 语言: Matlab
- (3) 学术规范: 自己独立完成, 抄袭者和被抄袭者的成绩一律按原成绩的50%计。

project提交方式和完成时间:

- (1) 文档、代码和图像以 WINZIP 打包, 文件名为: hm4-姓名-学号, 交作业邮箱: [dip2016@126.com](mailto:dip2016@126.com)
- (2) project完成时间: 2017年12月26日前