Unit 6 - Week 4: Digital Image Processing - II

Assignment 4

Due: 2018-06-26, 23:08 IST.

Course Outline

Week 1: Image Representation
Lesson 1: Image Representation - I
Lesson 2: Image Representation - II
Week 2: Image Processing
Lesson 3: Image Filtering
Lesson 4: Image Enhancement
Week 3: Image Classification
Lesson 5: Image Segmentation
Lesson 6: Image Recognition
Week 4: Video Processing
Lesson 7: Video Representation
Lesson 8: Video Analysis
Lesson 9: Video Processing

Week 4 - Assignment

1. What is the application of spatial enhancement?
   - Noise reduction
   - Image sharpening
   - Edge detection
   - JPEG compression
   Correct answer: Noise reduction
   2. What is the application of frequency enhancement?
   - Image sharpening
   - Image compression
   - Image artifact reduction
   - Image smoothing
   Correct answer: Image artifact reduction
   3. What is the application of spatial frequency enhancement?
   - Image sharpening
   - Image compression
   - Image artifact reduction
   - Image smoothing
   Correct answer: Image sharpening
   4. What is the application of frequency domain enhancement?
   - Image sharpening
   - Image compression
   - Image artifact reduction
   - Image smoothing
   Correct answer: Image compression
   5. What is the application of combined enhancement?
   - Image sharpening
   - Image compression
   - Image artifact reduction
   - Image smoothing
   Correct answer: Image artifact reduction

Note: These questions are similar to those in previous assignments.

Mark

1. 10
2. 5
3. 5
4. 5
5. 5

Total: 30 marks

Instructions:

1.解决方案应清晰、准确，符合题意。
2.解决方案应包括：问题分析、算法设计、实现过程、结果展示。
3.解决方案应具有创新性，可拓展性，实用性。

提交方式：

1. 电子版：将解决方案以PDF格式发送至指定邮箱。
2. 纸质版：将解决方案打印并提交。

提交截止时间：2018-06-26, 23:08 IST.