3640:635 Advanced Algorithms, Spring 2014

# Program #2 PROGRAM EVALUATION

## Name

Date received

Resubmission penalty \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Late Penalty

Score /27

Program Practices and Correctness (10 pts)

* Followed the instruction for the programming part in Part I (2): \_\_\_\_\_\_\_
* Requirements 1 (2 binary, Yourprogram.exe 1 image.pgm)
  + Test case 1 (given in the assignment, # bytes) : \_\_\_\_\_\_; 2 (Case2.pgm, #bytes) :\_\_\_\_\_\_\_
* Requirements 2 (back to the original, Yourprogram.exe 2 image\_b.pgm)
  + Test case 1 (given in the assignment) : \_\_\_\_\_\_; 2 (Case2.pgm) :\_\_\_\_\_\_\_\_\_
* Requirements 3 (SVD, Yourprogram.exe 3 header.txt SVD.txt k)
  + Test case 1 (Case2, k=1, # bytes) : \_\_\_\_\_\_; 2 (Case2, k=50, # bytes) : \_\_\_\_\_\_\_
* Requirements 4 (back to pgm, Yourprogram.exe 4 image\_b.pgm.SVD)
  + Test case 1 (Case2, k=1, screen shot) : \_\_\_\_\_\_; 2 (Case2, k=50, screen shot) : \_\_\_\_\_\_\_

Report (12 pts)

1. Describing the SVD algorithm (2)\_\_\_
2. Theoretical analyses and experimental run results (compression rate, 2) \_\_\_
3. Discussion of the results (2) \_\_\_
4. Describing the PCA algorithm; relation between SVD and PCA (2) \_\_\_
5. Application problem formulation (2) \_\_\_
6. Discussion of the results (2) \_\_\_

Presentation total (5 pts) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Peer evaluation (2pts):\_\_\_\_\_\_\_\_

Instructor evaluation (3pts):\_\_\_\_\_\_\_\_

Bonus: \_\_\_\_\_\_