

EE5356 LAB Assignment #2

Zooming with interpolation

Apply the following 3 interpolators to a test image (8bpp 256 level gray scale) to zoom it by 2.

- 1) Replication (See Figure 7.28 in the textbook pp.254)
- 2) Linear interpolator (See Figure 7.29 in the textbook pp.255)
- 3) Cubic spline interpolator (See Figure 7.30 in the textbook pp.255)

NOTE:

You may choose a test image from the UTA DIP website at

<http://www-ee.uta.edu/dip>

or Dr.Rafael Gonzalez's web site at

http://www.imageprocessingbook.com/downloads/book_images_downloads.htm . (All the images are in jpeg format.)

Also, go to database in the class website.

Reference:

- 1) Textbook pp.253-255
- 2) Rafael C. Gonzalez and Richard E.Woods, "Digital image processing", Prentice Hall 2002