Mohamed Allali* (allali@chapman.edu). Application of Fourier Transform to Image Noise Removal.

As digital images are shared, cropped, scanned, printed then scanned, digital images can lose vital image information or acquire noise in the form of blurring, salt and pepper, noise patterns, and/or scanner lines. In this talk, I will show how Fourier Transform can be used to fix imperfections on an image and can help reconstruct the image to its original form. This can be incorporated as a solid project into many mathematics courses. (Received September 15, 2014)