ECSE 4540: Introduction to Image Processing

Fall 2019

Lecture 6: Spatial Fil

Lecturer: Rich Radke Scribes: Yao Zhang

It covers: Spatial filers, connection to connection, the spatial domain, applying spatial filters, smoothing filters, filtering in Matlab, averaging to remove Gaussian noise, sharpening filters, general low-pass filters, horizontal and vertical edge detectors, the Laplacian, Matlab examples, enhancing edges, unsharp masking, Sobel edge detectors, the median filter (nonlinear).

Follows section 3.4–3.6 the textbook (Gonzalez and woods, 3rd ed).

References

[GW18] GONZALEZ and WOODS, Digital Image Processing, Pearson, 2018.