

Lecture 1: Digital Image Modalities and Processing

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It covers: Where do digital images come from?, digital imaging modalities, Gamma-ray imaging, X-ray imaging, computed tomography (CT) imaging, ultraviolet imaging, visible-spectrum imaging, millimeter-wave imaging, radio-band imaging, ultrasound imaging, electron microscopy, information overlays/human-generated imagery, image processing topics, low mid and high level image processing, major topics in image processing.

Follows section 1.1-1.3 the textbook (Gonzalez and woods, 3rd ed).

Histograms and point operations. $I(x, y)$

References

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