

Lecture 2: The Human Visual System, Perception and Color*Lecturer: Rich Radke**Scribes: Yao Zhang*

It covers: Anatomy of the human eye, facts about the fovea, brightness perception, optical illusions/perceptual phenomena, facts about rods and cones, color spaces, additive color spaces(RGB), subtractive color spaces(CMYK), hue saturation value (HSV), tristimulus values, color gamuts, RPI's smart lighting engineering research center, image manipulation in Matlab.

Follows section 2.1-2.2 the textbook (Gonzalez and woods, 3rd ed).

References

- [GW18] GONZALEZ and WOODS, Digital Image Processing, *Pearson*, 2018.
- [Web 1] <http://www.michaelbach.de/ot/>.
- [Web 2] <http://www.ritsumei.ac.jp/~akitaoka/index-e.html>.