

Lecture 1: Image Formation and Representation Basics

Pinhole Camera:

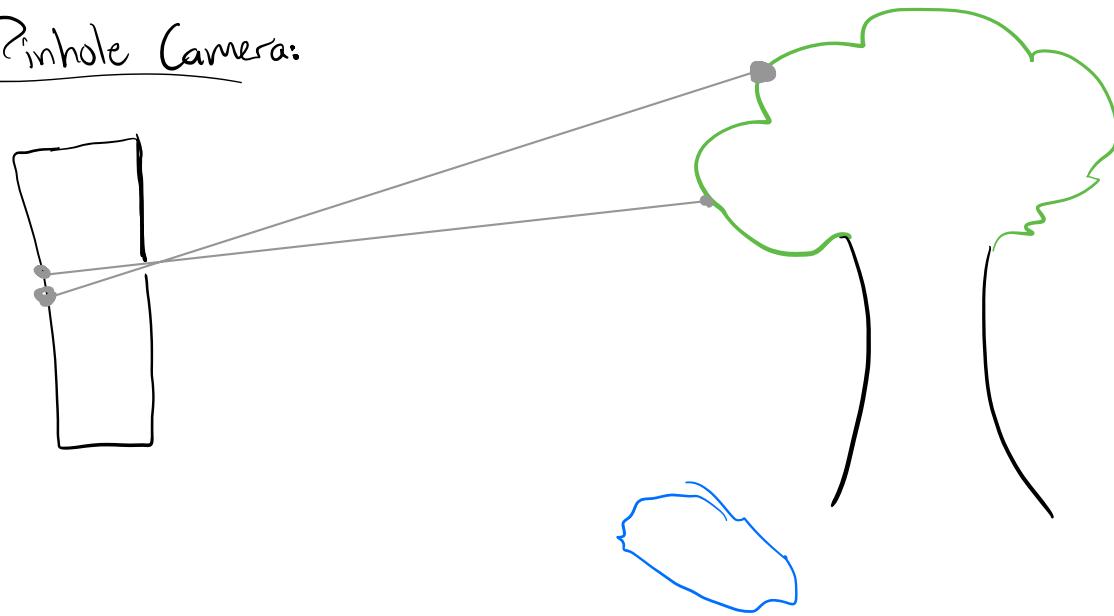


Image Representation

Computers: ndarray (height, width, 3)
↑
red
green
blue

Math: function from position to intensity

Gray: $f: \mathbb{R}^2 \rightarrow \mathbb{R}_{\geq 0}$

Color: $f: \mathbb{R}^2 \rightarrow \mathbb{R}_{\geq 0}^3$