

$W = \# \text{ pixels wide}$

j

Convert (i,j) pixels to (u,v)

Shift by a half pixel

LS.1

Shift origin to center

$$u = \frac{(j - \frac{1}{2})}{W} - \frac{1}{2}$$

← scale to width I

$$v = -\left(\frac{(i - \frac{1}{2})}{H} - \frac{1}{2}\right)$$

This viewing ray has:

Origin: $(0,0,0)$

Direction: $(u, v, -d)$

$H = \# \text{ pixels tall}$

