

Part I. Submitted as image output.

2. Projections and Homographies

2.1. $x_1 \equiv H \cdot x_2$

if $x_1 = x_2$, H matrix would be 3×3 matrix w/ translation of image by half of width of the image.

2.1. If H is identity matrix x_1 will be same picture because identity matrix don't change.

$$H = \begin{bmatrix} 1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{bmatrix}$$

$$H = \begin{bmatrix} 1 & 0 & \text{width}/2 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{bmatrix} \quad \text{if right of } x_1 = \text{left half of } x_2$$

2.2 Given that the rotation of cameras: $x_1 = H \cdot x_2$ we can say the image or as to say the angle of the image is produced from the same angle.

2.3 H^2 corresponds to 2θ , you would need movement twice because when you rotate it once, you will go half way, multiply H matrix by itself.