



Given the information above:

Calculate the focal length (in pixels) along  $X$  axis:




Calculate the focal length (in pixels) along  $Y$  axis:




and construct the camera intrinsic matrix ( $K$ ).

The image point  $p$  has pixel coordinates (360, 302).

If we translate the camera by the vector  $T = [0.2, 0.0, 0.0]^T$  meters and take another picture, the point appears at image position (330, 302).

Assuming that the first camera frame acts as the world reference frame, estimate the position of point  $P$  in 3D coordinates as:

X:



Y:



Z:



## Discussion

**Topic:** Problem Set Week 5 / Stereo Triangulation

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