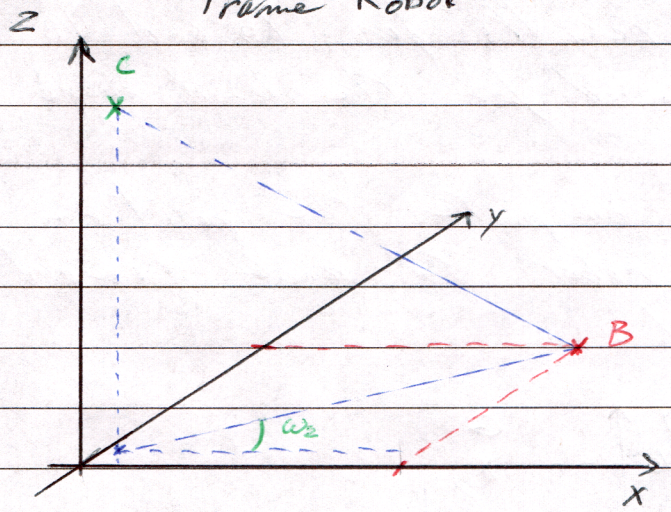
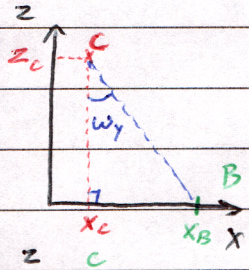
Frame Robot

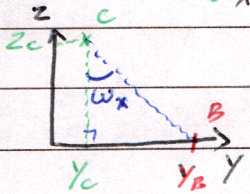


B (X_B , Y_B)

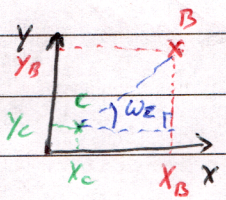
C (0.01, 0.004, 0.439) (-0.027, -0.536, 0.747)



$$tan(\omega_y) = \frac{X_B - X_c}{Z_c} \Rightarrow \boxed{X_B - X_c = Z_c \times tan(\omega_y)}$$



$$tan(\omega_x) = \frac{Y_B - Y_c}{Z_c} \Rightarrow \boxed{Y_B - Y_c = Z_c \, tan(\omega_x)}$$



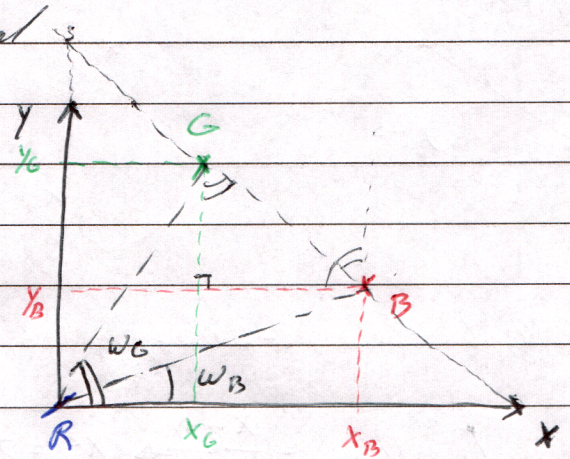
→ center Y

$$\boxed{\begin{aligned} X_B &= Z_c \times tan(\omega_y + C_y) + X_c \\ Y_B &= Z_c \times tan(\omega_x) + Y_c \end{aligned}}$$

↳ uses + motion · post → to move
→ return ID
+ motion · will Task is to adjust trajectory

+ The results for X_B and Y_B can be used for the land mark as well.

+ To compute the position of the robot to kick toward the goal



$$\omega_B = \tan^{-1}\left(\frac{Y_B}{X_B}\right)$$

$$\omega_G = \tan^{-1}\left(\frac{Y_G}{X_G}\right)$$

$$\boxed{\omega_{GB} = \tan^{-1}\left(\frac{X_G - X_B}{X_G - X_B}\right)}$$

→ angle to rotate to be aligned with goal