From the previous example:

Let's use 13...
\[
\begin{bmatrix}
\frac{\dd^2 z}{\dd^2 \theta} - \frac{\dd z}{\dd \theta}, \\
\frac{\dd z}{\dd \theta}
\end{bmatrix}
= \begin{bmatrix}
B \\
C
\end{bmatrix}
\]

(For different robots, such as the ROOMA)

AND from previous lectures:

The control input is:

\[
\begin{bmatrix}
\dd \phi \\
\dd \theta
\end{bmatrix}
= \begin{bmatrix}
P & Q \\
R & S
\end{bmatrix}
\begin{bmatrix}
\dd F \\
\dd \xi
\end{bmatrix}
\]

\[
\int \dd t
\]

For the case we can only control the angular velocity, we need to use instead of
We use:

$$\begin{bmatrix}
\frac{2}{\sin\alpha} \\
\sin\alpha \\
0 \\
\cos\alpha 
\end{bmatrix}$$

If $\alpha$ is in the 2nd or 3rd quadrant (i.e., $\pi < \alpha < \frac{3\pi}{2}$),

$a$ is in the 1st or 4th quadrant (i.e., $\frac{\pi}{2} < \alpha < \pi$).

Note: The expression in (\textasteriskcentered) is correct if

$$\begin{bmatrix}
0 \\
\cos\alpha \\
\sin\alpha \\
1 
\end{bmatrix}$$

What do you think?

\[ \begin{bmatrix} p & \alpha & \beta \\ \alpha & 0 & 0 \end{bmatrix} \begin{bmatrix} \rho \cos\theta \\ \rho \sin\theta \end{bmatrix} = \begin{bmatrix} \rho \cos\theta \\ \rho \sin\theta \end{bmatrix} \]

And for The Feedback Part?

\[ \begin{bmatrix} \frac{2}{\sin\alpha} \\
\sin\alpha \\
0 \\
\cos\alpha 
\end{bmatrix} = \begin{bmatrix} \frac{2}{\sin\alpha} \\
\sin\alpha \\
0 \\
\cos\alpha 
\end{bmatrix} \begin{bmatrix} \frac{2}{\sin\alpha} \\
\sin\alpha \\
0 \\
\cos\alpha 
\end{bmatrix} 
\]

So, for the Forward part of the loop:
First, take the forward part of the control loop.

Next, try to move the robot.

For each segment of the trajectory, do:

So, what should you do? (Algorithm, Cook, etc.)
AND INTEGER (i) - [i]

UNTIL THE INTEGER IS 0

PROCESS

DECISION

COUNT

COUNT

CHANGE IN FORCE AND CONTINUOUSLY CALCULATE AS THE NOBOT STAYS IN MOVEMENT.
noun: dead reckoning

1) The process of calculating one's position, especially at sea, by estimating the direction and distance traveled rather than by using landmarks, astronomical observations, or electronic navigation methods.

2) A method of estimating the position of a vehicle such as an aircraft or a ship based on its previous position and its course and speed over a known interval of time.