College of Engineering
School of Aeronautics and Astronautics

AAE 36401 Lab
Control Systems Lab

Lab 1 Pre-Lab
The Cart on a Track

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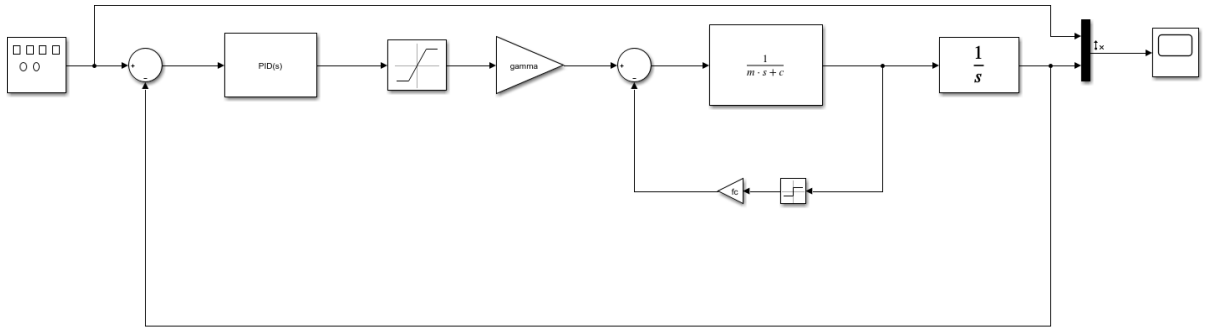
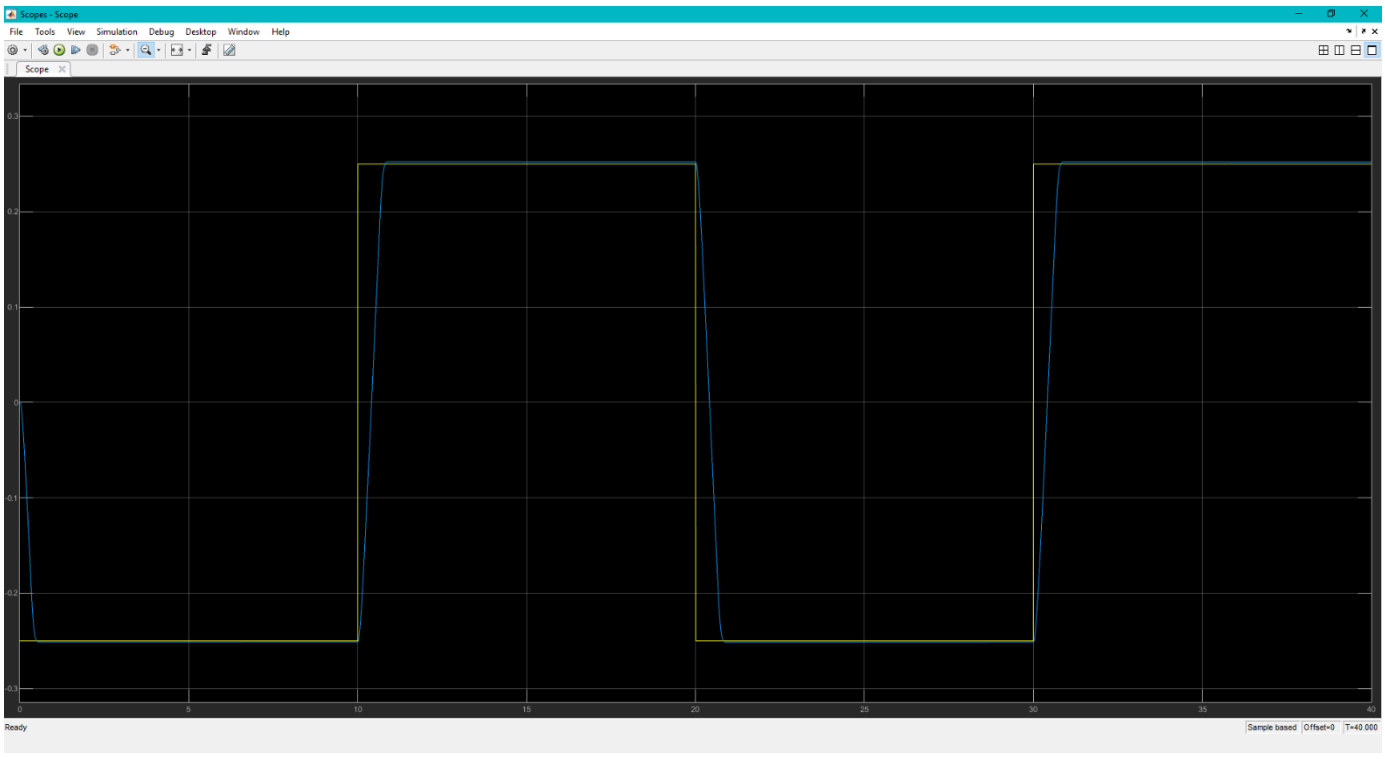


I have tuned the following system for the cart on a track model using a PID controller. The PID controllers have the gains listed in the following table

	GAINS
K_p	200
K_i	2
K_d	10

The plot for the output response is the following,



And the output parameters are listed in the following table

PARAMETER	VALUE
RISE TIME [S]	0.0815
PERCENT OVERSHOOT [%]	4.05%
SETTLING TIME [S]	0.266
STEADY STATE ERROR	~0