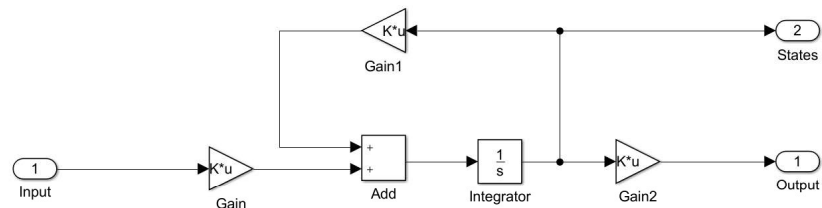
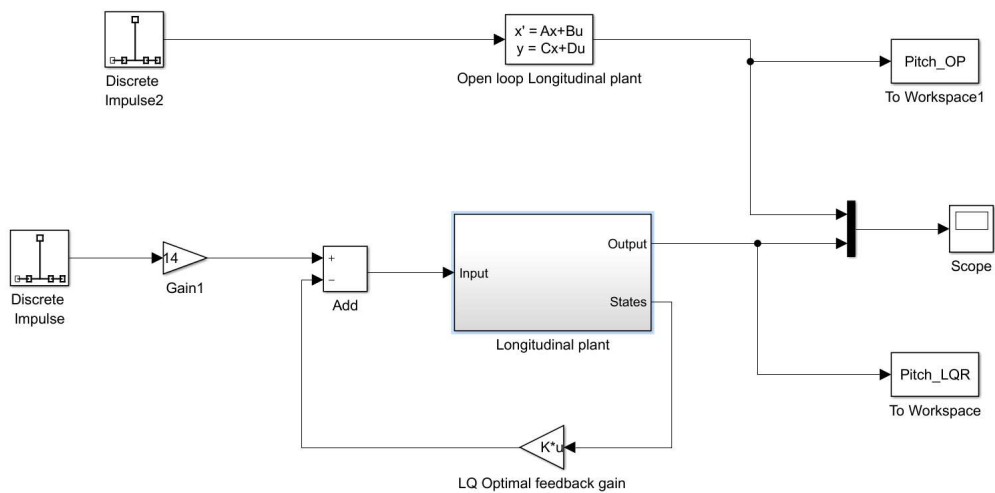


APPENDIX:

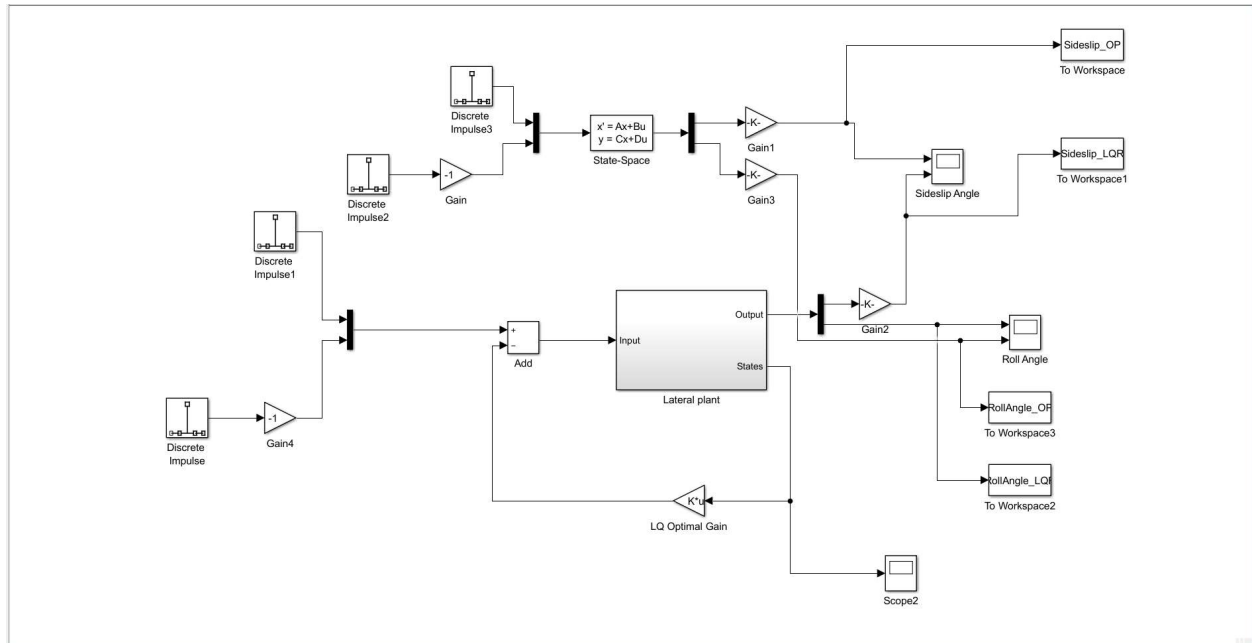
Open Loop model:



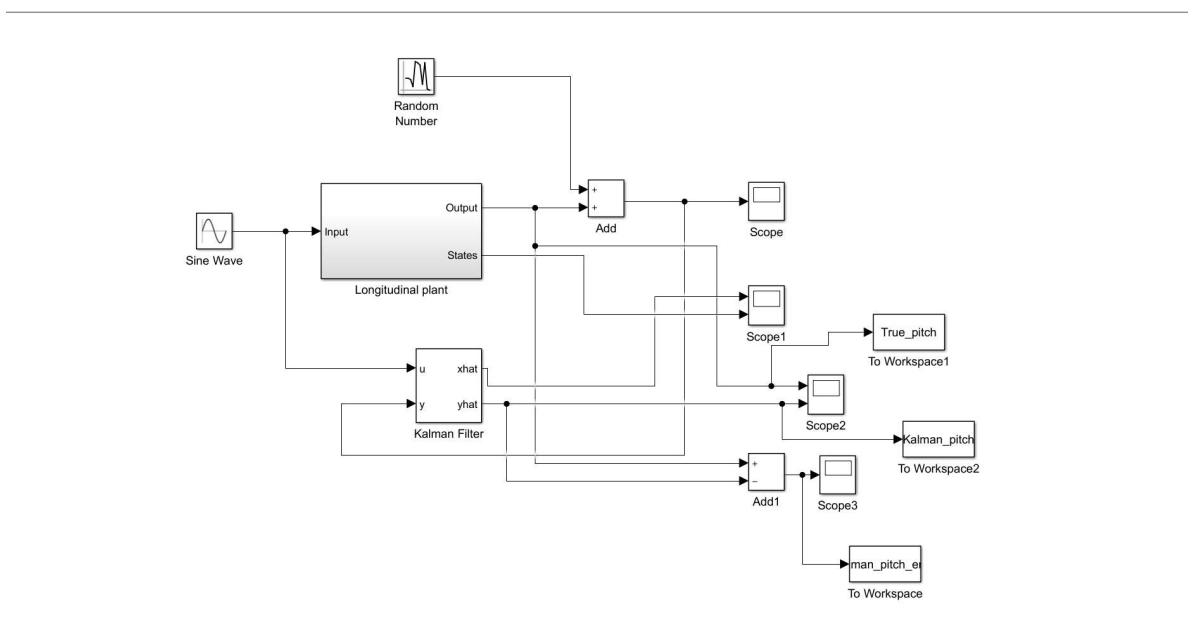
Longitudinal model LQR control:



Lateral model LQR control:



Longitudinal model Kalman Filtering:



Lateral model Kalman Filtering:

