Faculty of Engineering

Smgrc Group

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Intelligent Control

Project part I

Deadline: 17 Nov.

University of Kurdistan

Choose a benchmark plant. Perform the following tasks:

a) If the plant is nonlinear, linearize the system about its equilibrium point.

b) Study the behavior of open loop system and plot step response, root-locus, bode and nyquist diagram.

c) Design a PI controller for the system and compare the performance of nonlinear and linearized system.

d) Examine the effect of white noise and step disturbance on the system performance.