CH5120: Project 1 Report

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Note on running the MATLAB files: each of fmincon and quadprog have their own sets of files, run separately.

1 Basic model

1.1 fmincon

All configuration is done in the objective function. The caller provides just the seed U values.

1.1.1 Without minimizing U^2 objective.

Same objective function: 0.625

References

[1] Bela G. Liptak (Editor) (2003). Instrument Engineers' Handbook (4th ed.). CRC Press. ISBN 0-8493-1083-0.

[2] http://nptel.ac.in/courses/Webcourse-contents/IIT%20Kharagpur/Industrial%20Automation%20control/pdf/L-25%28SS%29%28IAC%29%20%28%28EE%29NPTEL%29.pdf

[3] http://www.controlglobal.com/assets/Media/0609/article_167_fig1.jpg

[4] Balchen, Jens G., Dag Ljungquist, and Stig Strand. "State—space predictive control." Chemical Engineering Science 47.4 (1992): 787-807.