NPTEL Video Lecture Topic List - Created by LinuXpert Systems, Chennai

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NPTEL Video Course - Chemical Engineering - NOC: Process Control - Design, Analysis and Assessment
Subject Co-ordinator - Prof. Ragunathan Rengasamy
Co-ordinating Institute - IIT - Madras
Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable
Lecture 1 - Introduction
Lecture 2 - Introductory Concepts
Lecture 3 - Introduction to Modeling
Lecture 4 - Introduction to Control Structures
Lecture 5 - Process Modelling
Lecture 6 - State Space Modeling
Lecture 7 - State Space Solution
Lecture 8 - Laplace Transforms - Part 1
Lecture 9 - Laplace Transforms - Part 2
Lecture 10 - Analysis of transfer function models - Part 1
Lecture 11 - Analysis of transfer function models - Part 2
Lecture 12 - Stability
Lecture 13 - MATLAB Tutorial 1
Lecture 14 - MATLAB Tutorial 2
Lecture 15 - Controller Equations
Lecture 16 - Controllers and analysis of closed loop transfer functions
Lecture 17 - P, PI and PID Controllers
Lecture 18 - Stability analysis of closed loop systems
Lecture 19 - Controller design and tuning - Part 1
Lecture 20 - Controller design and tuning - Part 2
Lecture 21 - Traditional Advanced Control - Part 1
Lecture 22 - Traditional Advanced Control - Part 2
Lecture 23 - Frequency Response Analysis - Part 1
Lecture 24 - Frequency Response Analysis - Part 2
Lecture 25 - Traditional Advanced Control - Part 3
Lecture 26 - Traditional Advanced Control - Part 4
Lecture 27 - Traditional Advanced Control - Part 5
Lecture 28 - Understanding PID Gains
Lecture 29 - Nyquist Stability Criterion - Part 1
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Lecture 30 - Nyquist Stability Criterion - Part 2
Lecture 31 - Nyquist Stability Criterion - Part 3
Lecture 32 - Controllers for Unstable Systems
Lecture 33 - Traditional Advanced Control - Part 6
Lecture 34 - Traditional Advanced Control - Part 7
Lecture 35 - Multivariable Control - Part 1
Lecture 36 - Multivariable Control - Part 2
Lecture 37 - Model Predictive Control - Part 1
Lecture 38 - Model Predictive Control - Part 2
Lecture 39 - Model Predictive Control-Mathematical Formulation - Part 1
Lecture 40 - Model Predictive Control-Mathematical Formulation - Part 2
Lecture 41 - Model Predictive Control - Discrete Model
Lecture 42 - Model Predictive Control - Putting all these together
Lecture 43 - Stability Analysis-Various methods - Part 1
Lecture 44 - Stability Analysis-Various methods - Part 2
Lecture 45 - Stability Analysis-Various methods - Part 3
Lecture 46 - PID Tuning
Lecture 47 - MATLAB Tutorial-Controller Tuning - Part 1
Lecture 48 - MATLAB Tutorial-Controller Tuning - Part 2
Lecture 49 - MATLAB Tutorial - Controller Design - Part 1
Lecture 50 - MATLAB Tutorial - Controller Design - Part 2
Lecture 51 - MATLAB Tutorial - Controller Design - Part 3
Lecture 52 - Conclusion Lecture
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