

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

NPTEL Video Course - Mechanical Engineering - NOC:Nonlinear Control Design

Subject Co-ordinator - Prof. Srikant Sukumar

Co-ordinating Institute - IIT - Bombay

Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable

- Lecture 1 - Course Introduction
- Lecture 2 - Examples of Nonlinear systems
- Lecture 3 - Existence and uniqueness of solutions
- Lecture 4 - Preliminaries and notations
- Lecture 5 - Preliminaries: Normed linear space
- Lecture 6 - Preliminaries: Induced Matrix Norms and Signal Norms
- Lecture 7 - Signal Norms and Cauchy-Schwarz Inequality
- Lecture 8 - Stability - Part 1
- Lecture 9 - Stability - Part 2
- Lecture 10 - Stability - Part 3
- Lecture 11 - Stability - Part 4
- Lecture 12 - Stability - Part 5
- Lecture 13 - Lyapunov stability Theorems - Part 1
- Lecture 14 - Lyapunov stability Theorems - Part 2
- Lecture 15 - Lyapunov stability Theorems - Part 3
- Lecture 16 - Lyapunov stability Theorems - Part 4
- Lecture 17 - Lyapunov stability Theorems - Part 5
- Lecture 18 - Lyapunov stability Theorems - Part 6
- Lecture 19 - Proofs of Lyapunov Stability Theorems - Part 1
- Lecture 20 - Proofs of Lyapunov Stability Theorems - Part 2
- Lecture 21 - Proofs of Lyapunov Stability Theorems - Part 3
- Lecture 22 - Proofs of Lyapunov Stability Theorems - Part 4
- Lecture 23 - La Salle's Invariance Principle - Part 1
- Lecture 24 - La Salle's Invariance Principle - Part 2
- Lecture 25 - La Salle's Invariance Principle - Part 3
- Lecture 26 - La Salle's Invariance Principle - Part 4
- Lecture 27 - La Salle's Invariance Principle - Part 5
- Lecture 28 - La Salle's Invariance Principle - Part 6
- Lecture 29 - Control Lyapunov functions - Part 1

Get DIGIMAT For High-Speed Video Streaming of NPTEL and Educational Video Courses in LAN

<http://www.digimat.in>

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

- Lecture 30 - Control Lyapunov functions - Part 2
- Lecture 31 - Control Lyapunov functions - Part 3
- Lecture 32 - Control Lyapunov functions - Part 4
- Lecture 33 - Control Lyapunov functions - Part 5
- Lecture 34 - Backstepping method for control design - Part 1
- Lecture 35 - Backstepping method for control design - Part 2
- Lecture 36 - Backstepping method for control design - Part 3
- Lecture 37 - Backstepping method for control design - Part 4
- Lecture 38 - Passivity based control - Part 1
- Lecture 39 - Passivity based control - Part 2
- Lecture 40 - Passivity based control - Part 3
- Lecture 41 - Passivity in control systems - Part 1 (Prof. Antonio Loria)
- Lecture 42 - Passivity in control systems - Part 2 (Prof. Antonio Loria)
- Lecture 43 - Passivity in control systems - Part 3 (Prof. Antonio Loria)
- Lecture 44 - Passivity in control systems - Part 4 (Prof. Antonio Loria)
- Lecture 45 - Passivity based control - Part 4
- Lecture 46 - Passivity based control - Part 5
- Lecture 47 - Passivity based control - Part 6
- Lecture 48 - Passivity based control - Part 7
- Lecture 49 - Feedback Linearization - Part 1
- Lecture 50 - Feedback Linearization - Part 2
- Lecture 51 - Feedback Linearization - Part 3
- Lecture 52 - Feedback Linearization - Part 4
- Lecture 53 - Feedback Linearization - Part 5
- Lecture 54 - Feedback Linearization - Part 6
- Lecture 55 - Feedback Linearization - Part 6
- Lecture 56 - Feedback Linearization - Part 7
- Lecture 57 - Feedback Linearization - Part 8
- Lecture 58 - Feedback Linearization - Part 9
- Lecture 59 - Feedback Linearization - Part 10
- Lecture 60 - Feedback Linearization - Part 11
- Lecture 61 - Barbalat's Lemma
- Lecture 62 - Application of Barbalat's Lemma
- Lecture 63 - Adaptive control - Part 1
- Lecture 64 - Adaptive control - Part 2
- Lecture 65 - State constrained control - Part 1
- Lecture 66 - State constrained control - Part 2
- Lecture 67 - State constrained control - Part 3
- Lecture 68 - Finite time stability - Part 1

Get DIGIMAT For High-Speed Video Streaming of NPTEL and Educational Video Courses in LAN

<http://www.digimat.in>

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

- Lecture 69 - Finite time stability - Part 2
- Lecture 70 - Finite time stability - Part 3
- Lecture 71 - Sliding mode control - Part 1
- Lecture 72 - Sliding mode control - Part 2
- Lecture 73 - Sliding mode control - Part 3