NPTEL Video Course - Mechanical Engineering - NOC:Robotics: Basics and Selected Advanced Concepts

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Co-ordinating Institute - IISc - Bangalore

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

Lecture 30 - Recursive Formulations of Dynamics of Manipulators
Lecture 31 - Motion planning
Lecture 32 - Control of a single link
Lecture 33 - Control of a multi-link serial manipulator
Lecture 34 - Control of a multi-link manipulator
Lecture 35 - Control of constrained and parallel manipulator, Cartesian control of serial manipulators
Lecture 36 - Force control of manipulators, Hybrid position/force control of manipulators
Lecture 37 - Advanced topics in non-linear control of manipulators
Lecture 38 - Wheeled Mobile Robots (WMR) on Flat Terrain
Lecture 39 - Wheeled Mobile Robots (WMR) on Uneven Terrain
Lecture 40 - Kinematics and Dynamics of WMR on Uneven Terrain
Lecture 41 - Over-Constrained Mechanism and Deployable Structures
Lecture 42 - Kinematic and Static Analysis