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

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NPTEL Video Course - Computer Science and Engineering - NOC: Machine Learning
Subject Co-ordinator - Prof. Henrik Bostrom, Prof. Fredrik Kilander, Prof. Carl Gustaf Jansson
Co-ordinating Institute - IIT - Madras
Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable
Lecture 1 - Introduction to the Machine Learning Course
Lecture 2 - Foundation of Artificial Intelligence and Machine Learning
Lecture 3 - Intelligent Autonomous Systems and Artificial Intelligence
Lecture 4 - Applications of Machine Learning
Lecture 5 - Tutorial for week 1
Lecture 6 - Characterization of Learning Problems
Lecture 7 - Objects, Categories and Features
Lecture 8 - Feature related issues
Lecture 9 - Scenarios for Concept Learning
Lecture 10 - Tutorial for week 2
Lecture 11 - Forms of Representation
Lecture 12 - Decision Trees
Lecture 13 - Bayes (ian) Belief Networks
Lecture 14 - Artificial Neural Networks
Lecture 15 - Genetic algorithm
Lecture 16 - Logic Programming
Lecture 17 - Tutorial for week 3
Lecture 18 - Inductive Learning based on Symbolic Representations and Weak Theories
Lecture 19 - Generalization as Search - Part 1
Lecture 20 - Generalization as Search - Part 2
Lecture 21 - Decision Tree Learning Algorithms - Part 1
Lecture 22 - Decision Tree Learning Algorithms - Part 2
Lecture 23 - Instance Based Learning - Part 1
Lecture 24 - Instance Based Learning - Part 2
Lecture 25 - Cluster Analysis
Lecture 26 - Tutorial for week 4
Lecture 27 - Machine Learning enabled by Prior Theories
Lecture 28 - Explanation Based Learning
Lecture 29 - Inductive Logic Programming
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Lecture 30 - Reinforcement Learning - Part 1 Introduction
Lecture 31 - Reinforcement Learning - Part 2 Learning Algorithms
Lecture 32 - Reinforcement Learning - Part 3 O-Learning
Lecture 33 - Case - Based Reasoning
Lecture 34 - Tutorial for week 5
Lecture 35 - Fundamentals of Artificial Neural Networks - Part 1
Lecture 36 - Fundamentals of Artificial Neural Networks - Part 2
Lecture 37 - Perceptrons
Lecture 38 - Model of Neuron in an ANN
Lecture 39 - Learning in a Feed Forward Multiple Layer ANN - Backpropagation
Lecture 40 - Recurrent Neural Networks
Lecture 41 - Hebbian Learning and Associative Memory
Lecture 42 - Hopfield Networks and Boltzman Machines - Part 1
Lecture 43 - Hopfield Networks and Boltzman Machines - Part 2
Lecture 44 - Convolutional Neural Networks - Part 1
Lecture 45 - Convolutional Neural Networks - Part 2
Lecture 46 - DeepLearning
Lecture 47 - Tutorial for week 6
Lecture 48 - Tools and Resources
Lecture 49 - Interdisciplinary Inspiration
Lecture 50 - Preparation for Exam and Example of Applications
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