

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

NPTEL Video Course - Management - NOC:Introduction to Data Analytics

Subject Co-ordinator - Dr. Nandan Sudarsanam, Dr. Balaraman Ravindran

Co-ordinating Institute - IIT - Madras

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

- Lecture 1 - Course Overview
- Lecture 2 - Course Overview (Continued...)
- Lecture 3 - Descriptive Statistics - Graphical Approaches
- Lecture 4 - Descriptive Statistics - Measures of Central Tendency
- Lecture 5 - Descriptive Statistics - Measures of Dispersion
- Lecture 6 - Random Variables and Probability Distributions
- Lecture 7 - Probability Distributions (Continued...)
- Lecture 8 - Probability Distributions (Continued...)
- Lecture 9 - Inferential Statistics - Motivation
- Lecture 10 - Inferential Statistics - Single sample tests
- Lecture 11 - Two Sample tests
- Lecture 12 - Type 1 and Type 2 Errors
- Lecture 13 - Confidence Intervals
- Lecture 14 - ANOVA and Test of Independence
- Lecture 15 - Short Introduction to Regression
- Lecture 16 - Introduction to Machine Learning
- Lecture 17 - Supervised Learning
- Lecture 18 - Unsupervised Learning
- Lecture 19 - Ordinary Least Squares Regression
- Lecture 20 - Simple and Multiple Regression in Excel and Matlab
- Lecture 21 - Regularization/ Coefficients Shrinkage
- Lecture 22 - Data Modelling and Algorithmic Modelling Approaches
- Lecture 23 - Logistic Regression
- Lecture 24 - Training a Logistic Regression Classifier
- Lecture 25 - Classification and Regression Trees
- Lecture 26 - Classification and Regression Trees (Continued...)
- Lecture 27 - Bias Variance Dichotomy
- Lecture 28 - Model Assessment and Selection
- Lecture 29 - Support Vector Machines

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- Lecture 30 - Support Vector Machines (Continued...)
- Lecture 31 - Support Vector Machines for Non Linearly Separable Data
- Lecture 32 - Support Vector Machines and Kernel Transformations
- Lecture 33 - Ensemble Methods and Random Forests
- Lecture 34 - Artificial Neural Networks
- Lecture 35 - Artificial Neural Networks (Continued...)
- Lecture 36 - Deep Learning
- Lecture 37 - Associative Rule Mining
- Lecture 38 - Association Rule Mining (Continued...)
- Lecture 39 - Big Data - A small introduction
- Lecture 40 - Big Data - A small introduction (Continued...)
- Lecture 41 - Clustering Analysis
- Lecture 42 - Clustering Analysis (Continued...)
- Lecture 43 - Introduction to Experimentation and Active Learning
- Lecture 44 - Introduction to Experimentation and Active Learning (Continued...)
- Lecture 45 - An Introduction to Online Learning - Reinforcement Learning
- Lecture 46 - An Introduction to Online Learning - Reinforcement Learning (Continued...)
- Lecture 47 - Summary + Insights into the Final Exam
- Lecture 48 - Tutorial on weka
- Lecture 49 - Tutorial on Decision Trees
- Lecture 50 - Big Data - A Small Introduction (Continued...)