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

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NPTEL Video Course - Computer Science and Engineering - NOC: An Introduction to Probability in Computing
Subject Co-ordinator - Prof. John Augustine
Co-ordinating Institute - IIT - Madras
Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable
Lecture 1 - Introduction to Probability - A box of chocolates
Lecture 2 - Introduction to Probability - Axiomatic Approach to Probability Theory
Lecture 3 - Introduction to Probability - Verifying Matrix Multipilication (Statement, Algorithm and Independent
Lecture 4 - Introduction to Probability - Verifying Matrix Multipilication (Correctness and Law of Total Probability)
Lecture 5 - Introduction to Probability - How Strong is your Network?
Lecture 6 - Introduction to Probability - How to Understand the World? Play with it!
Lecture 7 - Tutorial 1
Lecture 8 - Tutorial 2
Lecture 9 - Discrete Random Variables - Basic Definitions
Lecture 10 - Discrete Random Variables - Linearity of Expectation and Jensens Inequality
Lecture 11 - Discrete Random Variables - Conditional Expectation I
Lecture 12 - Discrete Random Variables - Conditional Expectation II
Lecture 13 - Discrete Random Variables - Geometric Random Variables and Collecting Coupons
Lecture 14 - Discrete Random Variables - Randomized Selection
Lecture 15 - Tail Bounds I - Markov's Inequality
Lecture 16 - Tail Bounds I - The Second Moment, Variance and Chebyshev's Inequality
Lecture 17 - Tail Bounds I - Median via Sampling
Lecture 18 - Tail Bounds I - Median via Sampling - Analysis
Lecture 19 - Tail Bounds I - Moment Generating Functions and Chernoff Bounds
Lecture 20 - Tail Bounds I - Parameter Estimation
Lecture 21 - Tail Bounds I - Control Group Selection
Lecture 22 - Applications of Tail Bounds - Routing in Sparse Networks
Lecture 23 - Applications of Tail Bounds - Analysis of Valiant's Rounting
Lecture 24 - Applications of Tail Bounds - Random Graphs
Lecture 25 - Live Session 2
Lecture 26 - Live Session
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