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

```
NPTEL Video Course - Computer Science and Engineering - NOC: Bandit Algorithm (Online Machine Learning)
Subject Co-ordinator - Prof. Manjesh Hanawal
Co-ordinating Institute - IIT - Bombay
Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable
Lecture 1 - Introduction to Online Learning - I
Lecture 2 - Introduction to Online Learning - II
Lecture 3 - Basics of Statistical Learning
Lecture 4 - Empirical risk minimization
Lecture 5 - Consistency Halving algorithm
Lecture 6 - Online Learnability
Lecture 7 - Standard Optimal Algorithm
Lecture 8 - Classification in unrealizability case
Lecture 9 - Covers Impossibility Result
Lecture 10 - Weighted Majority
Lecture 11 - Proof Weighted Majority
Lecture 12 - Full Information vs Bandit Setting
Lecture 13 - Adversarial Bandit Setting
Lecture 14 - Exponential Weights for Exploration and Exploitation Algorithm
Lecture 15 - Regret Bound of Exp3
Lecture 16 - Regret Bound of Exp3 (Continued...)
Lecture 17 - Exp3.P and Exp3.IX
Lecture 18 - Online Convex Optimisation
Lecture 19 - Follow the Leader (FTL) Algorithm
Lecture 20 - Follow the Regularized Leader
Lecture 21 - Online Gradient Descent
Lecture 22 - Strongly Convex Function
Lecture 23 - FoReL with Strongly Convex Regulariser
Lecture 24 - FoReL with Strongly Convex Regulariser (Continued...)
Lecture 25 - Euclidean and Entropy Regularizer
Lecture 26 - Introduction to Stochastic Bandits
Lecture 27 - Concentration Inequalities
Lecture 28 - Subgaussian Random Variable
Lecture 29 - Regret Definition and Regret Decomposition
```

Get Digi-MAT (Digital Media Access Terminal) For High-Speed Video Streaming of NPTEL and Educational Video Courses in LAN www.digimat.in

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

```
Lecture 30 - Explore and Commit (ETC) Algorithm
Lecture 31 - Regret Analysis and ETC
Lecture 32 - Optimism in the Face of Uncertainty
Lecture 33 - Upper Confidence Bound Algorithm
Lecture 34 - Regret Analysis of UCB
Lecture 35 - Problem Dependent and Independent Bounds of UCB
Lecture 36 - KL-UCB Algorithm
Lecture 37 - Thompson Sampling - Brief Discussion
Lecture 38 - Proof Idea of Lower Bounds - 1
Lecture 39 - Proof Idea of Lower Bounds - 2
Lecture 40 - Proof of Lower Bound - 1
Lecture 41 - Proof of Lower Bound - 2
Lecture 42 - Stochastic Contextual Bandits
Lecture 43 - Introduction to Stochastic Linear Bandits
Lecture 44 - Stochastic Linear Bandits
Lecture 45 - Regret Analysis of SLB - I
Lecture 46 - Regret Analysis of SLB - II
Lecture 47 - Regret Analysis of SLB - III
Lecture 48 - Construction of Confidence Ellipsoids - I
Lecture 49 - Construction of Confidence Ellipsoids - II
Lecture 50 - Adversarial Contextual Bandits - I
Lecture 51 - Adversarial Contextual Bandits - II
Lecture 52 - Exp4 Algorithm
Lecture 53 - Regret of Exp4
Lecture 54 - Adversarial Linear Bandits
Lecture 55 - Exp3 for Adversarial Linear Bandits
Lecture 56 - Introduction to Pure Exploration and its lower bounds
Lecture 57 - Uniform Exploration
Lecture 58 - KL-LUCB
Lecture 59 - Lilâ UCB
Lecture 60 - Lower Bound for Pure Exploration Problem
```