NPTEL Video Course - Electrical Engineering - NOC:Stochastic Modeling and the Theory of Queues

Subject Co-ordinator - Prof. Krishna Jagannathan

Co-ordinating Institute - IIT - Madras

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

Lecture 30 - Wald's Equality
Lecture 31 - Wald's Equality (Continued...)
Lecture 32 - Elementary Renewal Theorem
Lecture 33 - The Renewal Equation
Lecture 34 - The Renewal Equation (Continued...)
Lecture 35 - G/G/1 Queue and Little's theorem
Lecture 36 - Little's theorem
Lecture 37 - M/G/1 Queue
Lecture 38 - M/G/1 Queue and PK Formula
Lecture 39 - M/G/1 Queue and PK Formula (Continued...)
Lecture 40 - Ensemble rewards - Age and Duration
Lecture 41 - Ensemble rewards - Age and Duration (Continued...)
Lecture 42 - Key Renewal Theorem and Ensemble rewards
Lecture 43 - Introduction to finite state Discrete Time Markov Chains
Lecture 44 - Class and Types of Classes in a DTMC
Lecture 45 - Periodicity in a DTMC
Lecture 46 - Matrix Representation of a DTMC
Lecture 47 - The long term behaviour of a DTMC
Lecture 48 - Stationary Distribution and Long term behaviour of a DTMC - Part 1
Lecture 49 - Stationary Distribution and Long term behaviour of a DTMC - Part 2
Lecture 50 - Stationary Distribution and Long term behaviour of a DTMC - Part 3
Lecture 51 - Spectral Properties of Stochastic Matrices - Part 1
Lecture 52 - Spectral Properties of Stochastic Matrices - Part 2
Lecture 53 - The Short-term Behaviour of a DTMC
Lecture 54 - Introduction to Countable-state DTMC
Lecture 55 - Introduction to Countable-state DTMC (Continued...)
Lecture 56 - The Strong Markov Property
Lecture 57 - Renewal Theory applied to DTMC's
Lecture 58 - Stationary Distribution of a Countable State Space DTMC and Renewal Theory
Lecture 59 - Stationary Distribution of a Countable State Space DTMC and Renewal Theory (Continued...)
Lecture 60 - Stationary Distribution and The Steady State Behaviour of a Countable-state DTMC - Part 1
Lecture 61 - Stationary Distribution and The Steady State Behaviour of a Countable-state DTMC - Part 2
Lecture 62 - Convergence to Steady State of a Coutable-state DTMC (Stochastic Coupling)
Lecture 63 - The Birth-Death Markov Chains
Lecture 64 - The Reversibility Markov Chains
Lecture 65 - The Reversibility Markov Chains (Continued...)
Lecture 66 - Time Sampled M/M/1 Queue and The Burke's Theorem
Lecture 67 - Introduction to Continuous Time Markov Chains
Lecture 68 - Introduction to CTMC (Continued...)