NPTEL Video Course - Computer Science and Engineering - NOC:Distributed Systems

Subject Co-ordinator - Dr. Rajiv Misra

Co-ordinating Institute - IIT - Patna

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


Lecture 1 - Introduction to Distributed Systems
Lecture 2 - Basic Algorithms in Message Passing System
Lecture 3 - Leader Election in Rings
Lecture 4 - Distributed Models of Computation, Causality and Logical Time
Lecture 5 - Size of Vector Clock, Matrix Clocks, Virtual Time and Physical Clock Synchronization
Lecture 6 - Global State and Snapshot Recording Algorithms
Lecture 7 - Distributed Mutual Exclusion and Non-Token based Approaches
Lecture 8 - Quorum Based Distributed Mutual Exclusion Approaches
Lecture 9 - Token Based Distributed Mutual Exclusion Approaches
Lecture 10 - Consensus and Agreement Algorithms
Lecture 11 - Checkpointing and Rollback Recovery
Lecture 12 - Deadlock Detection in Distributed Systems
Lecture 13 - Distributed Shared Memory
Lecture 14 - Distributed Minimum Spanning Tree
Lecture 15 - Termination Detection in Distributed System
Lecture 16 - Message Ordering and Group Communication
Lecture 17 - Self-Stabilization
Lecture 18 - Case Study 1 - Distributed Randomized Algorithms
Lecture 19 - Case Study 2 - Peer-to-Peer Computing and Structured Overlay Network
Lecture 20 - Case Study 3 - The Google File System (GFS)
Lecture 21 - Case Study 4 - MapReduce
Lecture 22 - Case Study 5 - HDFS
Lecture 23 - Case Study 6 - Spark
Lecture 24 - Case Study 7 - Distributed Algorithms for Sensor Networks
Lecture 25 - Case Study 8 - Authentication in Distributed Systems
Lecture 26 - Case Study 9 - Bitcoin
Lecture 27 - Case Study 10 - BlockChain Technology

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

www.digimat.in