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

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NPTEL Video Course - Computer Science and Engineering - NOC: Parallel Algorithms
Subject Co-ordinator - Prof. Sajith Gopalan
Co-ordinating Institute - IIT - Guwahati
Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable
Lecture 1 - Shared Memory Models - 1
Lecture 2 - Shared Memory Models - 2
Lecture 3 - Interconnection Networks
Lecture 4 - Cost and Optimality
Lecture 5 - Basic Techniques - 1
Lecture 6 - Basic Techniques - 2
Lecture 7 - Basic Techniques - 3
Lecture 8 - Basic Techniques - 4
Lecture 9 - Basic Techniques - 5
Lecture 10 - Odd Even Merge Sort (OEMS)
Lecture 11 - OEMS, Bitonic-Sort-Merge Sort (BSMS)
Lecture 12 - BSMS, Optimal List Colouring
Lecture 13 - Description
Lecture 14 - Analysis
Lecture 15 - Applications
Lecture 16 - Applications
Lecture 17 - Fast optimal merge algorithm
Lecture 18 - High level Description
Lecture 19 - Cole's Merge Sort
Lecture 20 - Analysis of Cole's Merge Sort; Lower bound for sorting
Lecture 21 - Sorting Lower bound; Connected Components
Lecture 22 - Connected Components (CREW)
Lecture 23 - Connected Components, Vertex Colouring
Lecture 24 - Sorting on a 2D mesh
Lecture 25 - Sorting on a 2D mesh
Lecture 26 - Sorting, Offline routing on a 2D mesh
Lecture 27 - Sorting on a 3D mesh
Lecture 28 - Mesh of Trees, Hypercube
Lecture 29 - Hypercube (Continued...)
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Lecture 30 - Hypercube (Continued...), butterfly network

Lecture 31 - Butterfly, CCC and Benes Networks

Lecture 32 - Butterfly, CCC and Benes Networks

Lecture 33 - Shuffle Exchange Graphs, de Bruijn Graphs

Lecture 34 - Interconnection Networks Algorithms

Lecture 35 - Circuit Value Problem is P-complete for NC-reductions

Lecture 36 - Ordered DFS is P-complete for NC-reductions

Lecture 37 - Max Flow is P-complete for NC-reductions