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

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NPTEL Video Course - Computer Science and Engineering - NOC: Synthesis of Digital Systems
Subject Co-ordinator - Prof. Preeti Ranjan Panda
Co-ordinating Institute - IIT - Delhi
Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable
Lecture 1 - Outline - What is Synthesis?
Lecture 2 - Chip Design Flow and Hardware Modelling
Lecture 3 - VHDL
Lecture 4 - VHDL
Lecture 5 - VHDL
Lecture 6 - VHDL
Lecture 7 - Introduction to High-level Synthesis
Lecture 8 - Language front-end Design Representation
Lecture 9 - Compiler Transformation in High Level Synthesis
Lecture 10 - Memory Modelling and Compiler Transformation in High Level Synthesis
Lecture 11 - Compiler Transformations in High Level Synthesis
Lecture 12 - Hardware Transformations and ASAP / ALAP Scheduling
Lecture 13 - Scheduling in High Level Synthesis
Lecture 14 - Force Directed Scheduling and Register Allocation
Lecture 15 - High Level Synthesis and Timing Issues
Lecture 16 - Finite State Machine Synthesis
Lecture 17 - Finite State Machine Synthesis
Lecture 18 - The Retiming Problem
Lecture 19 - Efficient Solution to Retiming and Introduction to Logic Synthesis
Lecture 20 - Binary Decision Diagrams
Lecture 21 - Introduction to Logic Synthesis
Lecture 22 - Two-level Logic Optimisation
Lecture 23 - Multi-Level Logic Optimisation
Lecture 24 - Multi-level Logic Synthesis
Lecture 25 - Introduction to Timing Analysis
Lecture 26 - Timing Analysis and Critical Paths
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