NPTEL Video Course - Electrical Engineering - NOC:Multirate DSP

Subject Co-ordinator - Prof. David Kovil Pillai

Co-ordinating Institute - IIT - Madras

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

Lecture 30 - DFT and High Resolution Spectral Analysis - Part 1
Lecture 31 - DFT and High Resolution Spectral Analysis - Part 2
Lecture 32 - Transmultiplexer and Maximally Decimated Filterbanks - Part 1
Lecture 33 - Transmultiplexer and Maximally Decimated Filterbanks - Part 2
Lecture 34 - Maximally Decimated Filterbanks 2 - Part 1
Lecture 35 - Maximally Decimated Filterbanks 2 - Part 2
Lecture 36 - Study of Two-channel filter bank
Lecture 37 - Introduction to Quadrature Mirror Filters (QMF)
Lecture 38 - 2-channel QMF Filter Bank Design
Lecture 39 - Study of All-pass filters
Lecture 40 - Study of All-pass lattice
Lecture 41 - All-pass decomposition, the study of Mth band and Nyquist filters
Lecture 42 - Study of two-channel filter bank with perfect reconstruction
Lecture 43 - First part name
Lecture 44 - First part name
Lecture 45 - Capacity of wireless channels - CSIR - Part 1
Lecture 46 - Capacity of wireless channels - CSIT - Part 2
Lecture 47 - Capacity of wireless channels - Formulation of capacity calculation - Part 3
Lecture 48 - Capacity of wireless channels - Formulation of capacity calculation (Continued...) - Part 1
Lecture 49 - Capacity of wireless channels - Formulation of capacity calculation (Continued...) - Part 2
Lecture 50 - Capacity of wireless channels - Time-invariant Frequency selective channel - Part 3
Lecture 51 - Capacity of wireless channels - Time varying Frequency selective channels - Part 1
Lecture 52 - Multi-rate DSP framework for Multi-carrier Modulation - Part 2
Lecture 53 - MCM with overlapping spectra - Part 1
Lecture 54 - Recap of multirate DSP concepts for building OFDM - Part 2
Lecture 55 - Introduction to Redundancy and it's implementation in multi-rate framework - Part 3
Lecture 56 - M-channel multicarrier Transceiver - Part 1
Lecture 57 - M-channel multicarrier Transceiver - Part 2
Lecture 58 - M-channel multicarrier Transceiver - Part 3
Lecture 59 - Pseudo -circulant structure - Part 1
Lecture 60 - Pseudo -circulant structure - Part 2
Lecture 61 - MCM impairments and CP - Part 1
Lecture 62 - MCM impairments and CP - Part 2
Lecture 63 - Orthogonal Frequency Division Multiplexing - Part 1
Lecture 64 - Orthogonal Frequency Division Multiplexing - Part 2
Lecture 65 - Review of OFDM with CP
Lecture 66 - Review of Lec 1-28
Lecture 67 - OFDM applications - Quantization - Part 1
Lecture 68 - OFDM applications - Quantization - Part 2

Lecture 69 - Some more applications of MDSP