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

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NPTEL Video Course - Electronics and Communication Engineering - NOC: Digital Image Processing
Subject Co-ordinator - Prof. P.K. Biswas
Co-ordinating Institute - IIT - Kharagpur
Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable
Lecture 1 - Introduction to Digital Image Processing
Lecture 2 - Application of Digital Image Processing
Lecture 3 - Image Digitalization, Sampling Quantization and Display
Lecture 4 - Signal Reconstruction from Samples
Lecture 5 - Signal Reconstruction from Image
Lecture 6 - Quantizer Design
Lecture 7 - Relationship between Pixels
Lecture 8 - Relationship of Adjacency and Connected Components Labeling
Lecture 9 - Application of Distance Measures
Lecture 10 - Basic Transform
Lecture 11 - Image Formation - I
Lecture 12 - Image Formation - II
Lecture 13 - Image Geometry - I
Lecture 14 - Image Geometry - II
Lecture 15 - Stereo Imaging Model - II
Lecture 16 - Interpolation and Resampling
Lecture 17 - Interpolation Techniques
Lecture 18 - Interpolation with examples - I
Lecture 19 - Interpolation with Examples - II
Lecture 20 - Image Transformation - I Edit Lesson
Lecture 21 - Image Transformation - 2
Lecture 22 - Separable Transformation
Lecture 23 - Basis Images
Lecture 24 - Fourier Transformation
Lecture 25 - Properties of FT
Lecture 26 - FT Result Display - 2
Lecture 27 - Rotation Invariance Property
Lecture 28 - DCT and Walsh Transform
Lecture 29 - Handmard Transformation
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## NPTEL Video Lecture Topic List - Created by LinuXpert Systems, Chennai

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Lecture 30 - Histogram Equalization and Specifications - I
Lecture 31 - KL-transform-2
Lecture 32 - Image Enhancement
Lecture 33 - Contrast Stretching Operation
Lecture 34 - Histogram Equalization and Specification - I
Lecture 35 - Histogram Equalization and Specification - II
Lecture 36 - Histogram Implementation - I
Lecture 37 - Histogram Implementation - II
Lecture 38 - Image Enhancement
Lecture 39 - Image Enhancement
Lecture 40 - Image Enhancement
Lecture 41 - Frequency Domain Processing Techniques
Lecture 42 - Image Restoration Techniques - I
Lecture 43 - Image Restoration Techniques - II
Lecture 44 - Estimation of Degradation Model and Restoration Techniques - I
Lecture 45 - Estimation of Degradation Model and Restoration Techniques - II
Lecture 46 - Other Restoration Techniques - I
Lecture 47 - Other Restoration Techniques - II
Lecture 48 - Image Registration - I
Lecture 49 - Image Registration - II
Lecture 50 - Colour Image Processing
Lecture 51 - Colour Model
Lecture 52 - Conversion of one color model to another - I
Lecture 53 - Conversion of one color model to another - II
Lecture 54 - Pseudo color image processing
Lecture 55 - Full color image processing
Lecture 56 - Different Approaches for Image Segmentation
Lecture 57 - Image Segmentation
Lecture 58 - Region based Segmentation Operation. Thresholding Techniques
Lecture 59 - Region Splitting and Merging Technique Edit Lesson
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