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

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NPTEL Video Course - Civil Engineering - NOC: Digital Image Processing of Remote Sensing Data
Subject Co-ordinator - Dr. Arun K. Saraf
Co-ordinating Institute - IIT - Roorkee
Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable
Lecture 1 - Remote-sensing Image and How it is represented
Lecture 2 - Different Techniques of Image Acquisition
Lecture 3 - Why is Digital Image processing Important ?
Lecture 4 - Image characteristics and Different Resolutions in Remote Sensing
Lecture 5 - Electromagnetic spectrum, solar reflection, and thermal emission
Lecture 6 - Color Representation and Transformations
Lecture 7 - Image histograms and statistics
Lecture 8 - Geo-referencing Techniques
Lecture 9 - Image Enhancement Techniques part 1
Lecture 10 - Image Enhancement Techniques part 2
Lecture 11 - Multispectral Transform, Scatter Plot, Principal Component Analysis and Decorrelation Stretch
Lecture 12 - Spatial Filtering Techniques
Lecture 13 - Frequency Domain Fourier Transformation
Lecture 14 - Basic Image Compression Techniques and Different Image File Formats
Lecture 15 - Image Classification Techniques
Lecture 16 - Principles of Image Interpretation
Lecture 17 - SAR Interferometry (InSAR) Techniques
Lecture 18 - Image Merging and Image Mosaicing Techniques
Lecture 19 - Application of Image Analysis
Lecture 20 - Limitations and Future of Digital Image Processing
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