



Class03

Advanced Image Processing
Data and Web Mining
Biomedical Image Processing



305541 Data and Web Mining

Data mining terminology and concepts; data preparation process; data mining task analysis; classification and prediction; clustering; genetic algorithms; fuzzy sets; rough sets; artificial neural networks; association and rule generation; frequent itemset algorithms; correlated items; matching and mining event sequences; web content mining; web structure mining; web usage mining

Assignment03

1. Study Genetic Algorithm/Fuzzy Sets.
2. Prepare the presentation in ppt
3. Present next Friday



305513 Advanced Image Processing

Multiscale image decomposition and wavelets; image noise models; image edge detection; color and multispectral image representation; multiscale denoising of photographic images; nonlinear filtering for image analysis and enhancement; image quality assessment

Assignment03

1. Select one of edge detection algorithms.
Then, write a program.
2. Prepare the presentation in ppt
3. Present next Friday



305613 Biomedical Image Processing

Digital signal processing in biomedical work; biomedical data acquisition; biomedical image reconstruction; image processing for biomedical images; computed tomography; Magnetic Resonance Imaging (MRI); other biomedical image modalities

Assignment03

1. Group Study: Study Computed Tomography and related images of CT.
2. Prepare the presentation in ppt
3. Present next Friday