

CSC461: Image Processing

This course introduces students to the basic theories and methodologies of digital image processing. Topics include: Image sampling and quantization, color, point operations, intensity transformations for image enhancement, noise reduction and restoration, two-dimensional discrete Fourier transform, spatial and frequency domain linear image filtering, nonlinear image filtering, binary image processing, morphological image processing, edge detection, image segmentation, feature extraction and recognition tasks, image registration and digital video processing basics.