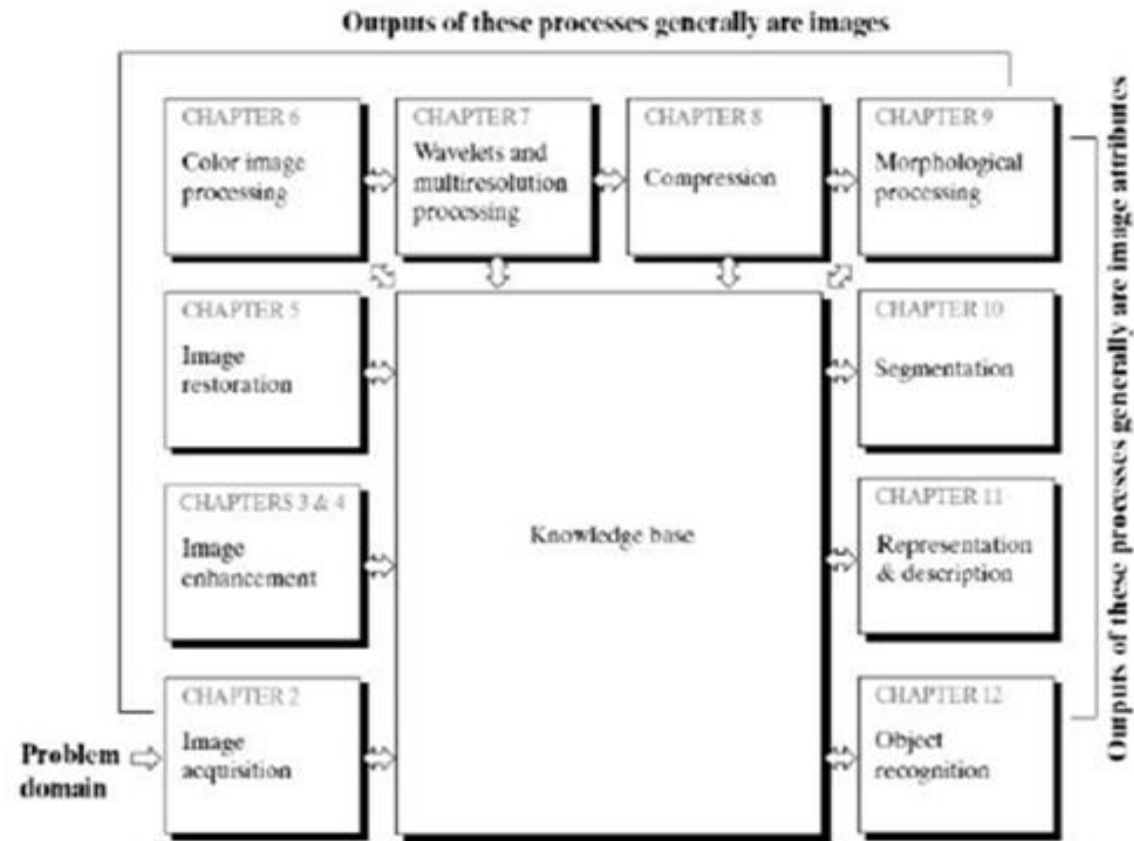


Digital Image Processing

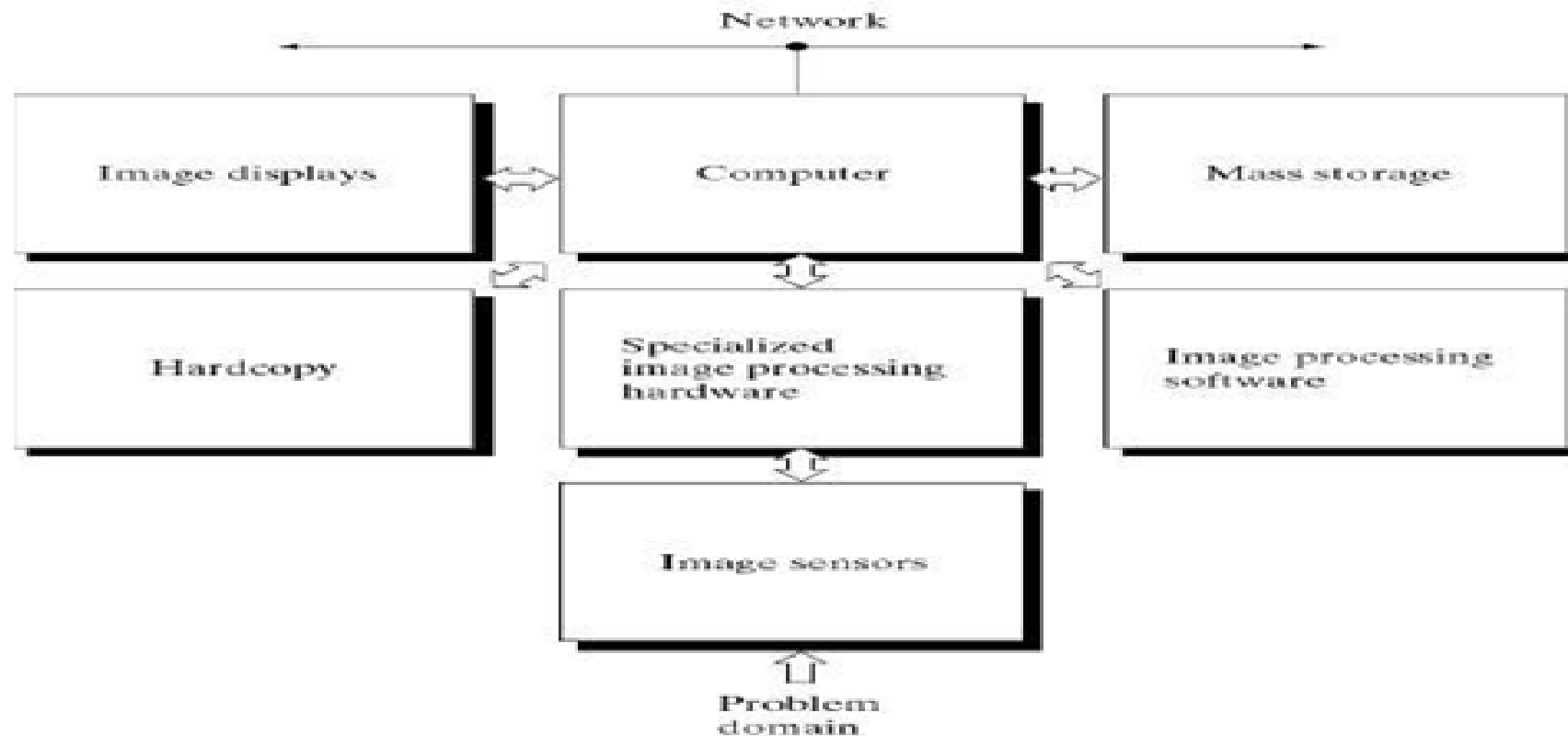
Module 1

Introduction

Key Stages in Digital Image Processing



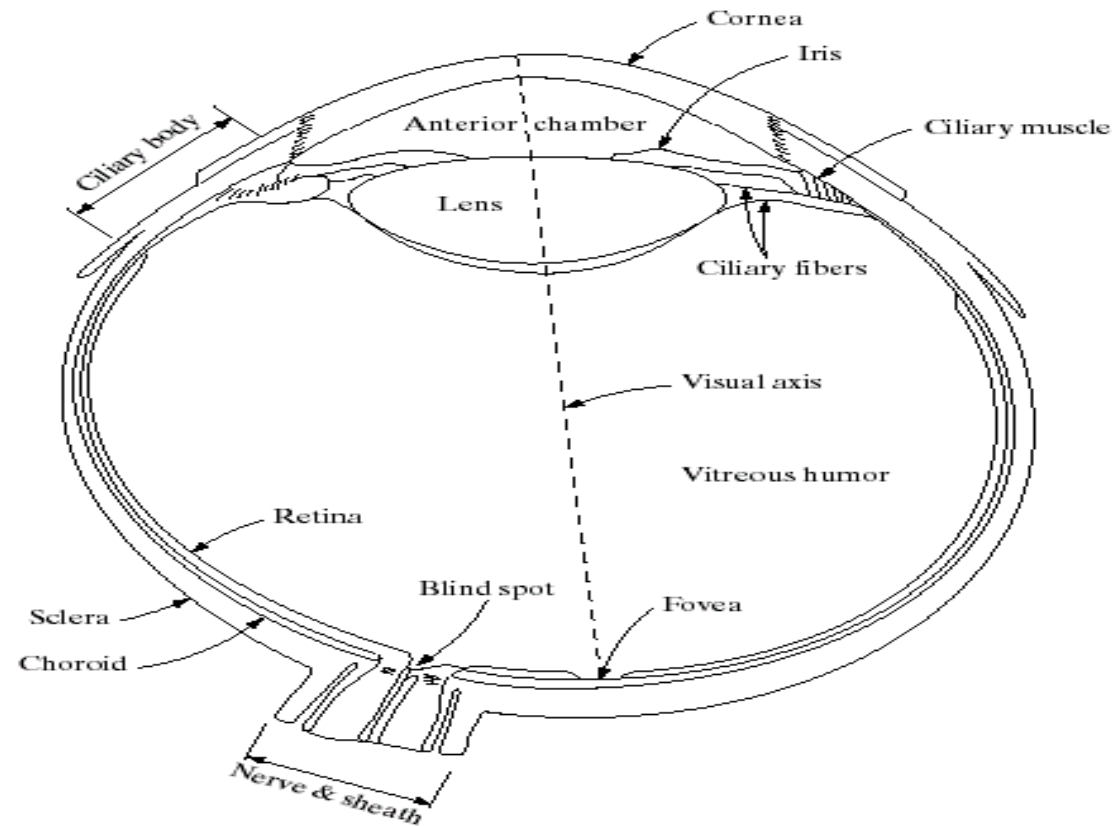
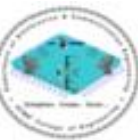
Components of an Image Processing System





A T M E
College of Engineering

Elements of Visual Perception



Range of Relative Brightness Sensation

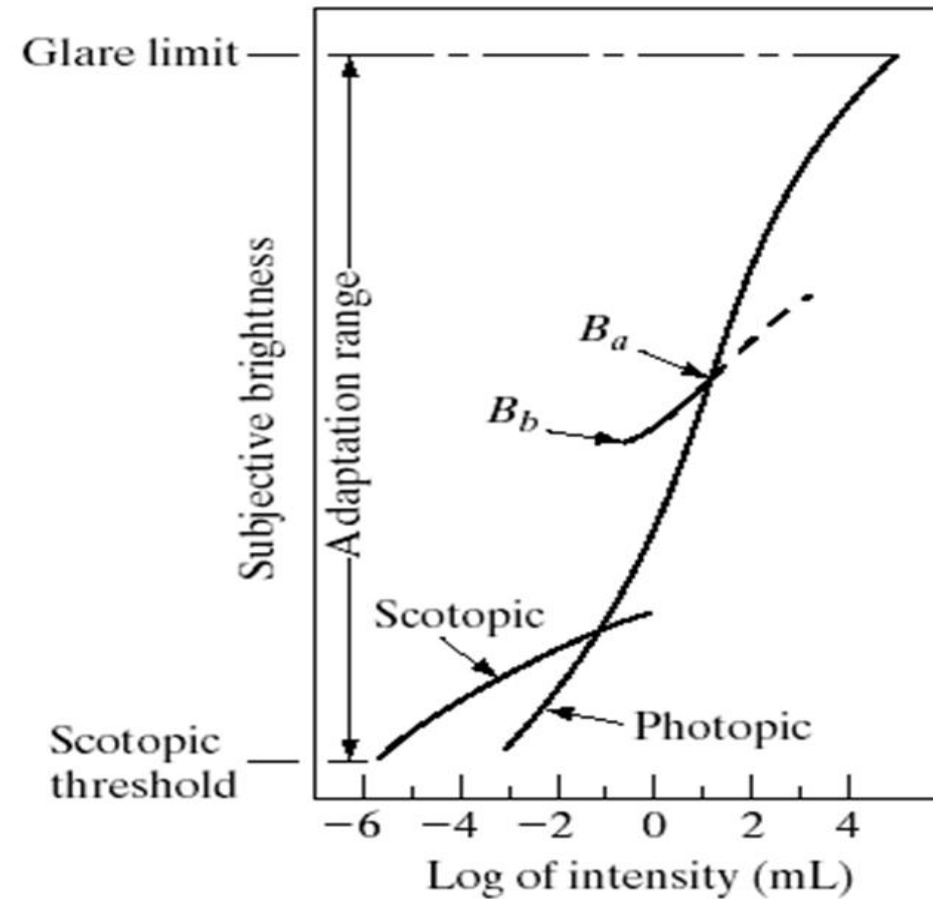
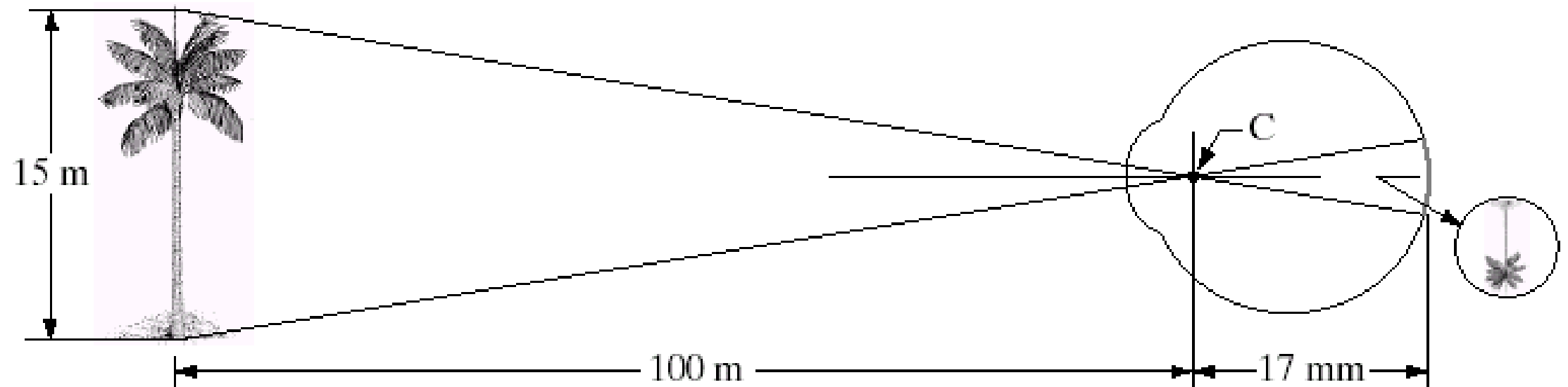
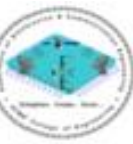


Image Formation in the Eye



Brightness Adaptation of Human Eye : Simultaneous Contrast



Optical illusion

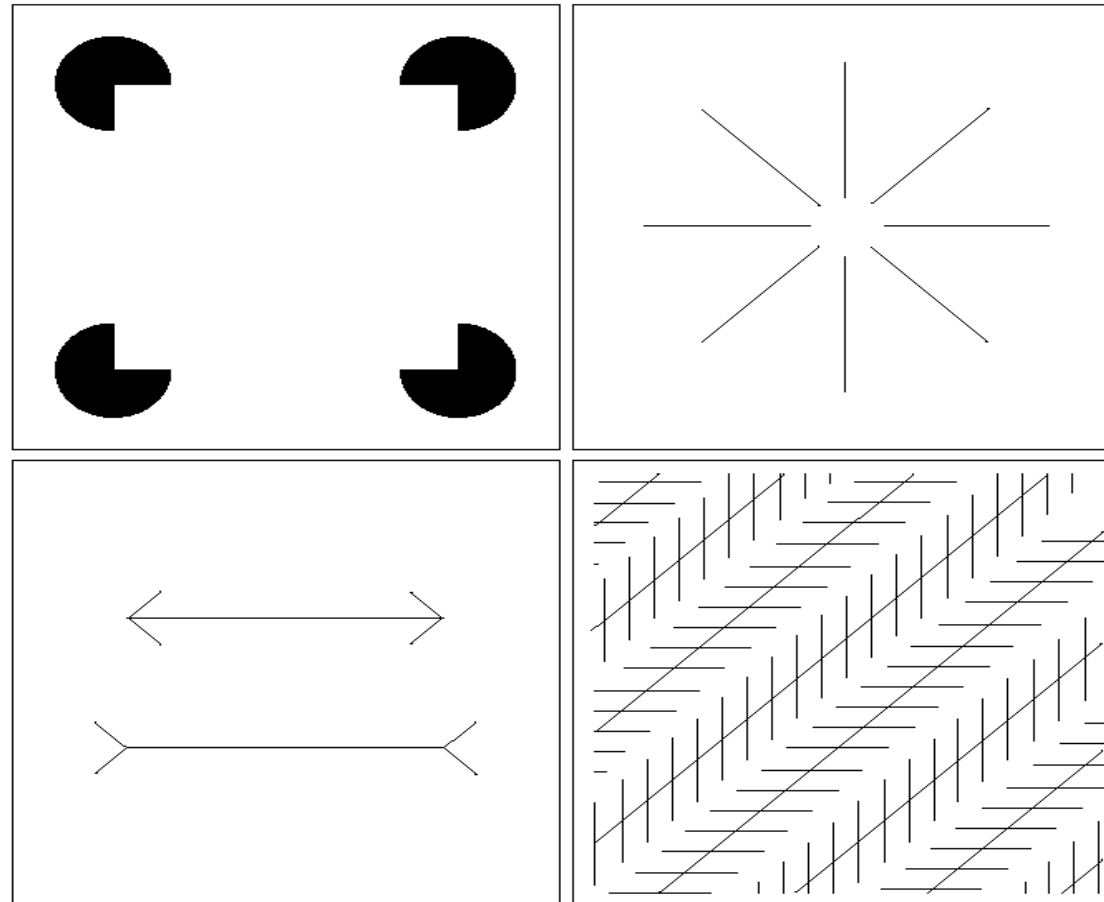


Image Sensors

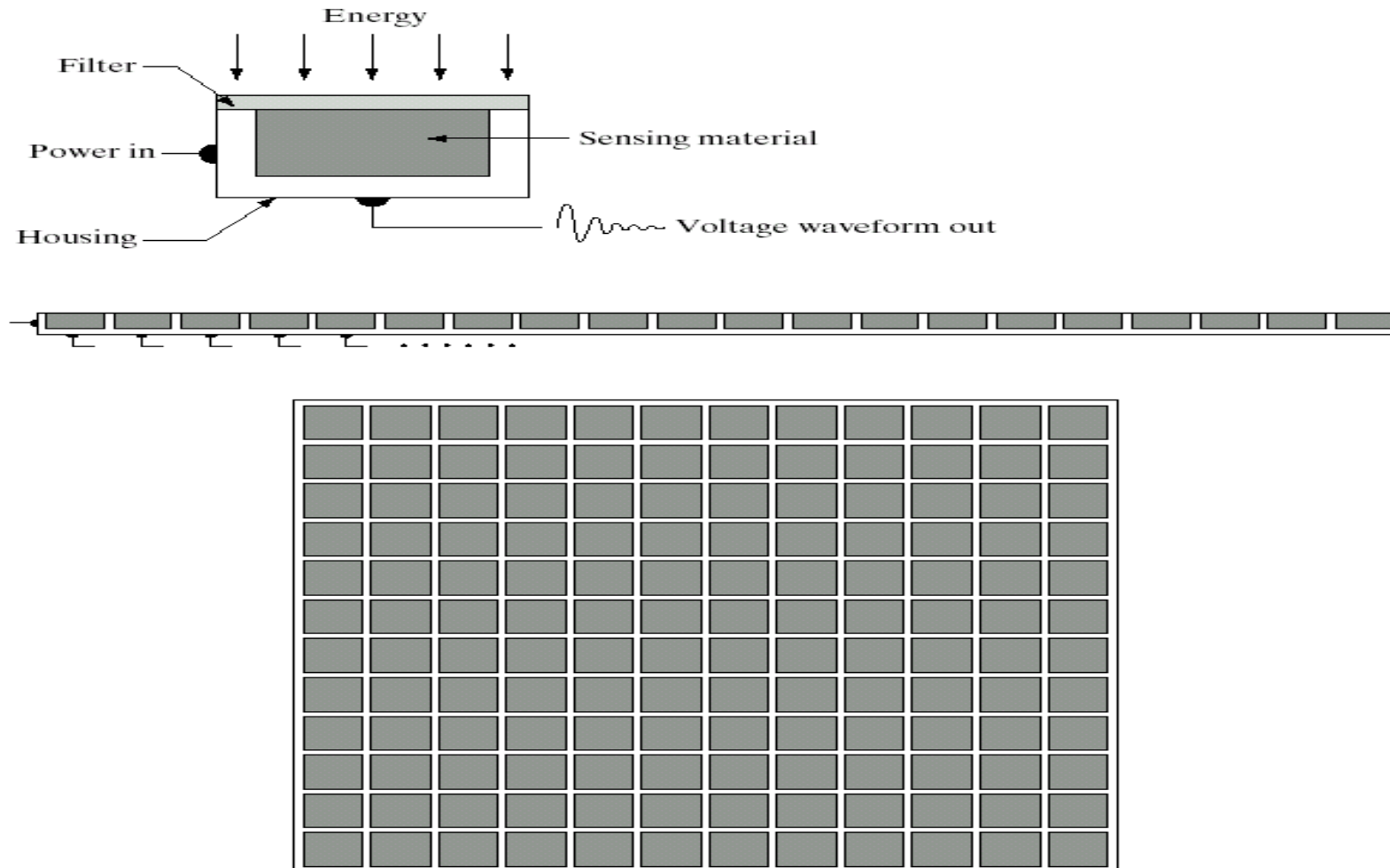
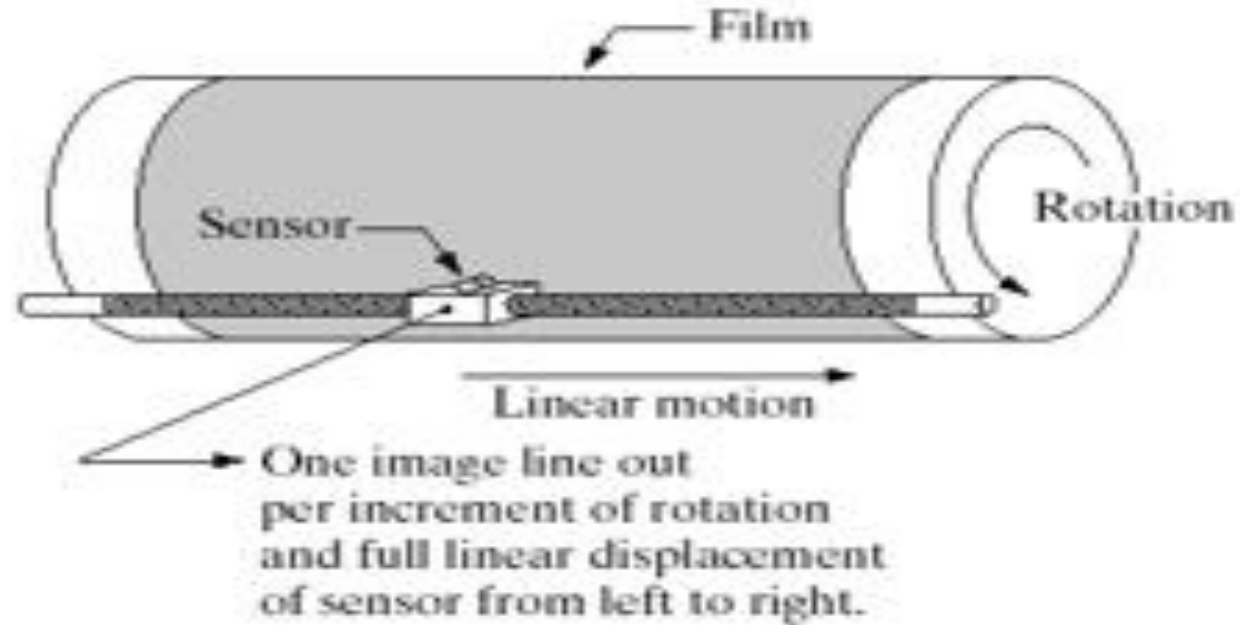


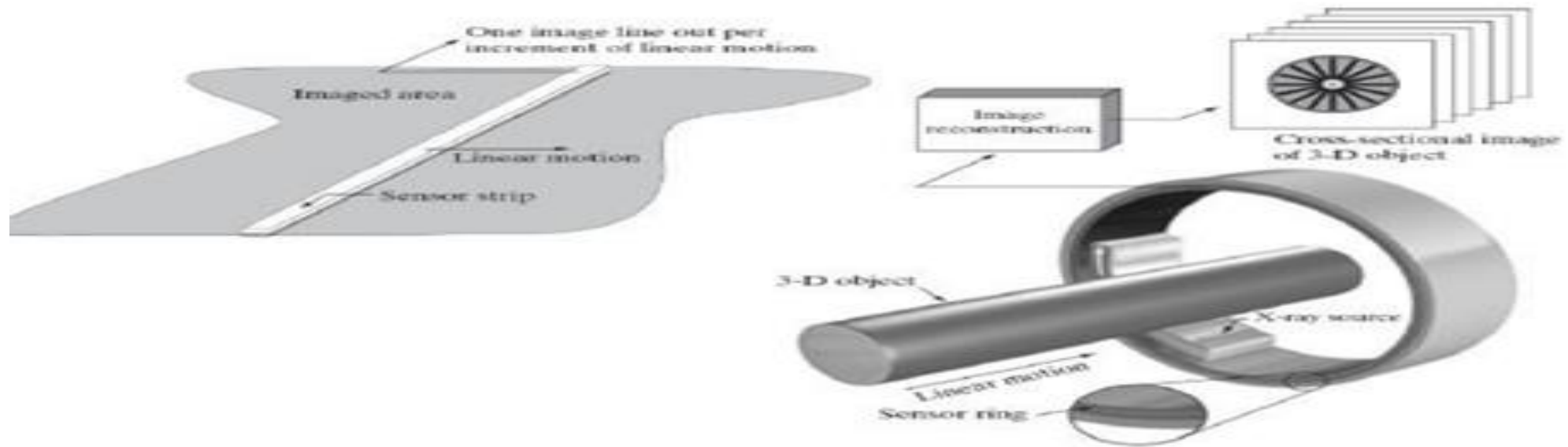
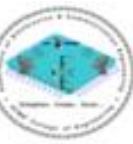
Image Sensors : Single Sensor



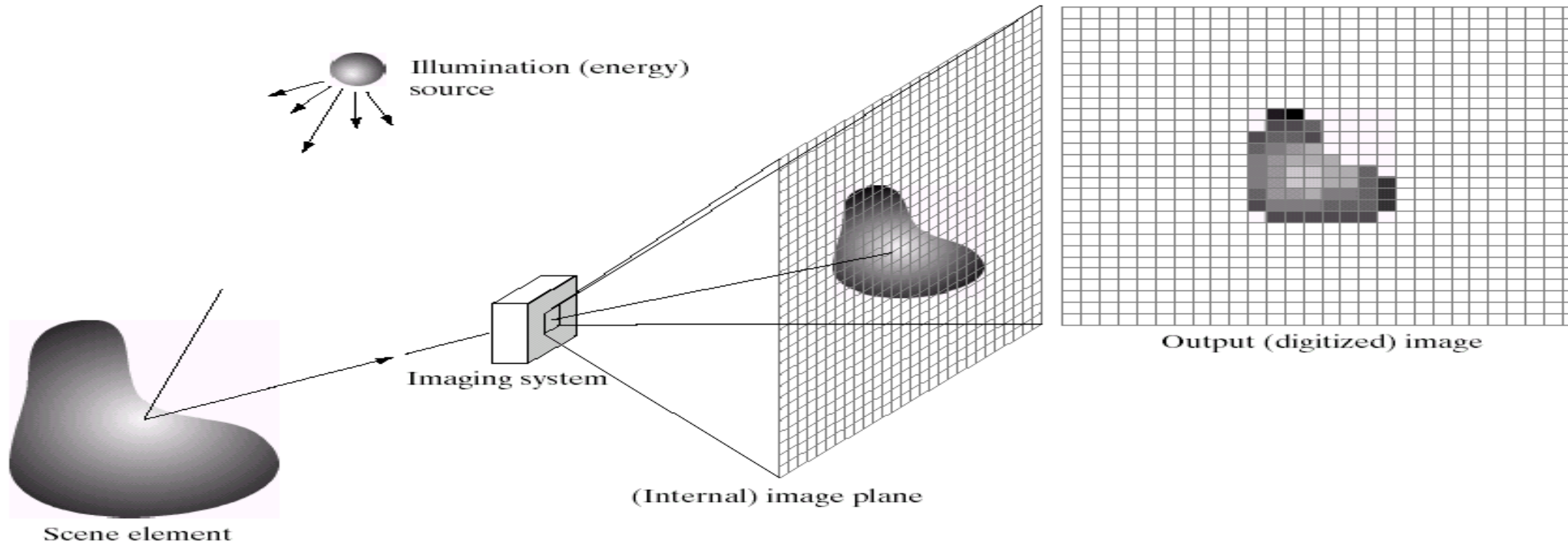


A T M E
College of Engineering

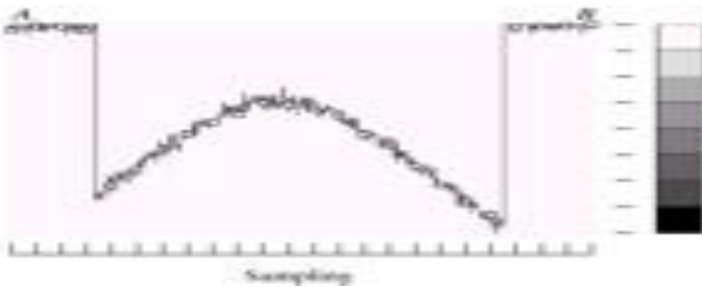
Image Sensors : Line Sensor



Digital Image Acquisition Process



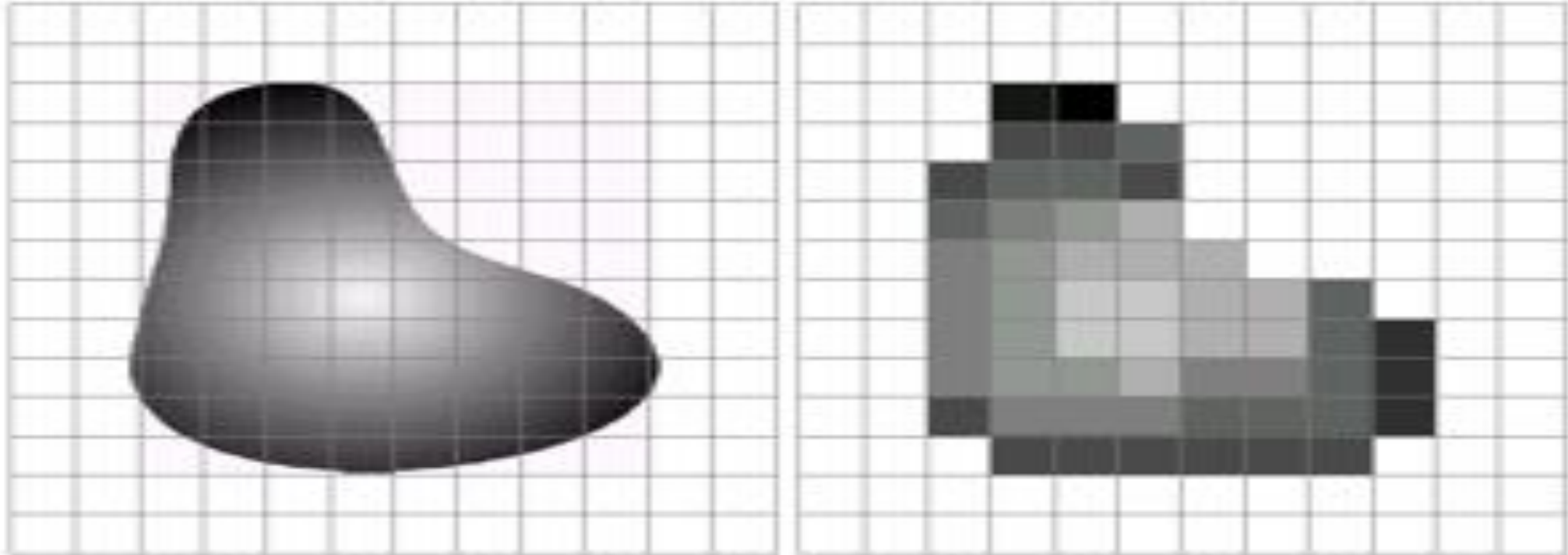
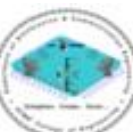
Generating a Digital Image



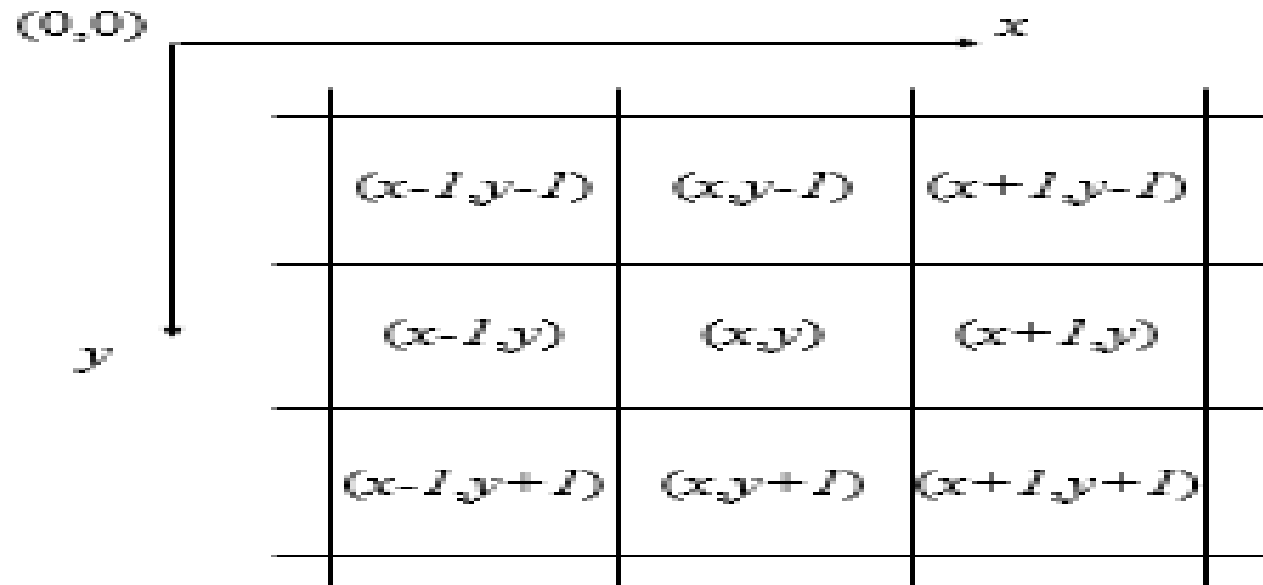


A T M E
College of Engineering

Image Sampling and Quantization

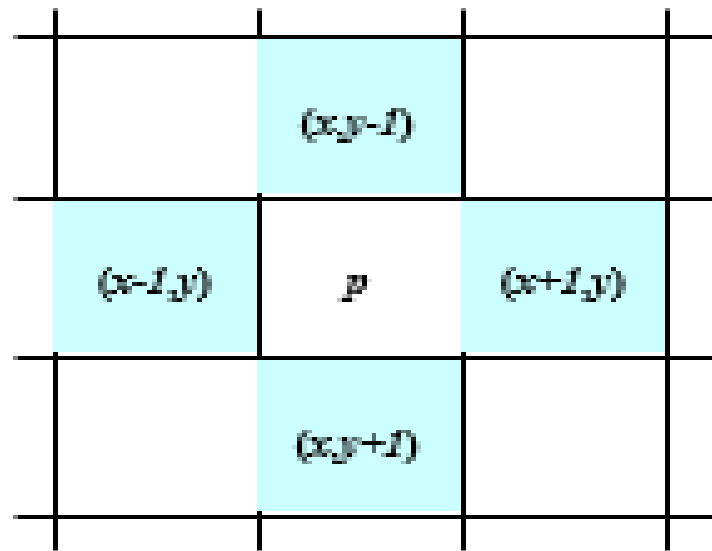


Basic Relationship of Pixels



Neighbors of a Pixel

- 4-neighbors of p



- 8-neighbors of p

