Image Processing

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Introduction of image processing

- Image processing is a method to perform some operations on an image, in order to get an enhanced image or to extract some useful information from it.
- It is a type of signal processing in which input is an image and output may be image or characteristics with that image.
- Nowadays, image processing is among rapidly growing technologies.

Types of image processing

- ➤ Analog Image Processing
- ➤ Digital Image Processing

Analog image processing

- Analog image processing is done on analog signals. it includes processing on two dimensional analog signal.
- ➤ In this type of image processing, the image are manipulated by electrical means by varying the electrical signal

Digital image processing

- Digital image Processing is the use of computer algorithms to perform image processing on digital image.
- Digital image processing is developed in 1960s at jet Propulsion Laboratory at USA
- Digital Image processing deals with developing a digital system that performs operations on an digital image.

Advantage of digital image processing

The main advantage of digital image processing are:-

- Digital image can be processed by digital computers.
- Image can be given more sharpness and better visuals appearance.
- Image size can be increased or decreased.
- Image can be compressed and decompressed for faster image transfer over the network.
- Image can be smoothed.

Disadvantage of digital image processing

- ➤ It is very costly depends on the system used.
- ➤ Time consuming
- Lack of qualified professional

Application of digital image processing

Some of the major fields in which digital image processing is widely used are mentioned below

- Image sharpening
- ➤ Medical field
- ➤ Colour processing
- ➤ Artistic effects

Reference

- www.slideshare.net
- www.imageprocessingplace.com
- www.tutorialspoint.com/dip

THANK YOU