

IQRA NATIONAL UNIVERSITY

PESHAWAR

ID

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NAME

SHARIQ

SUBJECT

DATA IMAGE PROCESING

Filtering:-

It is a technique used to enhance an image

It is used to emphasize some features or remove some features

It includes smooting, sharpening and edge enhancement.

Why we use Filtering:-

We use filtering to supress either the high frequency in the image, smooting the image

or enhancing or detecting the edges in the image.

Filtering can be active or pasive having four types.

Types :-

Low pass

High pass

band pass

Notch pass

Low pass :-

A filter that attenuates high frequencies while passing low frequincies is called low pass filter.

Low pass filter usually used for smooting.

High pass :-

A fitter that don't affect high frequencies is called high pass.

High pass usually used for sharpening.

Band pass filter:-

A bandpass attenuates very low and very high frequencies but retain a middle range band of frequencies

It is used to enhance the edges.

Notch pass filter:-

It's used to remove repetitive noise from the image

Are like a narrow pass filter.

Masking:-

In digital image processing masking refers to act of changing the color of certain area of a picture or transferring these area onto another background.

Explanation:-

On an independent layer, the color of this scoop can then be edited. The filter used for this method allows for the detail of the picture to be maintained.

Some of it's type

Layer masking

Clipping masking

Alpha channel masking.

Working:- Masking is used to create different color variants of a specific product so instead of being busy with taking countless picture of different colors the photographer can take a single picture of an item that can be used for all colors.

It reduce the overall efforts depend on the number of color sampling.

Example:-

The take of the model is not exact in one picture where the piece of clothing, is two pic can be easily combined to create final image.