

Summary

Modules completed:

a) Poisson Image Editing

Image editing tasks concern either global change (color/intensity corrections, filters, deformations) or local changes concerned to a selection. Here we are interested in achieving local changes, ones that are restricted to a region manually selected (ROI), in a seamless and effortless manner.

The extent of the changes ranges from slight distortions to complete replacement by novel content.

Examples: Inserting objects, Color Transfer, Feature Exchange, Texture Flattening, Local illumination changes.

b) Domain Transform for Edge-Aware Image Processing

The processing involves high-quality edge-preserving filtering of images.

Applied the filter on several image processing tasks including edge-preserving smoothing,

Depth-of-field effects, stylization, detail enhancement, edge enhancement and pencil/color pencil sketch.

c) Color2Gray

Visually important image features often disappear when color images are converted to gray scale.

This algorithm reduces such losses by attempting to preserve the salient features of the color image.

The Color2Gray results offer viewers salient information missing from previous gray scale image creation methods.

Work not done:

a) Image Stitching

This is already available as open source software.

<http://hugin.sourceforge.net/>

b) HDRI

This is also available as open source software.

<http://pfstools.sourceforge.net/>