NAME

Vindex − index of Vista programs

DESCRIPTION

Programs

The following is a list of Vista programs currently available. Each is documented by a section 1Vi manual page named after it.

For viewing the contents of Vista data files under X Windows:

vxview	general-purpose viewer
vxviewe	viewer optimized for displaying only edge sets and images
vxviewi	viewer optimized for displaying only images

For basic image processing:

vadjust	adjusts an image's brightness and/or contrast
vconvert	converts an image's pixel representation
vcrop	extracts a rectangular region from an image
vflip	flips an image horizontally and/or vertically
vinvert	inverts an image, swapping black and white
vistat	reports image statistics
vnegate	negates an image
vop	performs arithmetic and logical operations on image pixels
vrgbtogray	converts a RGB image into a gray-scale image
vrotate	rotates an image by any angle
vscale	scales an image in size
vsynth	synthesize an image with a pattern or random noise
vtranspose	tranposes the rows and columns of an image
vxadjust	interactively adjust image brightness and/or contrast
vxcrop	interactively crop an image
vzeroc	marks the zero crossings in an image

For filtering images:

vblur	blur an image and add noise to it
vconvolve	convolves an image with a mask
vgauss	convolve an image with a Gaussian or its derivative
vgrad	estimates intensity gradient at each image pixel

For Fourier analysis of images:

vcomplex	builds a complex image from real and imaginary components
vfft	computes forward or inverse Fourier transform of an image
vmag	computes magnitude of a complex image
vphase	computes phase of a complex image

For detecting and processing intensity edges:

vcanny	Canny's edge detector
vlink	link connected non-zero image points into edges

vsegedges	segments edges into straight lines

For manipulating Vista data files:

vcat	concatenates Vista data files
vcatbands	combines multiple images into a single, multi-band image
vselbands	selects specified bands from an image
vselect	selects specified objects from a Vista data file

For converting to and from other formats:

plaintov	converts an image from Vista plain file format to the standard Vista format
pnmtov	converts a Portable Anymap (PNM) to a Vista image
v1to2	converts Vista data file from version 1 format to version 2
vtopgm	converts Vista images to Portable Graymap (PGM) format

For outputting Vista data objects in PostScript:

vlayout	arranges multiple PostScript figures on a single page
vtops	outputs Vista images and edge sets in PostScript

Miscellaneous:

vcalsyn	for generating synthetic camera calibration data
vcamcal	for calibrating and evaluating a camera model
vflow	for computing optical flow from a motion sequence

Other Manual Pages

Vista file formats are defined by these manual pages:

Vfile(5Vi)	defines the general format of Vista data files
VCamera(3Vi)	defines the format of camera models in Vista data files
VEdges(3Vi)	defines the format of edge sets in Vista data files
VImage(3Vi)	defines the format of images in Vista data files
Vplain(5Vi)	defines a text file format for images

FILES

Include **/u/cs449/bin** in your **PATH** environment variable in order to access these programs.

SEE ALSO

Vista(7Vi)

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