

NAME

generatekeys – Generate SIFT keypoints from an image file

SYNOPSIS

generatekeys.exe *imagefile keyfile[.gz]* [downscaleResolution]

DESCRIPTION

Generate SIFT key descriptors for an image. It reads in the image file, finds SIFT keypoints for descriptive image locations and outputs the SIFT descriptors to the keyfile. The image is internally doubled in size, as this increases the number of keypoints found. If you do not want this behaviour or want to downscale the picture, see the downscaleResolution option. The resulting keyfiles can be processed by the other utilities in the autopano-sift package.

OPTIONS

imagefile

The image file name that will be read in and processed. It can be in any format readable by the GDK pixbuf loaders. Usually that includes JPEG, PNG and TIFF.

keyfile The name of the keypoint XML file to generate. When ".gz" is used at the end of the filename, the file is transparently compressed using the gzip compression. See **gzip(1)**

downscaleResolution

An optional integer width and height limitation. If given, the input image is downscaled so its larger dimension matches the given size in pixels. The smaller the downscale resolution, the smaller the memory requirements, but also less keypoints are found. In case no downscale resolution is given, the image is doubled in size prior to processing, which leads to substantially more keypoints. If you use 0 as downscaleResolution you can switch this behaviour off and the original image is used without applying any scaling.

BUGS

The memory requirements are quite big. If you have 256Mb of ram, you should go with a 700 downscale resolution, if you have 512Mb 1300 is a good value.

AUTHOR

Sebastian Nowozin <nowozin at cs dot tu dash berlin dot de>

SEE ALSO

autopano-complete(1), **autopano(1)**, **autopanog(1)**, **showone(1)**, **showtwo(1)**