

Important functions of the VC image processing library VCLIB

mean = mean value of an image variable	avg = moving average or unsharp masking	pyramid = pyramid filter for image variable
contour8 = contour following / 8-connected	vc_corr0 = small kernel correlation routine	arx = number of pixels > threshold
cjpeg = encode image variable to JPEG image file	rlc_inv = in-place inversion of RLC	chprint = output a string to an image variable
djpeg = decode JPEG image file into image variable	rlc_feature = determine features, unlabelled RLC	ellipsoid = draw ellipse / image mem.
and2 = AND two image variables	rlc_inv = in-place inversion of RLC	markerd = draw marker in video mem.
or2 = OR two image variables	rlcmk = create RLC	line = draw line
sobel = sobel operator	rlcout = output RLC	binarize = binarizing
laplace = Laplace operator	rlcand = AND RLCs	look = look-up table
mx = maximum operator	rlcor = OR RLCs	add2 = add two image variables
mn = minimum operator	rlcxor = XOR RLCs	copy = copy image variable
ff3 = 3 x 3 filter for image variable	erode = RLC erosion / square type	markerd = draw marker in video mem.
ff5 = 5 x 5 filter for image variable	dilate = RLC dilation / square type	variance = variance of an image variable
robert = Robert's cross operator	subsample = subsample image	histo = histogram
projh = horizontal projection	projv = vertical projection	sgmt = label RLC
focus = focal value of an image variable	variance = variance of an image variable	sub2 = subtract two image variables
max2 = max. of two image variables	min2 = min. of two image variables	

Benchmarks:

Filter	Time [msec]	RLC	Time [msec]
set	1.7	Detection of more than 60 Blobs in 6 msec	
robert	2.2	rlcmk	1.5
ff3	16.6	rlcout	3.9
median3	33.5	erode	2.0
sobel	6.6	erode2	2.1
laplace	4.4	rlc_feature	1.0
pyramid mean	1.1	rlc_inv	0.2
rotate90	8.6	rlc_mf	0.3
rotate180	3.5	rlc_move	0.5
move_image	5.8	sgmt	3.6

(640x480, RLC with 10'000 blocks, VCSBC4018)

(No liability is assumed for possible errors!)