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Vision, Video, Graphics
with .NET, OpenCV, OpenGL and Matlab

Status:

Navigation: Jump to, Run to, Frame # 2, Frames proc. 2

Color channel: RGB, r g b, h s v, y u v, Y U V, 1/4

Accuracy: CURR --> AVG -->

File size(kB),Compression ratio,Bitrate(Kbps,30fps): CURR --> AVG -->

PSNR (YUV) dB

Inf	Inf	Inf	19.37	33.45	33.40
Inf	Inf	Inf	19.42	33.28	33.44
5.479	26.81	25.68	5.534	26.82	25.66
5.479	26.81	25.68	5.544	26.81	25.67

CURR --> AVG --> Time (msec) 823.1 692.9 Frame rate 1.214 1.495 Total RAM (kB) 47708 47730 delta RAM (kB) -44 3964

Mouse

Dim.	640	480	RGB	145	138	119	145	138	119
Pixel	171	145	YUV	137	117	133	137	116	132
MB	10	9	HSV	43	45	145	43	45	145
clk MB	-	-	RGB	0	0	0	0	0	0
BLK	21	18	YUV	0	128	128	0	128	128
			HSV	0	0	0	0	0	0

Control Panel | Computer Vision | Signal Processing | 3D

Initialize | Execute

I/O | Status | ROI | YUV | Matlab | Debug

Database: ECE8833-1 — Capture screen

One click settings

PETS 2001	Templ. Mat.	Camshift (util)	3_AVSS2009
PETS 2007	Harris	CamshiftMPEG	8_ICIP2010
ECE8833	Harris (cmp)	myMPEG4Intra	test
Thames	Pyr Seg	Mul. tgt. trk.	
GreenBox	YUV	Basic ComOp	

Input

- None
- Images: INP_IMG\\
- Video: 01\\ foreman_352x288.yuv
- Webcam

Output

- None
- Images: OUT_IMG\\
- Video: 01\\ foreman_352x288_mine.yuv
- Signal Processing
  - test
  - OPT: Combinatorial Optimization
  - CMP: Ychannel
  - All pass
  - CMP: MPEG4_mine
  - CMP: MPEG4_Microsoft
- Computer vision
  - Paper_3: AVSS2009
  - Paper_2: IPCV2009
  - TRK: camshift
  - TRK: camshift (utilities.cpp)
  - TRK: camshift with MPEG
  - TRK: median image
  - TRK: foreground (unlabeled and
  - TRK: tracking

Graphical overlays

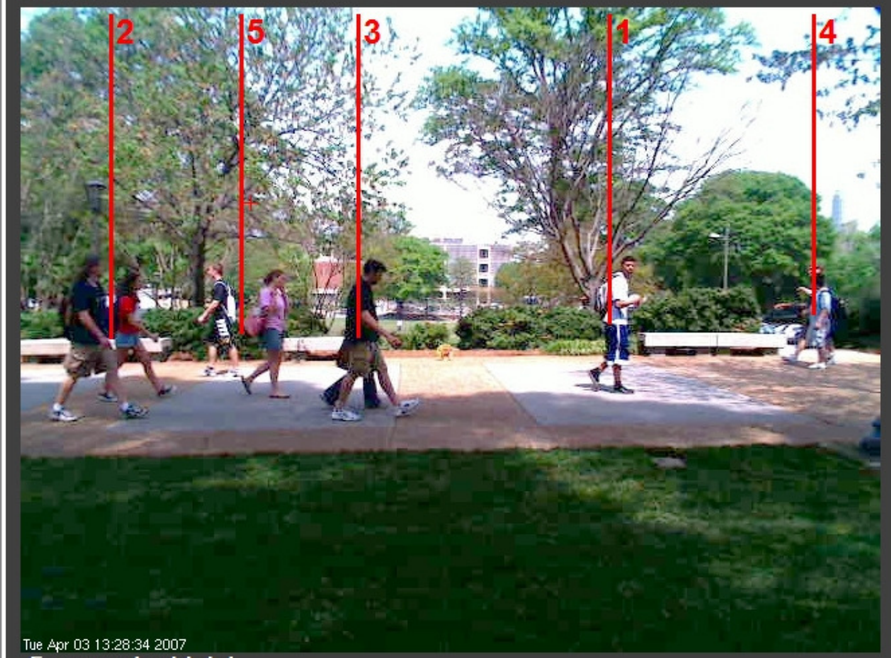
- [x] Current pixel
- [ ] Current 16x16 macroblock (MB)
- [ ] Current 8x8 block (BLK)
- [ ] R, G, B translucent overlays
- [ ] Grid (aligned to MB)
- [ ] Grid (aligned to BLK)
- [ ] Current ROI
- [ ] Clicked MB

Measure

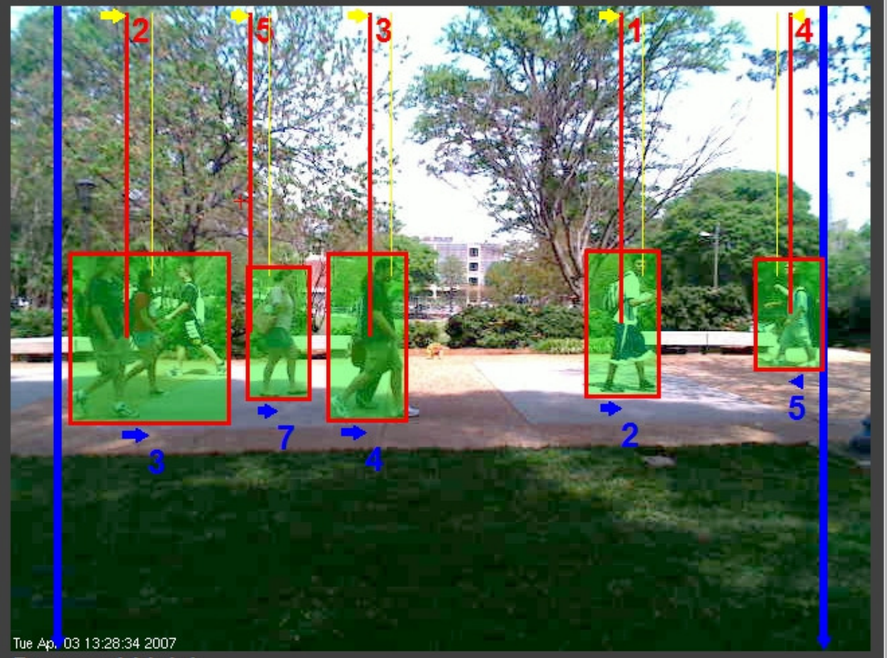
- [ ] Enabled

Images 1 - 4 | Images 5 - 8

Frame 1



Frame 2



Foreground, unlabeled

Foreground, labeled