

Traffic Analysis System

Progress Report: 11/05/2021





RTSP Downloader

```
ffmpeg -rtsp_transport tcp
-i "rtsp://url:port/chID=1&streamtype=main"
-vcodec copy -an -map 0 -f segment -segment_time 180
-reset_timestamps 1 -segment_atclocktime 1 -strftime 1
-timeout 1 -stimeout 1000000 'cctv#-%s.ts'
```

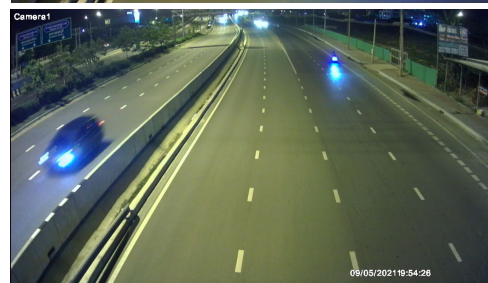
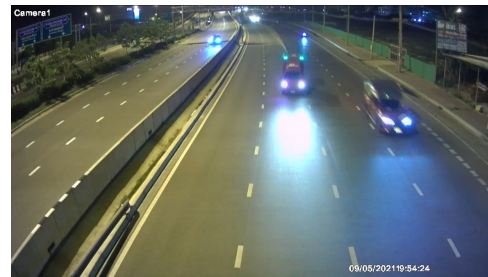
CCTV	Disk usage (06:00-20:00)
35	19 GB (1.36 GB/hour) (32.64 GB/day)
Size: 1920x1080 @12 fps	

filename	start_ts	total sec (ffprobe)	total frames	sec/frame	stop_ts	From	To
1620514804.ts	1620514804	177.8853	2136	0.0833	1620514981.8853	1620514804	1620514981.8853
1620514980.ts	1620514980	179.9698	2109	0.0853	1620515159.9698	1620514980	1620515159.9698
1620515160.ts	1620515160	179.9952	2160	0.0833	1620515339.9952	1620515160	1620515339.9952
1620515340.ts	1620515340	180.0129	2160	0.0833	1620515520.0129	1620515340	1620515520.0129

Problem with Source RTSP

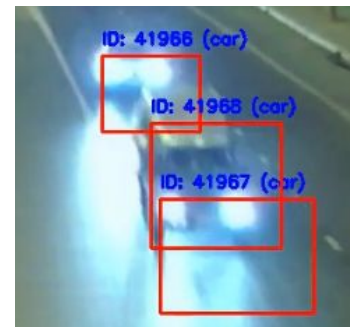


Freeze: 06:03:55-06:03:57



Freeze: 19:54:22-19:54:26

Detection Performance at night



Undetectable

Wrong class

Reflection

Best class - Accurate Class Identification




Table: track

Frame	Class	Score	Pos (Y)
608	2	0.51	153
609	2	0.50	160
610	7	0.91	368
611	7	0.91	373
612	7	0.70	385
642	7	0.92	974
643	7	0.92	997



All possible classes



Class	Total Score
2 (car)	1.01
7 (truck)	280.76



TODO: Timestamp Epoch to DateTime

(Epoch) 1620515160 => (DateTime) YYYYMMDDHHMMSS

- Easy for manual processing