



COMTM SUR

the missing piece of CCTV

COM-SURTM EMPOWERS PEOPLE TO ACHIEVE
OPTIMAL OUTCOMES FROM SURVEILLANCE VIDEO,
LEADING TO A SAFER WORLD.



CCTV VIDEO FOOTAGE
AUDITING AND
INVESTIGATION
COURSE - OVERVIEW

WELCOME



Dear participant,

We thank you for your interest in the COM-SUR CCTV video footage auditing and investigation course. We are confident that post this course, you will be able to use the knowledge to enhance your skills, look for new jobs and business opportunities, and of course, achieve optimal outcomes from CCTV and surveillance video cameras. On behalf of team COM-SUR, I would like to thank you for giving us the opportunity of bringing this course to you.

With best wishes,
Gautam D. Goradia,
Founder and CEO
www.comsur.biz

CCTV VIDEO FOOTAGE AUDITING AND
INVESTIGATION COURSE - OVERVIEW

It is a well-accepted fact that CCTV surveillance is now a part of the overall security apparatus across the world. With the proliferation of surveillance videos from diverse sources such as CCTV, drones/UAVs, body-worn cameras, mobile phones, etc., there is a deluge of this medium of 'information'. As per a 2020 report by Motorola, by the year 2025, there will be around 45 billion cameras on the face of this earth, which equates to roughly six cameras for every single human on the planet. However, despite this deluge of information, crime, fraud, losses, process violations, traffic violations, wastage etc. continue to take place, clearly indicating that CCTV cameras by themselves are not enough, and that some fundamental changes need to be made in terms of 'how' surveillance video needs to be used by one and all.

Whether surveillance video is used by commercial/home users, or whether it is used by the police/law enforcement agencies/defence

forces/investigators, there is a need for a cost-effective, easy-to-use, and efficient workflow tool to achieve optimal outcomes from CCTV/surveillance video, and to bring about the much-needed standardization in terms of the interaction between the user and video.

Also, while the current tendency is to veer towards video analytics, artificial intelligence, machine learning and so on, it is a well-accepted fact that such solutions, while being useful:

- (1) Cannot discover every kind of exception.
- (2) Come with many challenges including a major issue of false positives.
- (3) Come with their own baggage, and are either too expensive, or will never be needed by every user of CCTV.
- (4) Will always need human intervention to take the final call and next steps.

REMOTE VIDEO AUDITING (RVA)/E-SURVEILLANCE SERVICES AND THEIR CHALLENGES

Several organizations offer the above services, often referred to as remote video auditing (RVA) or 'e-surveillance'. However, most of these services do not audit or review an entire day's footage covering multiple cameras because of the humungous amount of data involved, and matters like bandwidth availability, and so on. Audits therefore are carried out based on triggers and/or are sample based, thereby increasing the risk of several incidents escaping detection. Also, in all such purely third-party audits, the angle of situational awareness can be questioned to a very large extent.

There is a need therefore to empower every user of CCTV with a tool to audit his/her own CCTV footage.

INVESTIGATION

Investigation can be defined as a systematic, minute, and thorough attempt to learn the facts about an incident; whether criminal or otherwise. In both cases, videos, photos, images, and even social media play a crucial role. With respect to criminal incidents, whether it is a serious incident like a terror attack, or a petty crime, investigation of the same always involves videos, photos, and images. Because of the diverse sources of these inputs, there is a need for a tool to make the activity of investigation more efficient and standardized.

SOLUTION – COM-SUR

Introducing Made in India COM-SUR – the world's only CCTV video footage auditing, smart backup, and standardized intelligent incident reporting software; the 'missing' piece of CCTV.

While COM-SUR is a must-have tool for every user of CCTV, for the police/law enforcement agencies (LEA)/defence forces /investigators, it is an exceptional force multiplier to make their working with videos, photos, and images easy, efficient, and standardized.

It is our firm belief that auditing of CCTV footage as an SOP, smart backup, and standardized reporting must first become an integral part of video surveillance. Everything else can follow.

CCTV VIDEO FOOTAGE AUDITORS

The COM-SUR CCTV video footage auditing and investigation course aims to create a new breed of professionals called 'CCTV video footage auditors'. The course will teach how optimal outcomes, and multiple benefits can be gained from CCTV cameras (visually rich source of information) through the

dedicated use of COM-SUR.

NEW JOBS AND BUSINESS OPPORTUNITIES

Since video surveillance will continue to grow, there will be a constant need to analyze the data, in order to gain actionable intelligence. Therefore, this new profession of a CCTV video footage auditor will continue to remain in demand. This course which revolves around COM-SUR (which has no shelf-life and can be compared to a productivity tool like MS Office) would also be most useful to retired personnel from the police, law enforcement agencies, defence forces, other retired women and men, young women and men, cadets and so on.

SOME KEY BENEFITS THAT CAN ACCRUE FROM THE OPTIMAL USE OF CCTV

1. Improvement of homeland security, prevention of crime, fraud, and loss, and faster solving of crime.
2. Threat and Hazard risk identification /mitigation, improvement of ops. efficiency, processes, business continuity, root cause analysis, good manufacturing practices, and total quality management efforts.
3. Improvement of employee performance, customer satisfaction and sales.
4. Enhancement of compliance (including compliance of environment, social, and governance issues) and health and safety matters.
5. Huge reduction of data size and inexpensive disaster recovery mechanisms.
6. Ease of investigation, forensics, debriefing, and gaining situational awareness and actionable intelligence efficiently.

7. Standardizing reporting and gaining business intelligence based on historical data.

8. Taking regular corrective and preventive action for continuous improvement.

SCOTLAND YARD - SUPER RECOGNIZERS – TECHNOLOGIES MUST WORK FOR HUMANS

While there is a tendency to turn towards technologies like facial recognition, artificial intelligence, and video analytics, it may not be out of place to mention that the London Metropolitan Police formed a team of 'Super Recognizers' and put them to work to identify individuals whose faces are captured on CCTV.

It is also not out of place to mention that when any of these technologies throw up results (including false alerts), it is the human that takes the final call, which is what augmented intelligence is all about. COM-SUR makes this activity very easy and efficient, including the analysis of micro-expressions and body language; especially during pandemics like COVID-19, when any troublemaker can easily 'hide' his/her face behind a mask, without being questioned. Finally, it would not be out of place to mention that irrespective of whatever surveillance/other analytical tools being used for the purpose of investigation, there are several areas where COM-SUR will be useful in acting as a complementary tool.

DRONES/UAVS AND BODY-WORN CAMERAS

With more and more adoption and usage of drones/UAVs and body-worn cameras, there is an ever-growing need to ensure that the content generated by these sources is analyzed minutely and managed cost-effectively.

Post the sortie of a drone/UAV or post an on-duty

recording of footage from a body-worn camera, it is extremely important to analyze the same to ensure that whatever was 'missed' (or simply for a review/debriefing) during live recording is discovered during the analysis; and there is no better tool than COM-SUR to make this happen.

COVID-19

A pandemic that brought the world to a stop! While this pandemic will go away or be controlled, one does not know what will follow next and when. While various bodies have issued multiple guidelines like masks, social distancing, temperature measuring, and so on, the million-dollar question is, "how will one be sure that guidelines are being followed all the time?" Also, while masks, social distancing, and temperature measuring are very important, one needs to 'look' beyond them. For example, it would be highly difficult for an automated solution to discover someone who is spitting, an act that can result in the spread of the virus.

SOLUTION: AUDIT CCTV FOOTAGE AS AN SOP

In order to ensure continuous compliance, users must audit their own CCTV footage as a standard operating procedure several times a day. Auditing the footage as an SOP will help users to discover non-compliance, as well as several other unknown and unexpected issues; thereby allowing them to take quicker corrective and preventive action.

Auditing is like the fourth eye. It is time to open it!

COURSE MODULES

1. Fundamental module
2. Foundation module
3. Advanced module

THE FUNDAMENTAL MODULE

The Fundamental module of the CCTV video footage auditing and investigation course, as the name suggests, explains the fundamentals of the missing pieces of CCTV/video surveillance, and sets the tone for the other two higher modules.

The Fundamental module is useful to anyone looking to acquiring new skills to gain jobs of 'CCTV video footage auditors', and business opportunities of CCTV video footage auditing services; for example, a facility management services organization, or a security company can get its staff to take this module and have them eventually certified as 'CCTV video footage auditors'. This module is also useful for home users, as well as for anyone else (it is always great to acquire new skills) who wishes to make use of the software for/at any non-commercial use/location. The module which revolves around the free COM-SUR 'HOME' version will teach you how to:

- a) Audit hours of CCTV footage in minutes. The more you audit your own CCTV footage, the more you will 'discover', leading to quicker corrective and preventive action; resulting in continuous improvement.
- b) Hugely reduce data size and create a very cost-effective disaster recovery mechanism.
- c) Report incidents/findings in PowerPoint, that are almost automatically created.

THE FOUNDATION MODULE

The Foundation module of the CCTV video footage auditing and investigation course is the next step to learning more about CCTV video footage auditing, smart backup, and standardized incident reporting.

The module which revolves around the COM-SUR 'BUSINESS' version will teach you all that you learnt in the Fundamental module and more, using the wonderful features of the COM-SUR BUSINESS version.

THE ADVANCED MODULE

The Advanced module of the CCTV video footage auditing and investigation course is the final step to learning more about CCTV video footage auditing, smart backup, standardized intelligent incident reporting and investigation. The module which revolves around the COM-SUR 'ULTIMA' version will teach you all that you learnt in the Foundation module and more, using the wonderful features of the COM-SUR ULTIMA version.

It is reckoned that those taking this module need more features that would be useful to investigate incidents that need minute analysis of video, photos, and images. This module also covers detailed reporting, as well as gaining business intelligence from the same. The module covers several investigative features like false colors (forensics), that make video content analysis (VCA) extremely easy, efficient, and standardized.

This module also concentrates on how COM-SUR makes joining of the dots easier when video is received from multiple sources like CCTV cameras, mobile phones, drones, body-worn cameras etc.

The Advanced module is extremely useful for the police, law enforcement agencies, defence forces, investigators.

Some examples that demonstrate the need for taking the Advanced module:

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| Airports may want to minutely investigate suspicious movements, left baggage, suspicious items discovered through an X-ray machine. |
| Banks may want to minutely investigate an incident of theft/fraud. |
| Commercial establishments may want to minutely investigate health and safety issues. |
| Educational institutions may want to minutely investigate movements of students and school staff. |
| Factories may want to minutely investigate production lines and processes. |
| E-Commerce companies may want to minutely investigate product handling and shipping. |
| Hotels may want to minutely investigate guest complaints. |
| Hospitals may want to minutely investigate patient care and staff safety. |
| Insurance companies may want to minutely investigate roof conditions or damaged pipes and rigs. |
| Restaurants may want to minutely investigate kitchen hygiene. |
| Retailers may want to minutely investigate staff and customer interaction. |

Also, issues like wastage of resources, shrinkage, compliance and operational efficiency, risk mitigation, root cause analysis (RCA), threat and hazard identification (THIIRA), total quality management (RCA), good manufacturing practices (GMP) etc., all become easier using COM-SUR ULTIMA.

COURSE SOFTWARE

1. The COM-SUR 'HOME' version forms the basis of the Fundamental module.
2. The COM-SUR 'BUSINESS' version forms the basis of the Foundation module.
3. The COM-SUR 'ULTIMA' version, as well as 'RIP-IT' (a frame extraction software also built by us) form the basis of the Advanced module.

GENERAL REQUIREMENTS

Participants should study the COM-SUR website at www.comsur.biz in detail. There are several items available for download that explain the various facets of COM-SUR. Participants should study all those items that are relevant to them.

Participants are also required to study the following two videos:

WHY we built COM-SUR – The OVERVIEW

<https://www.comsur.biz/overview.html>

HOW does COM-SUR do what it does – The WORKING

<https://www.comsur.biz/working.html>

Participants should possess basic knowledge of computers, MS Office, CCTV/other surveillance cameras, video management systems, and media players.

COURSE TAKE-AWAYS

An 'Achievement Certificate' (mentioning the relevant module) will be issued by us and/or the appropriate university/body (where applicable) on full payment of the fees, as well as upon successfully clearing a Quiz.

VALIDATION - THE GURUGRAM SCHOOL INCIDENT - 2017

Post the above sad incident that took place at a school in a city in India, the following order was passed by the collector of Raipur. This order clearly validates the need for auditing CCTV footage as an SOP, besides reporting, and creating a disaster recovery mechanism.

THE VALIDATION

North India (Gurugram) School incident 2017:

Post the above sad incident, seemingly based on our suggestions, the then collector of Raipur passed an order; highlights of which are:

- 1** School principals and head masters should audit CCTV footage on a daily basis, and monitor the movements of children, school staff, and peons.
- 2** Schools should audit CCTV video multiple times a day, to ensure that there is no violation of rules or wastage of resources.
- 3** Schools should document the details of monitoring the footage.
- 4** Schools must ensure that CCTV footage is stored well as part of disaster recovery, so that the school has a record in case of theft or damage to cameras.



<https://timesofindia.indiatimes.com/city/raipur/cctv-cameras-monitoring-at-schools-must-collector/articleshow/62293213.cms>

TIME TO STANDARDIZE THE CCTV SIGNAGE ACROSS A NATION WITH A POWERFUL NEW MESSAGE



NATIONAL SERVICE - COM-SUR ULTIMA VERSION
SOFTWARE IS FREE OF COST

As part of our national service, we are offering COM-SUR ULTIMA, the highest version of COM-SUR, without any cost for the software per se to the entire Indian Police, Para Military, and Defence Forces. Administration, consulting, training, support fees, and other conditions apply.

SOCIETAL PURPOSE - COM-SUR BUSINESS VERSION
SOFTWARE IS FREE OF COST

As part of our societal purpose, we are offering the COM-SUR BUSINESS version per se, without any cost for the software to:

1. All places of Worship across the world (vulnerable target for terror attacks and other incidents).
2. All low-budget Schools across the world (vulnerable age group from various kinds of abuse).
3. All Zoos across the world (vulnerable to poor treatment and trafficking).

While the software per se will be provided for free, administration, consulting, training, and support fees, and other conditions apply.

HOME USERS - COM-SUR HOME VERSION
SOFTWARE IS FREE OF COST

In order to encourage home and non-commercial users to audit their respective CCTV video footage, the COM-SUR HOME version is available for free, as a download from our website www.comsur.biz.

To download, go to **DOWNLOAD > FREE HOME VERSION**.

Please make sure to read the topics on the Recommended System Requirements, Installation, Computer settings and Tips. These are part of the detailed COM-SUR HOME version user manual which can be downloaded from here: https://www.comsur.biz/COM-SUR_Home_User_Manual.pdf

Finally, it is our firm belief that if every user of CCTV across the world audits his/her own CCTV footage on a daily basis as an SOP, it will not only lead to several benefits for the user, but also for society as a whole.

More importantly, once every user carries out this activity, it will mean huge reduction of policing burden through community policing and crowd-sourced surveillance.

QUESTIONS? Write to us at course@comsur.biz.