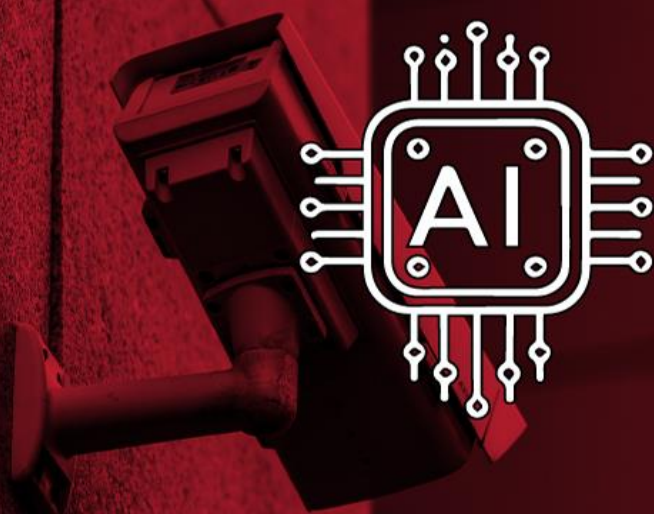




"SEE WHAT THE CAMERA SAW"

THE FOOTAGE WHISPERER



'BETTER' AI VIA DAILY AUDITS NO MORE DATA WALL

100+ TOPICS - AIRPORTS TO ZOOS

GAUTAM D. GORADIA



UTILITY VALUE OF
COM-SUR™ TO
ENHANCE CYBER
SECURITY

WELCOME



AUDIT HOURS OF FOOTAGE IN MINUTES

FIND OUT HOW COM-SUR, THE BEST
'MOUSETRAP' WILL HELP

["Seeing is believing - See what the camera saw"](#)

In our series of white papers focusing on the optimal usage of CCTV surveillance systems at business verticals from an airport to a zoo, we have explored the challenges faced by each vertical and have recommended the "little more" that they need to do to achieve optimal outcomes from surveillance video. This paper aims to highlight the utility value of COM-SUR, the world's only CCTV video footage auditing software, in enhancing cyber security across these diverse verticals. This paper makes a case for following certain methods and protocols by which organizations can strengthen their cyber security initiatives and proactively detect and prevent potential threats.

'COM-SUR' – THE WORLD'S ONLY CCTV VIDEO
FOOTAGE AUDITING, SMART BACKUP, AND
STANDARDIZED INTELLIGENT INCIDENT
REPORTING SOFTWARE – THE MISSING PIECE
OF CCTV

COM-SUR is the world's only CCTV video footage auditing, smart backup, and standardized intelligent incident reporting software that serves as a complete workflow and force multiplier. It helps audit 24 hours of footage in minutes, reduces data size, creates standardized intelligent reports, and delivers business intelligence. COM-SUR helps unlock hidden information in CCTV footage and enables people to gain actionable intelligence, improve homeland security, prevent crime and losses, identify and mitigate threats and hazards, and improve operational efficiency. It empowers people to gain new jobs as CCTV video footage auditors and start new businesses of auditing video footage. Like MS Office, COM-SUR is an enabler that makes it easy to work with CCTV cameras in a standardized way, leading to better decision-making. It also offers exceptional investigative capabilities.

BETTER AI VIA DAILY AUDITS – NO MORE DATA
WALL

COM-SUR delivers 'BETTER' AI by transforming how organizations approach CCTV video

surveillance, auditing, and post-event analysis. By generating a constant stream of real-time, site-specific data—Continuous Frontier Data—COM-SUR ensures that AI systems are never starved for fresh, actionable insights, which is key for building custom models and addressing key challenges like data exhaustion, data walls, and data cascades that often hinder AI from performing at full potential.

A key to making AI more effective lies in continuous learning from real-world incidents through daily and post-event auditing. COM-SUR enables AI models to evolve based on audit findings and incidents that go beyond real-time detection. By auditing daily footage, capturing exceptions, and feeding this data back into AI models, COM-SUR significantly improves the accuracy of AI systems, helping to reduce false alarms and enhance detection capabilities. This continuous feedback loop ensures that AI learns from what might have been missed in real-time, making it smarter and more reliable over time.

By integrating Reinforcement Learning from Human Feedback (RLHF) and Explainable AI (XAI), COM-SUR ensures that AI systems are continuously refined, transparent, responsible, and contextually aware. However, recognizing that AI can only perform tasks it's programmed for, human intelligence and intervention remain essential in verifying and refining AI outcomes. With COM-SUR, businesses can leverage AI as a powerful tool while maintaining human oversight, ensuring more accurate and informed decision-making—ultimately leading to 'BETTER' AI. This not only enhances surveillance but also paves the way for Augmented Intelligence, where AI-driven insights empower human operators while keeping them at the center of decision-making.

HOW COM-SUR SMARTLY REDUCES 'VIDEO' STORAGE SIZE

COM-SUR employs an innovative approach to smartly reduce the amount of video to be audited and consequently the storage size of videos. Regardless of the video's frame rate, COM-SUR captures a single image of the consolidated 'moment' of 'that' one second, when the I, P, and B frames come together. This method significantly reduces data size without sacrificing vital information. It goes without saying that when multiple cameras are displayed in a grid view, say 4x4, the storage size is further reduced since all the cameras are captured as a single image. Since no suggestion is being made to replace the actual video with images, COM-SUR acts as a wonderful supportive technology both to audit (review) just 86400 frames representing 24 hours and reducing the data size at the same time.

CHALLENGES RELATED TO CYBER SECURITY

1. Cyber threats:

Organizations are constantly targeted by cyber criminals seeking to exploit vulnerabilities in their systems. These threats encompass various types of attacks, such as hacking, data breaches, ransomware, and phishing attempts.

2. Insider threats:

Alongside external threats, organizations must also address the risks posed by insiders, including employees, contractors, or individuals with authorized access to critical systems. Insider threats can result from intentional actions or negligence, leading to data leaks or unauthorized access.

3. Compliance Requirements:

Organizations across different sectors must comply with industry regulations and data protection laws. Failing to meet compliance requirements can lead to severe consequences, including legal penalties and reputational damage.

4. Humongous growth of surveillance video:

The exponential growth of surveillance cameras has resulted in an unprecedented surge in surveillance video. Effectively managing this data has become a daunting challenge due to the massive storage capacity required, especially considering the prolonged retention periods necessary for security, incident investigation, or legal purposes. Furthermore, the prevalence of high-resolution video with increasing megapixels compounds the storage demands, making efficient data management an urgent priority for organizations grappling with the immense volume of surveillance footage.

USE OF VIDEO SURVEILLANCE TO ENHANCE CYBERSECURITY

Most organizations have video surveillance covering the following areas in order to enhance cyber security:

- Entry and exit points
- Data centers
- Server rooms
- Network operation centers
- Areas housing networking infrastructure (routers, switches, firewalls etc.)

- IT help desks and support centers

LEVERAGING CCTV VIDEO FOOTAGE AUDITING FOR CYBER SECURITY

Auditing CCTV footage can play a crucial role in enhancing cyber security initiatives within organizations. By adopting a proactive approach and leveraging the features of COM-SUR, organizations can address the challenges mentioned above and strengthen their cyber defences. The following points outline the key benefits and recommendations for utilizing CCTV video footage auditing:

1) DAILY AUDITING AS STANDARD OPERATING PROCEDURE

Implementing a daily CCTV video footage auditing process as a standard operating procedure of all those cameras that are relevant in terms of cyber security allows organizations to detect potential cyber security threats and incidents in a timely manner. Trained personnel can review the footage to identify suspicious activities, unauthorized access attempts, or any anomalies that may indicate a cyber-attack. Daily auditing helps organizations stay ahead of potential threats and take immediate action to mitigate risks.

2) INCIDENT DOCUMENTATION AND ANALYSIS

Documenting audit findings and incidents in a standardized template provides a valuable resource for root cause analysis and preventive measures. Analyzing historical data helps identify patterns and trends, enabling organizations to implement effective security measures and prevent future recurrences. By sharing this standardized data across the industry, relevant authorities can derive

actionable intelligence and take collective action for the benefit of all organizations.

3) ENSURING DISASTER RECOVERY OF CCTV VIDEO FOOTAGE

To safeguard against data loss or tampering, organizations should ensure the disaster recovery of CCTV video footage.

Storing footage at multiple locations and implementing robust backup solutions protects against theft, destruction, or tampering of video data. Easy searchability and retrieval of backed-up data enable efficient investigations and evidence gathering in case of cyber security incidents.

4) DISPLAYING DYNAMIC INFORMATION AT RELEVANT PLACES

Displaying dynamic information, such as lists of authorized personnel or known suspects, in relevant areas enhances situational awareness and aids in preventing cyber security breaches. This information helps staff members identify individuals who may pose a potential threat and enables them to report any suspicious activities promptly.

CCTV SIGNAGE: "FOR EVERYONE'S SAFETY, WE AUDIT CCTV VIDEO FOOTAGE EVERY DAY"

To reinforce the importance of daily CCTV footage auditing and create awareness among employees, visitors, and potential wrongdoers, it is recommended to display prominent signage throughout the premises. A simple and powerful message such as "For everyone's safety, we audit CCTV video footage every day" can serve as a visual reminder of the organization's commitment to security.

"WE AUDIT CCTV VIDEO FOOTAGE EVERYDAY".

This signage not only communicates the organization's proactive stance on security but also acts as a deterrent to potential threats. By highlighting the presence of active surveillance and regular auditing, the signage sends a strong message that any illegal or suspicious activities captured by the cameras will be reviewed and investigated. It enhances the perception of security and creates a sense of accountability for all individuals within the organization's premises.

Moreover, a CCTV signage with the above 'message' helps instil confidence in stakeholders, including employees, customers, and visitors, by reassuring them that the organization is actively taking measures to ensure their safety and protect their interests. The visual impact of such signage plays a vital role in establishing a security-conscious culture and acts as a constant reminder of the organization's commitment to maintaining a secure environment.

DE-CENTRALIZED SURVEILLANCE FOR OPTIMAL RESULTS

Organizations with multiple locations can benefit from a combination of de-centralized and centralized surveillance approaches. De-centralized surveillance provides higher accountability at each location and improves situational awareness. By leveraging COM-SUR and adopting a de-centralized surveillance strategy, organizations can increase the chances of detecting exceptions, including potential cyber security threats.

NEW SKILL – ‘CCTV VIDEO FOOTAGE AUDITOR’

In a groundbreaking move, the Ministry of Skill Development of India has established National Occupational Standards for the crucial skill of CCTV Video Footage Auditing. The Ministry of Education has also introduced a course to teach this skill to students in grades 11 and 12. This initiative will not only create new job opportunities and business ventures for those seeking a fresh career path but also for retirees from both the armed forces and the private sector. Additionally, this skill will help activate the millions of CCTV cameras currently underutilized, bringing them out of 'sleep mode' and enhancing their effectiveness.

CONCLUSION

"You see, but you do not observe"—a famous quote by Sherlock Holmes in A Scandal in Bohemia (1891, by Sir Arthur Conan Doyle)—perfectly illustrates the need for human insight in surveillance. While computers can 'see,' it is human observation that truly interprets and acts on what is seen. COM-SUR simplifies and enhances this critical process, leading to more effective and insightful results. "Cameras don't lie"—but how will you know unless you 'see' what the cameras 'saw'? Don't wait for things to go wrong. Start auditing your CCTV footage with award-winning COM-SUR today. In closing, we present three guiding principles that will revolutionize video surveillance:

1. Auditing is fundamental—everything else is peripheral.
2. Cameras have lenses—humans have eyes.
3. Let's make cameras 'accountable.'