

Apr-June 2023



CDTI, HYDERABAD

Bulletin

HORIZON

Our Motto “ज्ञानं सम्यग् वेक्षणम्” which means
“WISDOM LIES IN PROPER PERSPECTIVE”



CENTRAL DETECTIVE TRAINING INSTITUTE
HYDERABAD BPR&D, MHA



A Quarterly Bulletin of Central Detective Training Institute, Hyderabad



MESSAGE OF THE DIRECTOR



It gives me immense pleasure that the Central Detective Training Institute, Hyderabad is going to launch its quarterly year news magazine "HORIZON" for the period Apr to Jun, 2023.

CDTI, Hyderabad is declared as Centre of Excellence for "Police Information Technology and Cybercrime" and coupled with the establishment of "National Cyber Research, Innovation and Capacity Building Centre (NCRI&CB)" under the Indian Cyber Crime Coordination Centre (I4C), MHA, enabled CDTI-Hyderabad to hone the investigative skills of police officers in the field of cybercrimes. In 2021-22, four courses have been successfully conducted at NCRI&CB Lab on "Cyber Crime Investigation & Digital Forensics" in which 94 Police Officers trained. In 2022-23, Six courses have been conducted at NCRI&CB Lab in which 184 Police Officers were trained. In this quarter, Three courses have been conducted at NCRI&CB Lab in which 93 Police Officers were trained. I am sure that the training in the NCRI&CB Lab will give a great amount of confidence and success to the LEAs in the investigation of cyber crime cases.

I am glad to inform you that CDTI - Hyderabad is accredited as "उत्कृष्टम्" under the Capacity Building Commission's National Standards as assessed by National Accreditation Board of Education and Training (NABET).

It has been our continuous endeavor to improve the investigative skills of the Law Enforcement Officers and I am proud to say that we are moving in the right direction.

**KRANTHI KUMAR GADIDESI, IPS
DIG/ DIRECTOR**

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ABOUT TRAINING

Central Detective Training Institute, Hyderabad imparts training to the client state police officers of Andhra Pradesh, Telangana, Karnataka, Tamil Nadu, Kerala, Maharashtra, Puducherry, Delhi, Gujarat and Lakshadweep. It also imparts training to Police Officers of other States/ UTs and CRPF, BSF, CISF, SSB, RPF on the courses related to cyber crime cases. Armed Personnel from Army, Navy and Air Force are also given training on their request. Each state/ organization is allotted 02 seats in each course and if a particular state requests for more number of seats, the same is catered to.

This year (2023-24), CDTI, Hyderabad got approval from the BPR&D Hqrs for conducting 82 courses which includes Workshops, Webinars, Conferences, ITEC courses and Awareness Programmes. Based on the duration of course, some of the courses of duration one day are conducting in 'Online' and remaining courses in 'Offline' mode.

The Institute conducts long term as well as short term courses which deal mostly with investigation and various aspects of policing. The Institute conducts two long term courses in every academic year. Two long term "Advanced Course on Investigation & Detection of Crime" of 10 weeks duration were scheduled to conduct from 03.07.2023 to 08.09.2023 and 30.10.2023 to 05.01.2023. It is the flagship course of the institute.

The institute also conducts short-term courses of 1 day, 5 days and 10 days duration on various topics of contemporary interest concerning modern day policing, besides various Webinars & Workshops', and Awareness Programmes.



COURSES CONDUCTED FROM APRIL – JUNE, 2023

From 01st April to 30th June, 2023 a total of 15 Courses were conducted in which
321 Police Officers from all States/ UTs/ CAPFs were trained.

| S.NO. | Name of the Course | Date | | No. of Participants |
|--------------|--|----------|----------|---------------------|
| | | From | To | |
| 1 | Social Media Investigation & Data Analytics | 10.04.23 | 14.04.23 | 23 |
| 2 | Handling CCTV footages & DVR Forensics | 10.04.23 | 14.04.23 | 20 |
| 3 | CDR & IPDR Analysis | 24.04.23 | 28.04.23 | 27 |
| 4 | Workshop on “CYBER FORENSICS” | 01.05.23 | 01.05.23 | 32 |
| 5 | Disk Forensics | 15.05.23 | 19.05.23 | 16 |
| 6 | ATM & Digital Payment frauds | 22.05.23 | 26.05.23 | 25 |
| 7 | Investigation of Crime against Children (NCPCR) | 29.05.23 | 02.06.23 | 14 |
| 8 | Practical Orientation on Digital Forensics (from Search and seizure of digital evidence to memory forensics) | 29.05.23 | 02.06.23 | 15 |
| 9 | Webinar on Zero FIR (As a part of Gender Sensitization) | 01.06.23 | 01.06.23 | 25 |
| 10 | Workshop on Social Media crime investigation techniques | 02.06.23 | 02.06.23 | 31 |
| 11 | Basic Course on “Cyber Crime Investigation & Digital Forensics” | 12.06.23 | 16.06.23 | 32 |
| 12 | Intermediate Course on “Cyber Crime Investigation & Digital Forensics” | 19.06.23 | 23.06.23 | 32 |
| 13 | Basic Course on “Cyber Crime Investigation & Digital Forensics” | 26.06.23 | 30.06.23 | 29 |
| 14 | WEBINAR ON HOW TO REPORT CYBER CRIME ,VIRUS RANSOM WARE & MALWARE | 27.06.23 | 27.06.23 | 31 |
| 15 | Workshop on OSINT | 28.06.23 | 28.06.23 | 32 |
| TOTAL | | | | 384 |



CENTRAL DETECTIVE TRAINING INSTITUTE, HYDERABAD
Course On "Social Media Investigation and Data Analytics"
 10-04-2023 to 14-04-2023



Sitting (L to R) S/Sri :- P.Ayub Khan, Dy.SP, CDTI, R.S.Jaya Kumar, Vice Principal, CDTI, Ms.Chanda Singh, IPF, RPF, Sh.Kranthi Kumar Gadidesi, IPS, DIG/Director, CDTI, Amoghreddha Tanaji Salunke, Asst.Commissioner(Mah), Smt.Anasuya Baral, Dy.SP, CDTI, M.S.Venugopal , Dy.SP, CDTI.
Standing 1(L to R) S/Sri :- S.S.Solanki, SI(MP), Kotte Praveen Kumar, SI(TS), Shaik Junaid, RSI(TS), Vipin Kumar, SI(Com),SSB, Maheshbhai Gokulbhai Dhodia, PSI(Guj), Kanchan Singh Chauhan, SI(MP), Ms.Nikki Singh, SI(WB), Ms.Kotholla Aswini, SI(AP), Mahanand Kumar, SI(Jharkhand), Shantanu - Sarkar, PSI(WB), Ranjit Kumar, SI(Jharkhand), Ashutosh Paikaray, SI(Odisha).
Standing 2 (L to R) S/Sri :- Ketul K.Modi, PSI(Guj), Mukesh Chaudhary, SI, RPF, G.Janardhan, SI(TS), R.Rakesh, SI(TS), Veeralah Sandra, Insp(TS), Bhawani Singh, SI, - (Rajasthan), Mohan Venkat Waghmare, IO(Mah), Sanjit Tripura, SI(Tripura), Deepak Kumar, SI(Del).

CENTRAL DETECTIVE TRAINING INSTITUTE, HYDERABAD
Course On "Handling CCTV Footages & DVR Forensic"
 10-04-2023 to 14-04-2023



Sitting (L to R) S/Sri :- P.Ayub Khan, Dy.SP, CDTI, R.S.Jaya Kumar, Vice Principal, CDTI, Jitendrasinh Dilubha Zala, PI(Guj), Sh.Kranthi Kumar Gadidesi, IPS, DIG/Director, - CDTI, Ghansham Raghunath Bailal, PI(Mah), Smt.Anasuya Baral, Dy.SP, CDTI, M.S.Venugopal , Dy.SP, CDTI.
Standing 1(L to R) S/Sri :- Sourav Roy, PSI(UB)(WB), Dheeraj Kumar Rana, SI/Exe, CISE, Pukhraj Meena, SI(Rajasthan), Ms.Madhu, SI(Del), Ms.Trusha Dineshbhai - Budasana, PSI(Guj), Ms.Abirami A, SI(TN), Ms.Bhuwaneshwari, Insp, RPF, Ms.Guddeti Swetha, WSI(AP), Pramod Kumar Mahto, SI - (Jharkhand), Santosh Kumar Singh, SI, RPF, Souda Sunil, Insp(TS), Anjanesh Kumar Mishra, Insp/Exe, CISE.
Standing 2 (L to R) S/Sri :- Jitendra Kumar, SI(Rajasthan), Partha Pratim Reang, SI(UB)(Tripura), Ajay Rai, SI(MP), Narendra Reang, SI(UB)(Tripura), Sandipan Roy, - SI(Kolkata), Kamran Khan, Insp(Rajasthan).

CENTRAL DETECTIVE TRAINING INSTITUTE, HYDERABAD
Course On "CDR & IPDR Analysis"
 24-04-2023 to 28-04-2023



Sitting (L to R) S/Sri :- Shiv Prasad Reddy, CDR & IPDR Analyst(TS), Amruta Nandini Mohanty, Dy.SP(Odisha), Manish Kumar Kunwar, Dy.SP(Chhattisgarh), Anil Sreenivas, Dy.SP(HG)(Ker), Sh.Kranthi Kumar Gadidesi, IPS, DIG/Director, CDTI, Pravat Kumar Biswal, Dy.SP(Odisha), Surjeet G, - Mahedu, Dy.SP(Guj), Laxman Singh Potai, Dy.SP(Chhattisgarh), K.Nagaraja Rao, Dy.SP(Law).
Standing 1(L to R) S/Sri :- Premkumar .K, Insp(Ker), Sujith.P, SI(Ker), Mohan Taya Kalamkar, PSI(Mah), Mahesh Bhagachand Kawale, PSI(Mah), Garand Murmu, SI - (Jharkhand), Samba Murthy(Advocate), A.Swarnalata Patro, SI(Odisha), Kalyan Mondal, PSI(WB), Durgesh Kumar, SI(Jharkhand), Ravindra Singh, SI/Comn, SSB, Sitesh Mahato, SI(Kolkata Police), Devender Soni, SI(Rajasthan).
Standing 2 (L to R) S/Sri :- Cheerla Sanath Kumar, SI(TS), Deepak Kumar Sah, SI(Jharkhand), Satish Kumar Hari Shankar Pandey, PSI(Wireless)(Guj), Shaik Junaid, - SI(AR)(TS), Vijay Kumar Vampu, Insp(TS), A.Bhuvaneshwar Rao, SI(TS), Leeladhar Rathore, Insp(Chhattisgarh), Sajid Mansuri, - API(Mah), Pritam Paul, SI(WB), Manish Singh Charan, Insp(Rajasthan).

CENTRAL DETECTIVE TRAINING INSTITUTE, HYDERABAD
Course On "ATM & Digital Payment Frauds"
 22-05-2023 to 26-05-2023



Sitting (L to R) S/Sri :- Bhagwan Deen Upadhyay, SI(MP), R.S. Jaya Kumar, Vice Principal, CDTI, Anit Kumar Rathor, Inspr(commn)SSB, Sh.Kranthi Kumar Gadidesi, IPS, DIG/Director, CDTI, Vijay Chelak, Inspr(Chhattisgarh), S.Saikrishna, Dy.SP, CDTI, Smt. Anasuya Baral, Dy.SP, CDTI.
 Standing 1(L to R) S/Sri :- Om Prakash Dixit, SI/Exce, CISF, Mukesh Kumar, SI/Exce, CISF, Shaik Junaid, RSI(AR)(TS), Rana Shaktisinh Mulrajsinh, PSI(Guj), Ashok Kumar, - SI(Jharkhand), N.Sandosh, SI(Puducherry), Anil Kumar Pandit, SI(Jharkhand), - Garad, PSI(Mah), G.Chandna Shaker, RSI(TS), Mohan Singh Bhati, SI/Exce, CISF, - Budumuru Nihar, DSI(AP), Rajpal, SI(Rajasthan), Ganesh, V.Sawargave, SI(H)RPF, Prashant Yashawant Thaware, API(Mah), B.Subhash Goud, - SI(TS), Vijay Kumar Azad, SI(Bihar), Amba Ram Barud, SI(MP), Mohit Kumar, SI(DP), Karthikeyan Ranganathan, Inspr(Puducherry), Parag Tikamkumar Jayswal, PSI(Guj), Manoj Kumar, SI(Commn)SSB.

CENTRAL DETECTIVE TRAINING INSTITUTE, HYDERABAD
Course On "Practical Orientation On Digital Forensics
(From Search and Seizure of Digital Evidence to Memory Forensics)
 29-05-2023 to 02-06-2023



Sitting (L to R) S/Sri :- Sandeep Mudalkar, Cyber Crime Investigator, Surinder Kumar, Inspr/Comm, SSB, Sh.Kranthi Kumar Gadidesi, IPS, DIG/Director, CDTI, P.Ayub Khan, Dy.SP, CDTI, Smt. Anasuya Baral, Dy.SP, CDTI.
 Standing 1 (L to R) S/Sri :- Kamakhya Narayan Singh, Inspr(Bihar), Ejumala Prashant, Cyber Crime Anlyst, Leeladhar Prasad Rathore, Inspr(Chhattisgarh), Rentam Shekhar, RSI(TS), Abhimanu Kumar, SI(Jharkhand), Ms.Mori Radhaharibhai, PSI(Guj), Ms.Anupama.R, SI, RPF, Ms.Rajandeep - Kour, SI(Rajasthan), Ritesh Kumar, SI(Jharkhand), Satish Badolia, SI(MP), Hanuman Sahai Meena, SI(Rajasthan).
 Standing 2 (L to R) S/Sri :- Srawan Kumar, SI(Jharkhand), Umesh Kumar Mishra, ASI(Mah), Tadi Vijaybhai Nansinghbhai, PSI(Guj), Shaiju.E, SI(Ker).

CENTRAL DETECTIVE TRAINING INSTITUTE, HYDERABAD
Basic and Intermediate Course on "Cyber Crime Investigation and Digital Forensic Training"
 12-06-2023 to 23-06-2023



Sitting (L to R) S/Sri :- Rushikesh Aghav, Digital Forensic Expert, NCR & IC BPRD, Umarul Farooq MT, Inspr(Ker), Meenakshi M, Addl.SP(TN), Sh.Kranthi Kumar - Gadidesi, IPS, DIG/Director, CDTI, Namasiyayam S, Addl.SP(TN), Anasuya Baral, Dy.SP, CDTI, N.Venkatesan, Dy.SP(TN).
 Standing 1 (L to R) S/Sri :- Vijay Vilas Bhise, API(Mah), Mahati Bolpal, SI(Jharkhand), Ms.Varuniya, Inspr(TN), Sudarchana K, SI(TN), Smt. Aleena Cyrus, SI(Ker), Piyali - Barua, Inspr(Kolkata), Anjan Mandal, SI(Jharkhand), Shaik Hussain Peera, SI(AP), Killi Bhaskara Rao, SI(R)(AP).
 Standing 2 (L to R) S/Sri :- Arunnehru S, SI(TN), Manish Kumar Rathod, PSI(Guj), Raju Lakhmanbhai Odedara, SI(Guj), Yuvraj Waman Shinde, PSI(Mah), Dinesh Kumar - Yadav, Inspr(Chhattisgarh), P.Jayakumar, SI(TN), Dipu Mandal, SI(Bihar), Elias P.George, Inspr(Ker), Bharat Singh, SI, SSB, Vaibhav - Dnyaneshwar Veer, PSI(Mah).
 Standing 3 (L to R) S/Sri :- Dandagala Raghavalah, SI(AP), Senthilkumar, T K, SI(TN), Sanjay Kumar Verma, Inspr, SSB, Abhilash, M, SI(Ker), N.Ravichandran, Inspr(TN), Rakesh Kumar Patel, SI(Chhattisgarh), Sumit Kumar, Inspr(Del), Santanu Gain, Sergeant(Kolkata Police), M.Ravi Sudhan, SI(Technical)(TN).

ACTIVITIES AT CDTI, HYDERABAD

1. CDTI, Hyderabad organized Cyber Awareness Programme to 75 students (10th Standard) of Kendriya Vidyalaya - 1, Uppal, Hyderabad on 06.04.2023. Sh. Sandeep Mudalkar, Cyber Investigator took two sessions on Cyber Security.



2. Sh. Kranthi Kumar Gadidesi, IPS, DIG/ Director, CDTI, Hyderabad received Best CDTI Trophy from Sh. Balaji, Srivastava, DG, BPR&D for the year 2021-22 on 13.04.2023 on the eve of Investiture Ceremony.



3. Shri Balaji Srivastava, IPS, DG, BPR&D visited CDTI, Hyderabad on 29.04.2023; inaugurated the Badminton Court. He also released the Quarterly Magazine "Horizon" for the period Jan-Mar, 2023 and the Annual Report for the year 2022-23. and interacted with the CDTI staff and their families.



4. Shri. Balaji Srivastava, IPS, DG, BPR&D felicitated Shri. Sadaiah S, HC, who worked for more than 30 years in CDTI, Hyderabad on his superannuation on 29.04.2023. Thereafter, he interacted with the staff and their family members.





5. CDTI, Hyderabad organized **Awareness programme on Cyber & Social Media Crimes – Ways to prevent them** participated by **80 students/ teaching staff of Little Flower Degree College, Uppal, Hyderabad** on 04.05.2023. Sh. Sandeep Mudalkar, Cyber Investigator took two sessions on the said subject



6. Officers/ Staff of CDTI, Hyderabad undergone online training on iGoT (Integrated Government online Training) - Mission Karmayogi.



7. Conducted Capacity building awareness programme on "Social Media & Cyber Security" for the officers/ staff of CDTI, Hyderabad from 09.05.2023 to 11.05.2023. 27 Officers/ Staff of CDTI, Hyderabad have participated.



8. World Environment Day, 2023 was observed at CDTI, Hyderabad on 05.06.2023 along with "Beat Plastic Pollution" and explained the harmful effects of using plastic on environment. All the officers and staff of participated in the event. Director administered the Pledge to the officers and staff. Saplings were planted on this occasion



9. A Five Member Team comprising of the following members visited CDTI, Hyderabad on 18th and 19th May, 2023 for the “Onsite Assessment” of the Institute:

| S.NO. | Name | Position held |
|-------|------------------------|--|
| 1 | Ms. Anuradha Mookerjee | Onsite Assessor, NABET, Quality Council of India |
| 2 | Dr. Poonam Choudhary | Program Manager, Capacity Building Commission |
| 3 | Mr Pulkit Kumar | Consultant, Capacity Building Commission |
| 4 | Ms. Komal Jangra | Project Analyst, NABET, Quality Council of India |
| 5 | Ms. Kajal Bhardwaj | Project Analyst, NABET, Quality Council of India |



After a thorough assessment of various aspects of training, CDTI - Hyderabad is accredited as “उत्तम” under the Capacity Building Commission’s National Standards as assessed by National Accreditation Board of Education and Training (NABET), Quality Council of India.



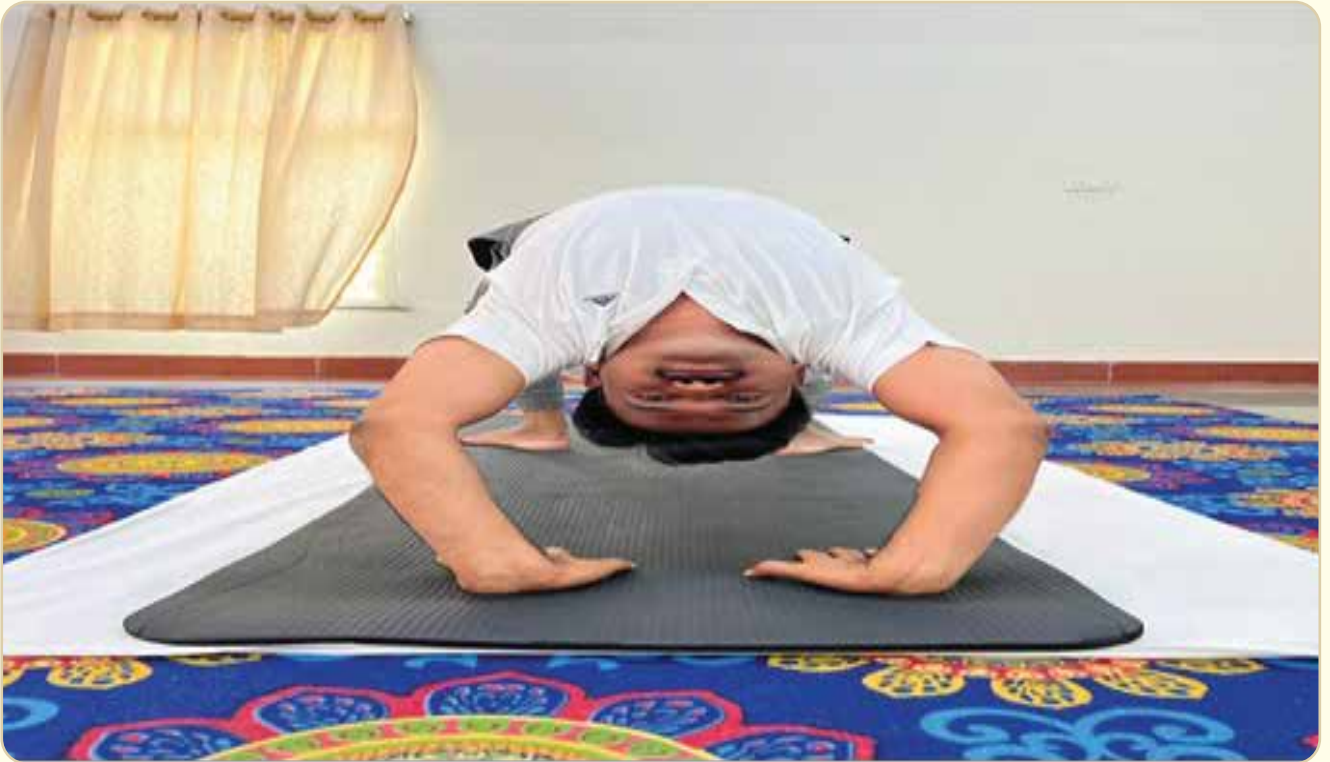
10. Shri Narendra Modi, Hon'ble Prime Minister of India along with the Heads of Institutes, who received "Certificate of Accreditation" under the Capacity Building Commission's National Standards. Shri Kranthi Kumar Gadidesi, IPS, DIG/Director, Central Detective Training Institute (BPR&D), Hyderabad can be seen standing in the second row.



Shri Kranthi Kumar Gadidesi, IPS, DIG/Director, CDTI-Hyd received CBC's National Standards Accreditation Certificate from the Hon'ble MoS for PM's Office Shri Jitendra Singh on 11-06-2023 at the CBC's National Training Conclave 2023 which was inaugurated by the Hon'ble Prime Minister.



11. As per the instructions issued by DG, BPR&D, the International Day of Yoga, 2023 was observed on 21-06-2023 at CDTI-Hyd. All the officers and staff along with the trainees attending the course (54 in total) participated the Yoga Programme.





CUSTODIAL VIOLENCE BY POLICE - REASONS AND LEGAL ASPECTS



Sh. M S Venugopal Rao
Dy. SP, CDTI, Hyderabad
SP (Retd), Telangana)

- Custodial Violence is nowhere defined in laws in India.
- In General, the custodial violence as a term, is used for violence committed against a person in custody by police.
- According to law commission “crime by a public servant against the arrested or detained person who is in custody amounts to custodial violence”.
- The existence of custodial violence in India is an established fact and it may be treated as an universal phenomenon if one takes a liberal view.
- The difference is only one of degree from state to state in India and from country to country in the world.
- Police officers commits an act of violence upon the person in custody during the process or under the pretext of investigation and interrogation.
- A person should not be kept in police custody from the time of his detention for not more than 24 hours excluding journey time and a judicial magistrate can grant an extension of custody of police for a maximum of fifteen days if he is satisfied that adequate ground exists while doing so (167 (1) CRPC).
- Custodial violence is also perpetrated and that too with more ferocity during the illegal custody of persons by police.
- Custodial violence can be both physical and pyschological.

Types of custodial violence

1. Unlawful detention
2. Torture-physical violence beating etc..
3. Psychological intimidation, threatening family members etc.
4. Sexual exploitation
5. Lockup deaths
6. Disappearances
7. Exchange of fire

REASONS FOR CUSTODIAL VIOLENCE

1. Work pressure-Police has to perform difficult and delicate duties in a deteriorating Law and order situations were in the criminals using modern techniques and weaponry in committing crime leaving no evidence. Dealing with insurgents and terrorists require altogether different skills than in case of ordinary crimes. With insufficient resources, techniques and skills when compared to criminals, police resort to custodial violence under work pressure.
2. High expectation by superior officers and public beyond their capacity.
3. Positive reinforcement - Producing of quick results by resorting to custodial violence gives a positive reinforcement to it.
4. Punitive Violence - Few misguided honest officers having a wrong notion that criminals deserve violence as punishment is another reason.
5. Police subculture - Violence by nature has become sub culture of police which is at variance with main culture i.e sacredness of human personality and dignity of individual.
6. Ulterior motives other than professional - Greed for money, sadism, sexual weakness etc.

CONSTITUTIONAL/STATUTORY PROVISIONS COVERING THE CUSTODIAL VIOLENCE-

- Custodial violence is a violation of human right.
- Article 21 of Indian constitution provided that no person should be deprived of his life or personal liberty except according to procedure established by law.
- Article 22 provides that the arrested person should be informed about the grounds of his arrest and should be produced with in 24 hours of his arrest before magistrate.

CODE OF CRIMINAL PROCEDURE 1973.

- Sec 49 CRPC- Person arrested shall not be subjected to more restrain than necessary.
- Sec 57- No police officer shall detain a person arrested without a warrant for more than 24 hours...
- Sec 57 A- Whenever person arrested without warrant produced before magistrate, the said magistrate shall enquire with the arrested person and satisfy himself of comply Sec 56 and 57 by police.
- Sec 76-Person arrested to be brought before court without delay.
- Sec 164 CrPC- Confession of a person to be recorded by magistrate.

INDIAN PENAL CODE-

- Sec 166 - Whoever being public servant, knowingly disobey the direction of law – cause injury to any person shall be punished with SI of one year or with fine or both.
- Sec 220 - Punishment to person with legal authority for confining persons.
- Sec 163 CrPC - No police officer or other person in authority shall offer, or make, or cause to be offered or make any such inducement, threat or promise as is mentioned in Sec 24 of IEA Act
- Sec 330- Voluntarily causing hurt to extort confession.
- Sec 331- Voluntarily causing grievous hurt to extort confession.

- Sec 340 to 348- Specifically addressed to deal with wrongful restrain and wrongful confinement and their aggravated forms.
- Custodial sexual offences are specifically taken care by 376(2)- rape committed by police officer/public servant and 376(B) to 376(D)

INDIAN EVIDENCE ACT

- Sec 25- Confession to police officer not to be proved against the person confessed.
- Sec 26- Confession by accused in police custody not to be proved.
- Apex court pronouncements, NHRC AND SHRC guidelines from time to time are also playing important role in efforts to curtail custodial violence by police.
- Constant in service training, improving professional skills, sensitization about human rights and providing appropriate resources will go in a long way to curb the custodial violence.



Electronic Evidence/ Challenges for Prosecution



Sh. Ayub Khan

Dy. SP, CDTI, Hyderabad
Asst. Comdt (Retd), CISF

Electronic evidence has become a crucial aspect of communication, processing, and documentation due to the significant growth in e-governance across both the public and private sectors. For the past two decades, the prosecution agency has been using various electronic devices, such as audio-video recorders and mobile phones, to capture evidence, especially in trap cases. Although the Evidence Act was amended to include Section 65B, a non-obstante clause for proving secondary electronic evidence, this provision has not been followed in the true spirit of the Legislature. Instead, the prosecution agency continues to rely on Section 63/65 EA Act and the precedent set in the Navjot Sandhu Case. The investigating agency's failure to preserve or seize the original media/evidence has resulted in a Catch 22 situation, where they cannot comply with Section 65B of the Evidence Act. The Apex Court's judgment in the Anvar P.V. Case has created mandatory compliance, but it has put the prosecution agency in a difficult position, as they cannot comply with Section 65B in pending cases due to the non-availability of original media. During trials, judges often have to rule on the admissibility of electronic evidence, which significantly impacts the outcome of civil lawsuits or the conviction/acquittal of the accused. The court is still grappling with this new electronic frontier, as the unique nature of e-evidence and its susceptibility to manipulation or falsification create hurdles to its admissibility, unlike other evidence, such as website data, social network communication, e-mail, SMS/MMS, and computer-generated documents.

The Indian Evidence Act underwent amendments through Section 92 of the Information Technology Act, 2000 (before amendment). Section 3 of the Act was amended, substituting the phrase "All documents produced for the inspection of the Court" with "Any records, including electronic ones, produced for the Court's scrutiny." In Section 59, the words "Content of documents" were replaced with "Content of documents of electronic records," regarding documentary evidence, and Sections 65A and 65B were added to incorporate the admissibility of electronic evidence.

The primary objective of introducing this specific provision was due to the technical nature of the evidence, especially given that the size of the computer/server prevents the production of electronic evidence in a legal proceeding, residing in the machine language, and requiring an interpreter to read it. Section 65B of the Evidence Act provides for the secondary copy in the form of a computer output consisting of a printout or data copies on electronic/magnetic media.

- **Section 65B - Electronic Evidence Admissibility:** This Section enables the admission of secondary electronic evidence, such as electronic output or copies, in the absence of the original evidence in court. To ensure admissibility, Section 65B(2) lays out certain conditions that must be fulfilled, and an authorized person must issue a certificate under Section 65B(4). Additionally, Section 65B(3) simplifies the admissibility process of output data that has been collected, stored or processed in a LAN or WAN environment.

- **Section 65B(1)** states that regardless of any other provision in this Act, any information contained in an electronic record will be considered a document if the following conditions are met:

- The information is printed on paper, stored, recorded or copied in optical or magnetic media, or produced by a computer.
- The conditions mentioned in this section are satisfied with respect to the information and the computer in question.

This document will be admissible as evidence of the original content or any facts stated in it for which direct evidence would be admissible in any proceedings without requiring further proof or the production of the original.

- **Section 65B(1)** states that regardless of any other provision in this Act, any information contained in an electronic record will be considered a document if the following conditions are met:

- The computer used to generate the record was regularly used to store or process information relating to an activity carried out by a person who had lawful control over the computer during the relevant period.
- The information was fed into the computer as part of the normal course of the activity of the person with lawful control over the computer.
- The computer was operating properly during the relevant period, or any issues with the computer did not affect the electronic record or its accuracy.
- The information reproduced is the same as the information fed into the computer in the normal course of the activity.

- **Section 65B(2):**

- The computer used to generate the record was regularly used to store or process information relating to an activity carried out by a person who had lawful control over the computer during the relevant period.
- The information was fed into the computer as part of the normal course of the activity of the person with lawful control over the computer.
- The computer was operating properly during the relevant period, or any issues with the computer did not affect the electronic record or its accuracy.
- The information reproduced is the same as the information fed into the computer in the normal course of the activity.

- **Section 65B(3):**

The following situations constitute a single computer:

- A combination of computers operating over the relevant period.
- Different computers operating in succession over the relevant period.
- Several combinations of computers that ran successively during the relevant period.
- Any alternative method that entails the operation of one or more computers, as well as one or more computer combinations, successively over the pertinent period, in whatever order.

● Section 65B(4):

This section pertains to the person who can issue a certificate and the contents of the certificate. The certificate must do any of the following:

- Identify the electronic record containing the statement and describe the manner in which it was produced.
- Give the particulars of the device used to produce the electronic record.
- Address any of the matters to which the conditions mentioned in sub-section (2) relate.

Additionally, a certificate claiming to be signed by an individual holding a responsible official position in relation to either the operation of the relevant device or the management of the relevant activities (whichever is applicable) shall constitute evidence of any matter stated in the certificate. For the purposes of this subsection, it is sufficient for the person making the statement to declare it to the best of their knowledge and belief.

The Supreme Court's ruling in the case of Anvar P.V. vs P.K. Basheer and Ors is a crucial judgment that has resolved disputes arising from conflicting judgments and practices related to the admissibility of electronic evidence. The court has interpreted several sections of the Evidence Act, including Section 22A, 45A, 59, 65A & 65B, and established that data in CD/DVD/Pen Drive cannot be admitted without a certificate under Section 65B(4) of the Evidence Act. The court clarified that electronic evidence without such a certificate cannot be proved through oral evidence, and the expert opinion under Section 45A of the Evidence Act cannot be relied upon to establish the admissibility of such electronic evidence.

This ruling is significant and has far-reaching implications, particularly in cases where the prosecution relies on electronic data, such as cases of corruption where audio-video recordings are submitted on CD/DVD as evidence. In such cases, CDs/DVDs forwarded without a certificate under Section 65B of the Evidence Act will not be admissible, and the court cannot consider expert opinions on their authenticity. The Supreme Court observed that safeguards must be put in place to ensure the source and authenticity of electronic records used as evidence. Electronic records are vulnerable to tampering, alteration, transposition, and excision, and without proper safeguards, the use of electronic records as evidence can lead to a miscarriage of justice.

In cases of corruption investigated by State Anti-Corruption/Vigilance Agencies, even if the original recordings are preserved in digital voice, once destroyed, no Section 65B (4) Evidence Act certificate can be issued. Consequently, CD/DVD recordings, oral testimony, or expert opinions cannot be admitted as evidence, and recordings/data in CD/DVDs cannot be the sole basis for conviction.

According to a judgment, Section 65B of the Evidence Act, as a non-obstante clause, supersedes the general law on secondary evidence under Sections 63 and 65 of the Evidence Act. These sections do not apply to secondary electronic evidence, which is governed wholly by Sections 65A and 65B of the Evidence Act. The Supreme Court's constitution bench overruled the judgment of the two-judge bench in the case of State (NCT of Delhi) v. Navjot Sandhu alias Afsan Guru (2005) 11 SCC 600. The court noted that the Navjot Sandhu judgment did not correctly reflect the law on the admissibility of electronic evidence pertaining to electronic records of the court and needed to be overruled.

To prove electronic records or evidence, only the original electronic media can be produced as primary evidence in court, or its copy can be presented as secondary evidence under Sections 65A/65B of the Evidence Act. In the case of CDs, DVDs, chips, etc., the accompanying certificate in accordance with Section 65B must be obtained at the time of taking the document. Without this certificate, secondary evidence of that electronic record is inadmissible.



THE FUGITIVE FIR



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First Information Report, FIR, is the most common condensation, known to everyone, regarding the felonious disquisition and the felonious justice system. Without getting into the legalese, it simply means that any information of a cognizable offense reported to the police is brought down in jotting and that becomes the gist of the FIR, with applicable columns of the details properly filled in and a unique number added to it, to cover all conditioning related to the case. This is the inauguration of a felonious case that can conceivably go up to the Supreme Court of India. Contrary to the simplicity of its name and legal operation, substantially the de-facto operation, is one of the hottest snares of the felonious justice system. FIR has become so iconic that it is used as a word of general operation. The catch in this whole game is that if there's no FIR registered, it can be fairly presumed that the offense has not taken place. Any act not brought on felonious disquisition records, doesn't live and that can be claimed safely and can not be challenged in any court of law or before any authority. While the law doesn't allow for any discretion in this regard, discretion is what rules the roost. Any crime not seen in public view or blatantly of a physical nature falls in the field of view called discretion.

Ask anyone who has gone through the exercise of getting an FIR registered will tell how easy it is. We can call it the fugitive FIR. Elderly officers in the police in their exploration days are tutored about the FIR and its complications, inclusive of its fugitive nature, and at the end of further than three and half decades, they find it a fugitive when they retire from service. Free enrollment of FIR has been the placarded gospel, and in malignancy of clear-cut guidelines of courts any number of times, it remains mired in teething problems which utmost to the times puts our governance and republic to shame. It's a tool of power to be used in whichever manner it suits the stylish from a SHO of a Police Station to the powers that be. Naked power in a disguised republic is what is rehearsed in justice for a relatively long. The end doesn't feel to be in sight. Each word of the legal language; First, Information, and Report has been shattered into smithereens. A little elaboration will make it clear; power to register is also used as power not to register, indeed timing is worked out, the details of the case might not be the truest, and for sure the sections of law would always remain a matter of disagreement. If wrong sections are used, it would always be a matter of debate. Police look for orders to register in case of sensitive cases, the cases are else sensitive in different political situations. Suo aphorism powers can mean to be suo aphorism collusion. Stock manipulation to sexual importunity being in captions constantly don't end up indeed in the most introductory legal step; enrollment of an FIR.



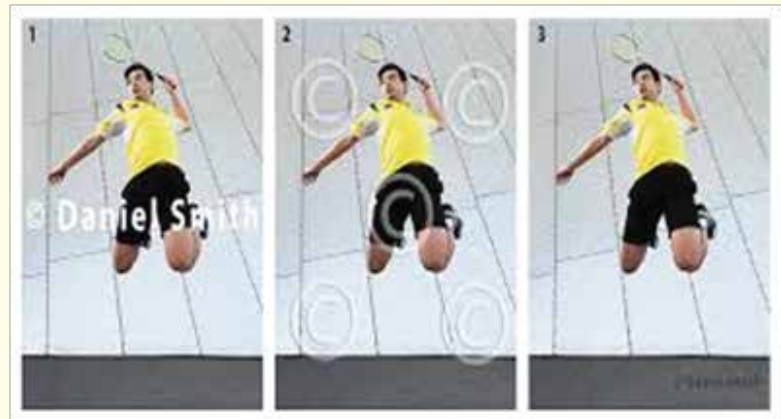
Digital Image Watermarking



Sh. V Bheemakrishna Naik,
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Watermarking is a process of hiding a information to the data. Watermarking may be visible or invisible. Watermarking is used to verify authenticity to show the identity of its owners. Watermarking is can be used to protect confidential information and to indicate the validity of the legal document.

Digital Watermarking is use of kind of marker covertly embedded in a digital media such as audio, video or image which enables us to know the source or owner of the copyright. This technique is used for tracing copyright infringement in social media and knowing the genuineness of the notes in the banking systems.



Digital Watermarking is a very secure technique. The embedding of watermarks is done by a key. Anyone who wants to remove the watermark can only do this with the knowledge of the keys involved in embedding.

There are various watermarking methods like Discrete Cosine Transform(DCT), Discrete Wavelet Transform (DWT) and Discrete Fourier Transform (DFT).digital images are used in various platforms by all means of purpose by people and also creators. The data also can be easily copied or altered, and anyone with a computer can create the forgeries too. The work on digital watermarking of images has introduced several strategies over the years, either using spatial or transform domain. Nevertheless, as the technologies are evolving, the digital images become more vulnerable towards illegal threats such as illegal duplication and removal attack without the creator's consent and the approach or watermarking techniques used are still aren't robust enough to secure the digital images hence, more approach can be applied to make it more secure. So to tackle the problem, the combined or hybrid of Discrete Cosine Transform (DCT) and Discrete Wavelet Transform (DWT) watermarking techniques are developed in this project to analyses and evaluate the performance of the proposed techniques. This hybrid watermarking algorithm combines the strengths of the discrete cosine transform (DCT) and the discrete wavelet transform (DWT). The DCT is a popular transform for digital watermarking because it can efficiently represent the frequency content of an image. The DWT, on the other hand, is a more flexible transform that can represent the spatial and frequency content of an image.

The hybrid DCT and DWT watermarking algorithm works by first transforming the host image using the DWT. The watermark is then embedded in the coefficients of the DWT transformed image. The watermarked image is then transformed using the DCT. The watermark is further embedded in the coefficients of the DCT transformed image.

Figure 1 - Research Design of Digital Watermarking

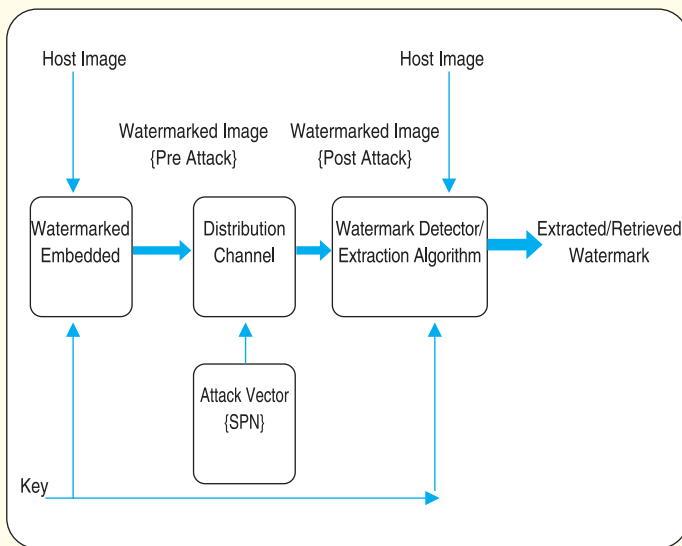


Figure 2 - Embedding process flow chart of watermarking

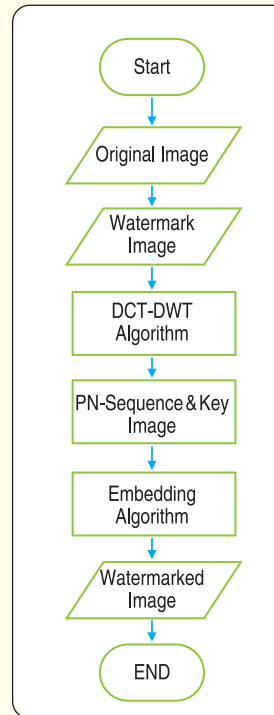
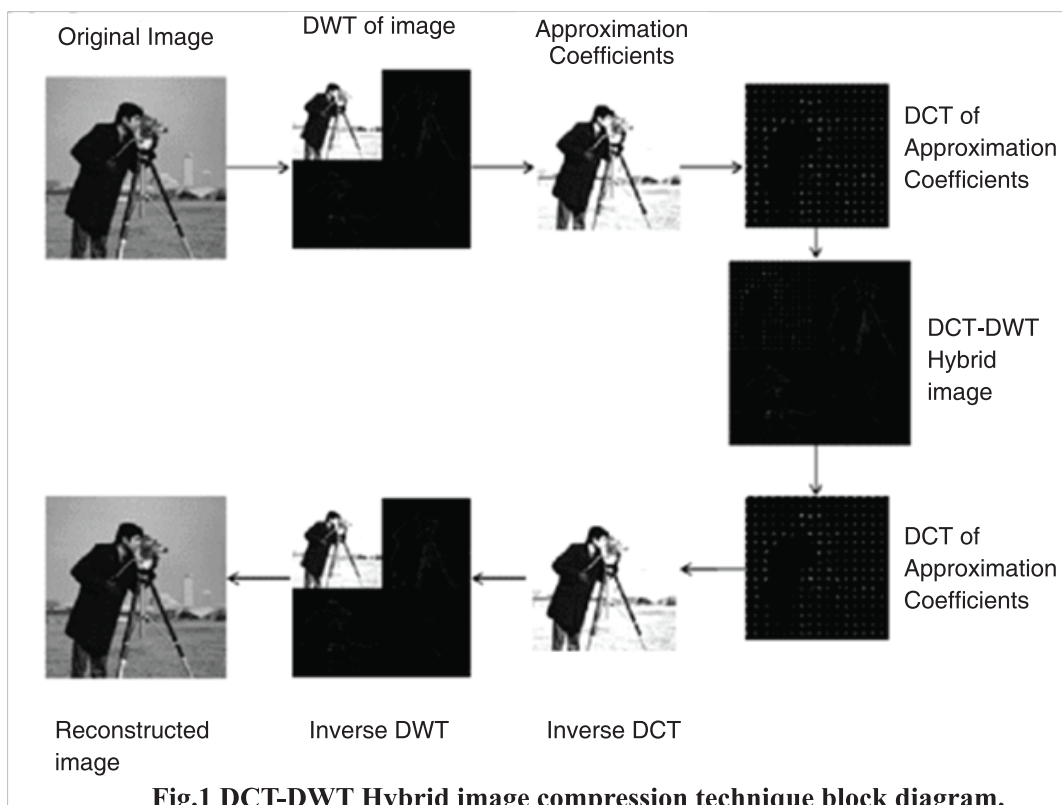
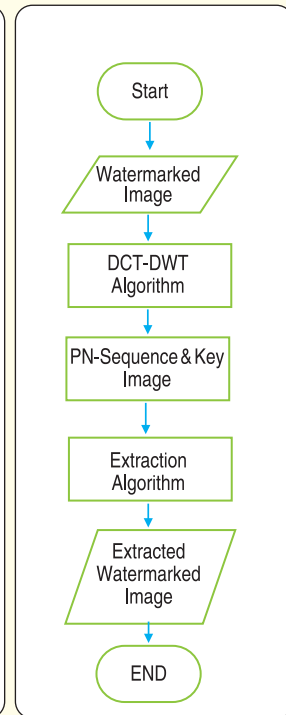


Figure 3 - Embedding process flowchart of the retrieved watermark



The hybrid DCT and DWT watermarking algorithm has several advantages over other watermarking algorithms:

1. It is more robust to attacks than watermarking algorithms that use only the DCT or the DWT.
2. It can be used to embed both visible and invisible watermarks.
3. It can be used to embed watermarks in both grayscale and colour images.

Here are some detailed data for hybrid DCT and DWT based digital watermarking:

- **Watermark embedding:** The watermark is embedded in the high-frequency coefficients of the DCT transformed image and in the low-frequency coefficients of the DWT transformed image. The watermark is embedded using a least-significant bit (LSB) substitution technique.
- **Watermark extraction:** The watermark is extracted from the watermarked image by transforming the image using the DCT and the DWT. The watermark is then extracted from the high-frequency coefficients of the DCT transformed image and from the low-frequency coefficients of the DWT transformed image.
- **Robustness:** The DCT+DWT watermarking algorithm is more robust to attacks than watermarking algorithms that use only the DCT or the DWT. This is because the watermark is embedded in both the spatial and frequency domains.
- **Imperceptibility:** The DCT+DWT watermarking algorithm can be used to embed both visible and invisible watermarks. The visible watermark is embedded in the high-frequency coefficients of the DCT transformed image. The invisible watermark is embedded in the low-frequency coefficients of the DWT transformed image.
- **Applications:** The DCT+DWT watermarking algorithm can be used to protect digital images from copyright infringement, illegal distribution, and tampering. It can also be used to track the ownership of digital images.



The Power of Tone Analysers

Decoding the Secrets of Emotional Expression in Criminal Investigations



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Introduction:

When we communicate, we usually focus on the words we use. In today's fast-paced digital world, where written communication is abundant, understanding the true meaning behind text messages can be challenging. That's where text tone analysers come into play. These analytical tools have the remarkable ability to unravel the complexities of written language, helping us comprehend the emotions and intentions behind every word, symbol, or emoji. They act as modern interpreters of written text, enabling us to decipher the subtle cues that often elude us in online conversations. These interpretations are rooted in sophisticated algorithms and intricate linguistic patterns to bridge the gap between written words and genuine human expression.

What is Tone of Text?

Usually, in written communication, in order to convey feelings and emotions we use punctuation marks, emojis, etc. When we are conversing with a person face to face, we are able to understand the communication better by reading their body language, expressions, tone in their voice, etc. All these factors are lost or diminished in written text. Let us consider this example:

1. "Yeah, great!" – This could mean that the person is happy.
2. "Yeah great" – Could imply that the person is sarcastic

What is Tone of Text?

During criminal investigations, tone analysis plays an important role in establishing connections, relationships and motives. The way the case moves forward depends on the text content found. Tone analysers can do what humans may not be able to right away.

To the untrained human eye, both "okay" and "ok" may not have significant differences. Tone analysers dig much deeper to bring out a more accurate context of the words used.

Tool: <https://sapling.ai/utilities/tone>

| | |
|--|--|
| <p>ok</p> <p>Detect Tone</p> <p>Overall</p> <p>ok neutral 😐 [1.00] approving 👍 [0.00] dis-approving 🙄 [0.00]</p> <p>By sentence</p> <p>ok neutral 😐 [1.00] approving 👍 [0.00] dis-approving 🙄 [0.00]</p> | <p>okay</p> <p>Detect Tone</p> <p>Overall</p> <p>okay approving 👍 [0.88] neutral 😐 [0.12] admiring 😍 [0.00]</p> <p>By sentence</p> <p>okay approving 👍 [0.88] neutral 😐 [0.12] admiring 😍 [0.00]</p> |
|--|--|

What is a text tone analyser?

A text tone analyser is a tool that helps us understand the emotions and intentions conveyed through written text. It uses advanced algorithms and linguistic patterns to analyse the words, symbols, and even emojis used in a message. By examining factors such as word choice, sentence structure, and punctuation, the analyser can determine the overall tone of the text, whether it's positive, negative, or neutral.

It assists in deciphering the subtle nuances and hidden meanings in written communication, allowing us to better understand the emotions and intentions behind the words, even when we can't see the person's facial expressions or hear their voice. In essence, a text tone analyser also known as a sentiment analyser acts as a virtual interpreter, helping us navigate the complexities of online conversations and improving our overall communication experience.

How does a text tone analyser work?

Human emotions can generally be classified into 6 categories – Anger, Fear, Disgust, Surprise, Sadness & Happiness. All other emotions stem from these categories.

To shape a tone analyser tool, a coded model is built and fed a large volume of data. A sure shot combination of Artificial Intelligence and Machine Learning is implemented during the development of the tool. During this phase, the tool is taught how to classify text into various categories. The model is fed emotionally rich texts. These are usually found on personal blogs/journals, social networking websites, forums, product reviews, excerpts and analysis, opinions, critiques, etc. The model is then taught to distinguish between the various tones in the statement to improve its prediction abilities.

Unleashing the power of tone analysers during investigation:

In this era of constant technology use, digital evidence is left behind in every crime committed. During the course of investigation, written content plays a major role in deciding the course of investigation. This is especially applicable in cases where there is a ransom note, suicide note, a letter of blackmail, personal diaries and journals, etc.

Some advanced tools are also equipped to create a psychological overview of the person based on their writing. This will help establish authorship and authenticate the text.

Here is what an advanced tool (<https://appliedmagicsauce.com/demo>) can do to help in the investigation:

This is a piece of text taken from a note written by an 18-year-old girl. During the investigation of this case, the note was recovered but the police did not know which of the 4 children had written this note.

Based on the portion of text input, the tool not just analyses the tone, but also provides the psychological makeup of the person who has written it. The predictions made by the tool are:

Open Text

I hate that man. He threatened my family and blackmailed my father. We could not even go to school because we were scared. The police did not help us in any way even though we filed a complaint.

Open text entered here will be used for prediction but not stored for any purpose

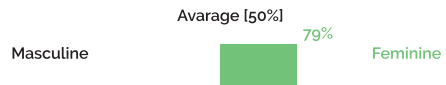
The following prediction is based on 38 words

Age

19

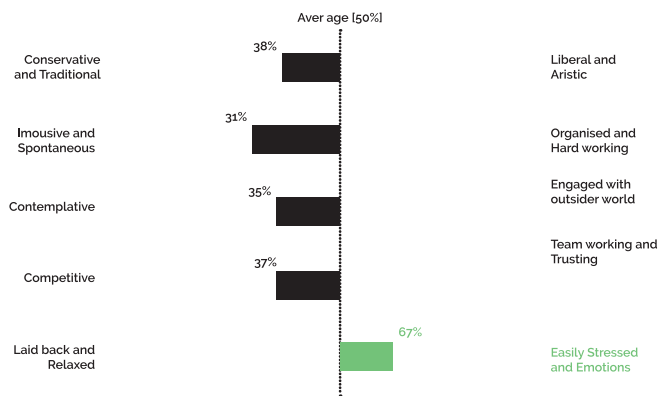
Your digital footprint closely resembles that of a 13-19 years old.

Psychological Gender



Your digital footprint suggests mostly resembles that of female users. You are probably comfortable expressing your feminine side online.

Big 5 Personality [Predictions are expressed as percentiles]



Openness to experience describes a dimension of personality that distinguishes imaginative, creative people from down-to-earth, conventional people.

Your digital footprint suggests that you dislike needless complexity, and prefer the familiar over the unusual. You might say that you are more conservative than many, but not to an extreme level, and that you value practical outcomes over imaginative ideas.

Conscientiousness concerns the way in which we control, regulate, and direct our impulses.

Your digital footprint suggests that you are spontaneous and fun. You like to do unexpected things that make life a bit more interesting. You might say that you are not completely reliable, but you've been known to slip up on occasion.

Extraversion is marked by pronounced engagement with the external world, versus being comfortable with your own company.

Your digital footprint suggests that you are similar to people who prefer low-key social occasions, with a few close friends. You might say that it's not that you are afraid of large parties; they're just not that fun for you.

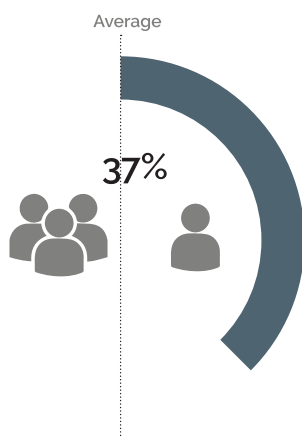
Agreeableness reflects individual differences in concern with cooperation and social harmony.

Your digital footprint suggests that you can find it difficult to get along with others when you first meet them. You might be suspicious of others' motives in this situation. It also looks like people warm to you over time, and you to them, although that doesn't stop you telling them "how it is".

Neuroticism refers to the tendency to experience negative emotions.

Your digital footprint suggests that you tend to be more self-conscious than many. You come across as someone who can find it hard to not get caught up by anxious or stressful situations. You might say that you are in touch with your own feelings.

Leadership Potential

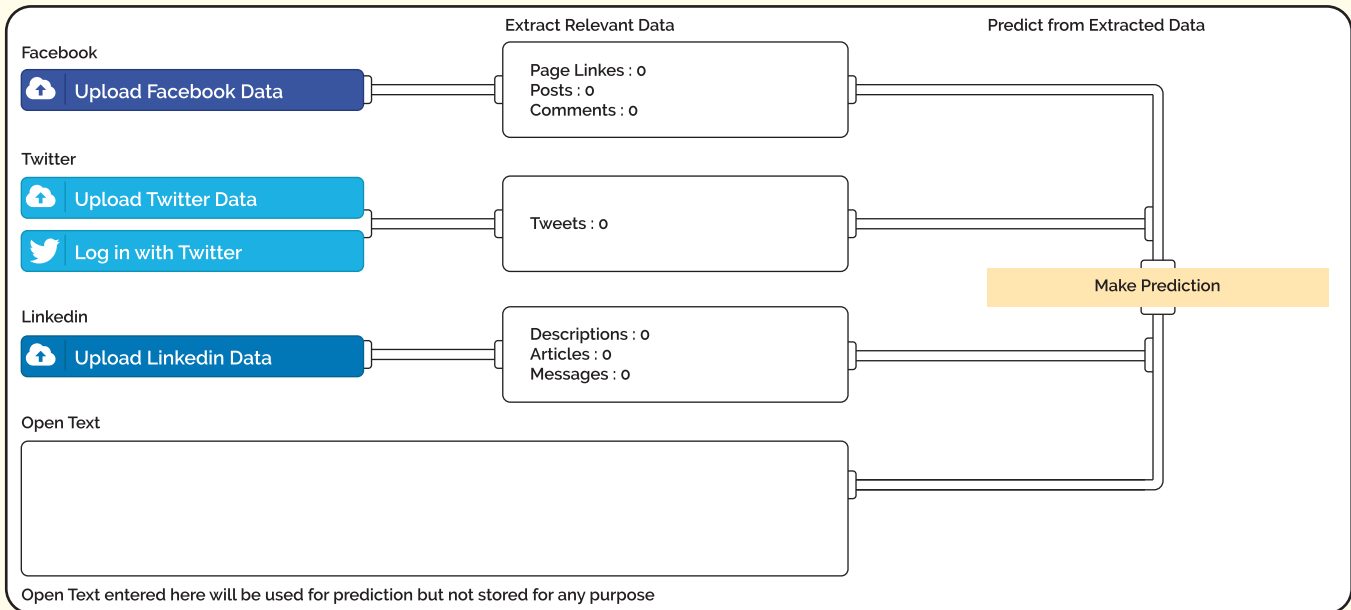


Jungian Personality Type

Introverted Sensing Thinking Perceiving

ISTPs excel at analyzing situations to reach the heart of a problem so that they can swiftly implement a functional repair, making them ideally suited to the field of engineering. Naturally quiet people, they are interested in understanding how systems operate, focusing on efficient operation and structure. They are open to new information and approaches. But contrary to their seemingly quiet and detached natures, ISTPs are often capable of humorously insightful observations about the world around them, and can be closet daredevils who live on the edge by gravitating toward fast-moving or risky hobbies.

ISTPs tend to save their energy until they see a project worthy of their time, and then they launch themselves at it.



A comprehensive psychological makeup of the person (subject) was given by the tool with a limited piece of text available. In cases where the social media profiles of the person of interest are available, the profile data can be downloaded. This entire file can be uploaded in the tool. The tool then predicts the psychological make up of the user based on the content.

These are the data sets based on which predictions can be made by the tool:

All sources Likes Posts Comments Tweets LinkedIn text LinkedIn Messages Open Text

Key Takeaway:

Tone Analyser tools help pave the way for the investigation to proceed by giving certain inputs about the author. It also helps select and eliminate suspects based on the data provided.

This tool does not guarantee 100% accuracy as we are dealing with human subjects. There are a lot of variable factors to consider – language ability of the author, mental ability of the author, vocabulary, etc. Currently, this tool is limited to the English language only.

So, the predictions of the tools can be taken as a general guideline. Sometimes, when the age cannot be determined, it provides an age group such as “13-17 years.” When it comes to investigations, some information is better than none.

Most of these tools are open source and free to use. This makes it widely accessible to all the police officers, investigators, etc. It can also be used on any device with an internet connection. The predictions are instantly available for viewing or saving.

In summary, text tone analysers play a vital role in our digital realm by assisting us in comprehending written messages more effectively. By analysing elements like word choice, sentence structure, and context, these tools provide valuable insights into the emotions and intentions conveyed in the text. Their assistance helps us avoid misunderstandings, improve our understanding of tone, and obtain data that is relevant to the case in hand.

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