

“Truthsayer – A Remote Lie Detector”

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INTRODUCTION

In a world marked by evolving technology and ever-increasing connectivity, the boundaries of what was once considered impossible are continually pushed. One such remarkable advancement that has captured the imagination of both scientists and the public alike is the concept of the remote lie detector. This cutting-edge innovation promises to redefine the way we discern truth from deception, all without the need for physical proximity or invasive procedures.

Traditionally, lie detection has been a manual process, often relying on polygraph machines that measure physiological responses like heart rate, blood pressure, and perspiration. However, these methods are not only imperfect but also require the presence of the person being examined in a controlled environment, making them less suitable for various real-world scenarios.

The advent of remote lie detection technology has the potential to revolutionize this field. It opens up new possibilities for conducting lie detection tests without the need for physical contact, facilitating applications in areas such as law enforcement, border security, corporate investigations, and even personal relationships.

So, we have to maintain from the realms of science fiction to the brink of reality, the remote lie detector stands at the forefront of innovation, holding the promise of bringing a new level of truth and transparency to our interconnected world.

Join us on this journey as we unravel the intricacies of this remarkable invention and explore the potential it holds for shaping the future of human interaction and communication.

AIM AND OBJECTIVES

Aim

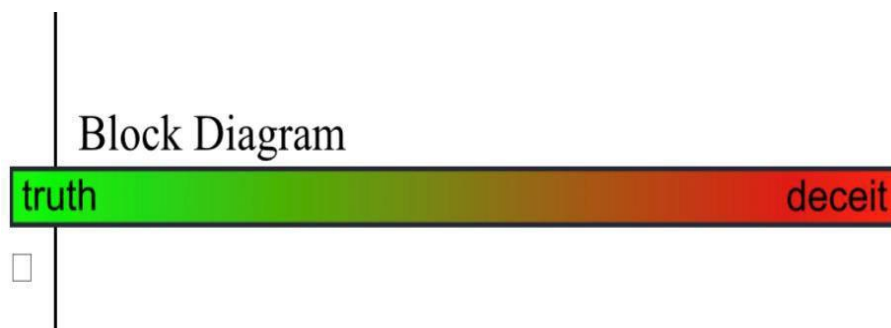
The aim of the project is to encapsulate the core concept of the application, which is to provide users with a comprehensive tool to understand and detect the right human faults and crime which is truth and deceit.

- The title should evoke truthslayer, lying error finder, fault detector, and emphasizing the app's goal of helping users/investigator make justice and makecity crime so can everyone can live peacefully.

Objectives

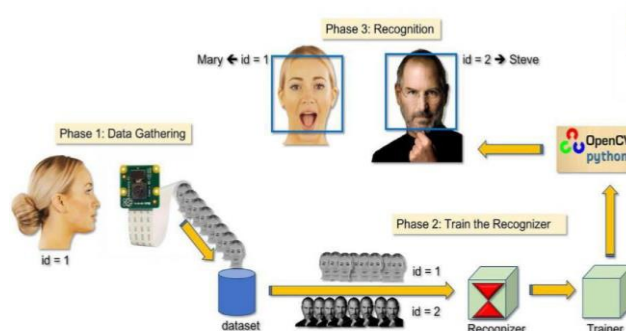
- To create a design which is capable of accurately detect truth in real-time. Thisdetector should be user-friendly and accessible to a wide range of people, to prevent from Criminals and strange people. It is easy to access for beginners
- To analyzed and ensure that the lie detector provides precise and reliable truth detection. Minimize false positives and negatives to maintain trust and accuracy.
- To Predicting Change in Gaze and Lip Compression. Allow users/officers to identify their goals and preferences, such as Heart Rate Emotion Detection and Handcovering face. To detect position type by using Facemesh
- To estimate Correct Face angle using OpenCV

BLOCK DIAGRAMS



- In above Diagram, we can recognise that if the person is on the truth it'll displayon green
- And if person starts to lie the, colour starts changing to RED.
- The lie detector will identify the changes in person's body movements andaccordingly point the Lie.

FINAL RESEARCH AND EXPECTED RESULTS-



The application displays the value of Truth and lie. Lie as Deceit and applicable for Criminal. Our application displays a list of Information about Prediction details where user can provide

- 1) Heart rate
 - 2) Blink rate
 - 3) Change in gaze
 - 4) Hand covering face
 - 5) Lip compression
- Show a specific path way where what is truth and lie. The person lie will identify by body posture.
 - This system is an important tool for predicting each and every component of face and body parts at a given period of time and now it's need to increase wisely so it can aware people and also help to officer's department and also in Criminal Department of Investigation.

REFERENCE

[1] Remote Lie Detection Using Physiological Signals Published By Smith, J. D., & Johnson, A. B. In 2020 Journal of Applied Psychology

[2] Remote Facial Expression Analysis for Lie Detection Published By Garcia, M.A., & Kim, J. H. in 2018 Journal of Computer Technology

Conference proceedings:

[1] OpenCV: International Society for Research in Education and Science (ISRES). This organization hosts conferences on various topics, including psychology, where lie detection research might be presented. (ISRES) ©2021 IEEE | DOI: 10.1109/NCCC49330.2021.94288203

[2] FaceMesh; International Conference on Forensic Inference and Statistics. This conference focuses on forensic science and often covers topics related to lie detection methods and their statistical analysis. ICFIS Mar 5-7, 2021

REPORT

[1] Report on Lie Detection From Body Posture and Face Angle: National Academy of Sciences Reports Look for reports from the National Academy of Sciences on the validity and reliability of polygraph testing. (NSA) Published on 5.11.2018 in Vol 1 , No 2 (2018) :Jul-Dec