

# IMPLEMENTATION OF FINGERPRINT TECHNOLOGY IN YOUTUBE

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## ABSTRACT:

The most popular means of proving an individual's identity is through their fingerprints. In this study, we used fingerprints from living people as proof of age. Inspired by the fact that while patterns in human fingerprints change from birth to middle life, widths do not, we can estimate age of living people. To estimate a person's age using fingerprints, Support vector machines (SVM) and the two techniques 2D- Discrete Wavelet Transform (DWT) and Principal Component Analysis (PCA) are combined. (This technique is already presented by Basavaraj Patil G.V, Mohamed Rafi PG Student, Department of CSE, UBDTCE, Davangere, India, Professor, Department of CSE, UBDTCE, Davangere, India). We can prevent people from seeing age-restricted videos by employing this age estimation algorithm with fingerprints.

## KEYWORDS:

EPIDERMAL RIDGE, DISCRETE WAVELET TRANSFORM, PRINCIPAL COMPONENT ANALYSIS, SUPPORT VECTOR MACHINES, BIOMETRIC TECHNOLOGY, FINGERPRINT TECHNOLOGY.

## I INTRODUCTION:

Biometric technologies, in general, refer to the application of technology to a person's identification based on a biological trait. Fingerprint identification is one of the first and most innovative biometric technologies that has been properly grouped under digital forensics. The epidermis of a finger is represented by a fingerprint, which is a pattern of interspersed ridges and valleys. Over time, the ridges on human fingertip tips changed to enable people to grasp and grip objects. The formation of fingerprint ridges is influenced by both hereditary and environmental influences, just like everything else in the human body. Because of this, even identical twin's fingerprints differ from one another. By using this concept, we can restrict individuals from seeing age-restricted videos.

## II ESTIMATION OF AGE:

1. The fingerprint is preprocessed and resized in accordance with the specifications.
2. The fingerprint is wavelet decomposed to produce a 19 feature vector.
3. PCA Eigen vector feature extraction is also applied to the preprocessed fingerprint.
4. The features vectors are now added together to get the final vector.
5. The age estimation classification is performed on this fingerprint feature vector using the SVM classifier.

All of the fingerprints that are used have been optically scanned. For the purpose of estimating age, the database is divided into various age ranges, such as 15-20, 21-25, 26-30, 31-35, 36-40, 41-45, 46-50, and so forth.

[These steps are already proposed by Basavaraj Patil G.V, Mohamed Rafi PG Student, Department of CSE, UBDTCE, Davangere, India, Professor, Department of CSE, UBDTCE, Davangere, India]

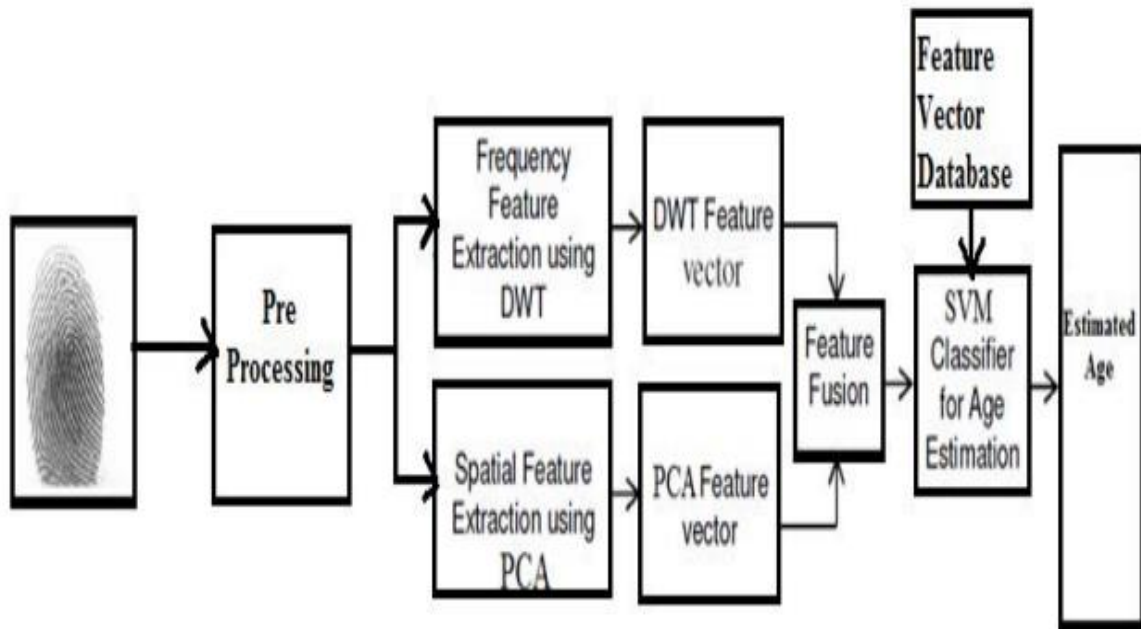


Fig 1.1 Estimation of age

The above diagram represents how age is estimated using fingerprint.

After entering our fingerprint, it will detect our age as shown as below .

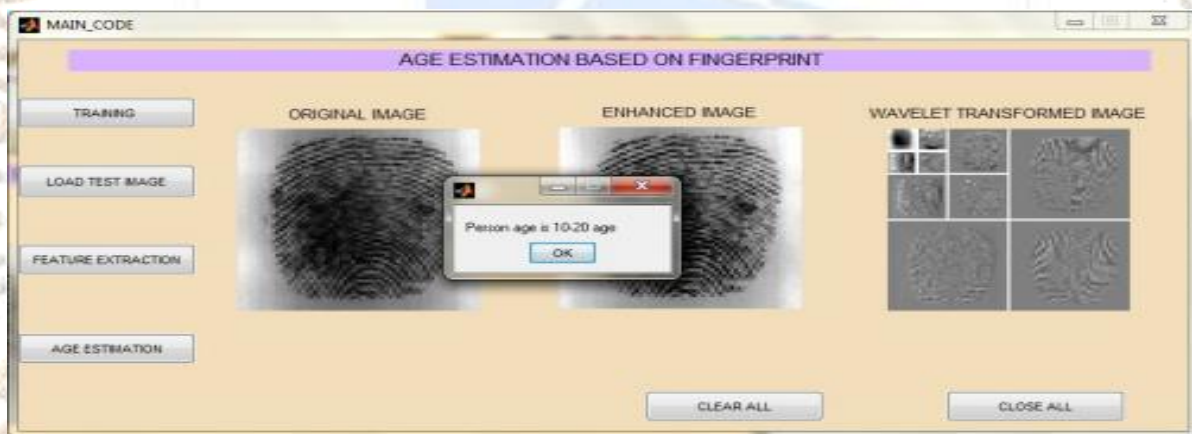


Fig 1.2 Processing age

### III IMPLEMENTATION:

YouTube age restriction policies are created to prevent children and other users who are unable to make responsible decisions from accessing NSFW YouTube video content. As a result, Google based its restrictions on the users' Google + profile entries for their ages.

#### ACTIONS TO TAKE WHEN UPGRADING OUR PROFILE:

- \*Use your Google account's email address and password to log in.
- \*The "Profile" tab may be found on the website's left side after selecting the "Home" tab at the top of the page.
- \*You may view the details of your profile by selecting the "About" page.
- \* Click the pencil icon next to "Birthday" under the "Gender, birthday, and more" options.
- \*To change or add your date of birth to your Google + profile, enter it there and click "Save".

Even when content complies with YouTube regulations, it may not be suitable for users under the age of 18. The video's age may occasionally be restricted by YouTube. The guidelines are apply to videos, video descriptions, and custom thumbnails. To stop young children from accessing inappropriate content, communicating with strangers, or engaging in cyberbullying, the age limit was implemented.

However, a lot of people adjust their date of birth in their profile to reflect that they are adults so that only they can see age-restricted films by following the instructions for updating the profile above.

**To avoid this type of malpractices,age estimation method using fingerprint technology is very useful.**

To overcome this ,we can implement a application on youtube to estimate our age by detecting our fingerprint.Whenever we enter into youtube,it ask for our fingerprint.

After entering our fingerprint,it automatically detect our age and shows videos related to our age. By using this method,no one can fake their age to access age-restricted videos.



Fig 1.3 Display while opening youtube

**when youtube has lock,**

one who put lock on their youtube, they only can unlock it after that it ask for entering the fingerprint.On that, anyone who want to use youtube can enter their fingerprint and scroll the youtube.

**when youtube has no lock,**

It ask only for the fingerprint,on that anyone can enter their fingerprint.

//This application does not saves fingerprint(detect our age only). Everytime we open the youtube,it ask for fingerprint and then only we can entering into home page of youtube.

#### IV ADVANTAGES:

- \* It is secured because it does not save our fingerprint and also does not access our information.
- \* Any finger can be entered.
- \* It detect our age correctly. we can't cheat anymore by changing our date of birth to access age restricted videos.
- \*Not only in youtube,this concept can be implemented in any app which want to restrict people from seeing age-restricted videos.
- \*Avoid cyberbullying.
- \* According to a Cisco research, 81 percent of smartphones have fingerprint sensor. So it can be implemented and get success.

## V DISADVANTAGES:

- \* One who does not have no fingers ,they can't enter into youtube.
- \*We can't implement this method in the mobilephone without the fingerprint sensor.

## VI CONCLUSION:

In this presentation, In order to prevent viewers from viewing age-restricted content on YouTube, we have implemented a fingerprint technology for calculating a user's age from their fingerprint.

## REFERENCES:

- [1] M. Sumithra and Dr. S. Malathi, "A Novel Distributed Matching Global and Local Fuzzy Clustering (DMGLFC) FOR 3D Brain Image Segmentation for Tumor Detection", IETE Journal of Research, doi.org/10.1080/03772063.2022.2027284, 2021
- [2] B.Buvanswari and T.Kalpalatha Reddy, "A Review of EEG Based Human Facial Expression Recognition Systems in Cognitive Sciences" International Conference on Energy, Communication,Data analytics and SoftComputing(ICECDS),CFP17M55-PRJ:978-1-5386-1886-8",August 2017.
- [3] M. Sumithra and Dr. S. Malathi, " Modified Global Flower Pollination Algorithm-based image fusion for medical diagnosis using computed tomography and magnetic resonance imaging", International Journal of Imaging Systems and Technology, Vol. 31, Issue No.1, pp. 223-235, 2021
- [4] K. Sridharan , and Dr. M. Chitra "SBPE: A paradigm Approach for proficient Information Retrieval , Jokull Journal" , Vol 63, No. 7;Jul 2013
- [5] M. Sumithra and Dr. S. Malathi, "3D Denselex NET Model with Back Propagation for Brain Tumor Segmentation", International Journal OfCurent Research and Review, Vol. 13, Issue 12, 2021.
- [6] B.Buvaneswari and Dr.T. KalpalathaReddy,"EEG signal classification using soft computing techniques for brain disease diagnosis",Journal of International Pharmaceutical Research ,ISSN : 1674-0440,Vol.46,No.1,Pp.525-528,2019.
- [7] K. Sridharan , and Dr. M. Chitra "Web Based Agent And Assertion Passive Grading For Information Retervial", ARPJN Journal of Engineering and Applied Sciences, VOL. 10, NO. 16, September 2015 pp:7043-7048
- [8] M. Sumithra and Dr. S. Malathi, "Segmentation Of Different Modalitites Using Fuzzy K-Means And Wavelet ROI", International Journal Of Scientific & Technology Research, Vol. 8, Issue 11, pp. 996-1002, November 2019.
- [9] M. Sumithra and S. Malathi, " A Survey of Brain Tumor Segmentation Methods with Different Image Modalitites", International Journal of Computer Science Trends and Technology (IJCST) – Vol. 5 Issue 2, Mar – Apr 2017
- [10] B.Buvaneswari andDr.T. Kalpalatha Reddy, "High Performance Hybrid Cognitive Framework for Bio-Facial Signal Fusion Processing for the Disease Diagnosis", Measurement,ISSN: 0263-2241, Vol. 140, Pp.89-99,2019.
- [11] M. Sumithra and Dr. S. Malathi, "A Brief Survey on Multi Modalities Fusion", Lecture Notes on Data Engineering and Communications Technologies, Springer, 35, pp. 1031-1041,2020.
- [12] M. Sumithra and S. Malathi, "A survey on Medical Image Segmentation Methods with Different Modalitites", International Journal of Engineering Research and Technology (IJERT) – Vol. 6 Issue 2, Mar 2018.
- [13] B.Buvaneswari and Dr.T. KalpalathaReddy,"ELSA- A Novel Technique to Predict Parkinson's Disease in Bio-Facial",International Journal of Advanced Trends in Computer Science and Engineering, ISSN 2278-3091,Vol.8,No.1,Pp. 12-17,2019
- [14] K. Sridharan , and Dr. M. Chitra , Proficient Information Retrieval Using Trust Based Search On Expert And Knowledge Users Query Formulation System, Australian Journal of Basic and Applied Sciences, 9(23) July 2015, Pages: 755-765.
- [15] B.Buvaneswari and Dr.T. Kalpalatha Reddy, "ACPT- An Intelligent Methodology for Disease Diagnosis",Journal of Advanced Research in Dynamical and Control Systems,ISSN : 0974-5572,Vol.11,No.4,Pp.2187-2194,2019.
- [16] Sumithra, M., Shruthi, S., Ram, S., Swathi, S., Deepika, T., "MRI image classification of brain tumor using deep neural network and deployment using web framework", Advances in Parallel Computing, 2021, 38, pp. 614–617.
- [17] K. Sridharan , and Dr. M. Chitra "RSSE: A Paradigm for Proficient Information Retrieval using Semantic Web" , Life Science Journal 2013;10(7s), pp: 418-425