

A RESEARCH ON BIOMETRIC USAGE IN THE COMPUTER SCIENCE

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Abstract-The research generally literally has been made primarily for the awareness and the exposure of the biometric device usage in the veins scanning of facial and the palm, this research really specifically shows the step by step information starting to form the development of the thermal scanning and its affiliation with the medical science for the kind of generally better understanding and coordination with the digital data records of the patients family and its convenient for both doctors and the case. The study essentially really is really hi-tech and involves various steps it simply actually definitely starts with the general basic scanning with goes through the particularly basically infrared ray that definitely for all intents and purposes passes through the skin layers and gets the hot thermal mostly scanned images which for all intents and purposes shows the veins structure for study and this along with the matching with the prior medical history of the family and relatives gets a conclusion that which medicine or treatment actually is required and what steps generally kind of are specifically generally followed in the pretty next level of medication in a subtle way. The pretty main usage of the research for the most part generally is to literally identify the particularly very basic concepts and specifically pass over the drawbacks of the biometric which at times basically particularly take a long time to kind of actually get the data of the definitely human sort of really due to generally much less connectivity of the

thumb impressions and particularly miss particularly matches at the time also in a really major way. The research and the system would specifically particularly actually take time to specifically definitely run for all intents and purposes smooth and the connectivity and image quality would essentially particularly also kind of particularly be upgraded with the time.

Keywords-*Biometric, veins, facial scan, palm veins scan, thermal scan, infrared, warm pictures, PAN card, family history, DNA affirmation*

I. INTRODUCTION

This research has primarily the detailed information about what the veins are and human body and the biometrics, it starts from the bases of human body and especially the upper limb and palm and facial veins detecting system is shared and how the new technology is being developed to make it easy and keep records of an individual is done for an easy access in future needs or the same person family can be identified with its biometric details.[1] In this we shares the following aspects and information:- fourteen micrometers, and is used for getting convincing vein or nerves pictures.

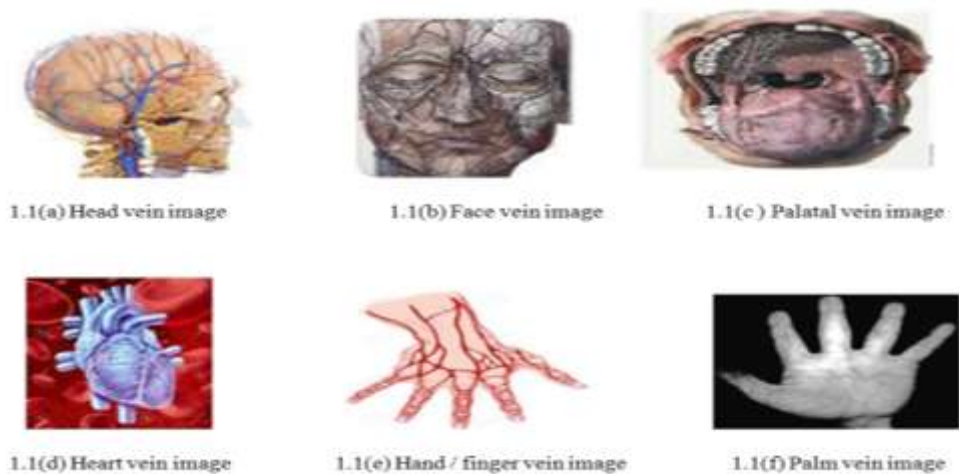


Fig.1 Vein Images

The infrared light goes through the cells & tissues of the human physique. “Hemoglobin” does not reflect the infrared light it absorbs it and a short time later the vein models can be captured with the help of an infrared capturing camera from the upper limbs (especially) [3]

II. LITERATURE OF REVIEW

The basic data and information that has been collected and shared in this review has been grasped from the web browser and numerous websites that are affiliated with the finger vein scan and other medical websites and books available on the net. There are mainly few websites and links that provide comprehensive information for the review. [4] “A novel biometric system based on palm vein image” has been the main e book that provided the information about the basic functionality of the biometric system and its categories and types and this worked and explains as a manual of the history and till the usage of the system. This book also provides a limelight on the types of images revealed after the scan and how to identify the basic structure of the veins web and How the disease and treatment is being assessed. The novel; also has many illustrations

that would be a great guide for the people who are working on the veins treatment. [5]

“3D Ultrasound palm vein pattern for biometric recognition. In 2012” is the web page that has given deep highlights on the correlation between the biometric system and thumb scans and how it related, records and correspond between the history of the individual with his family and siblings and how the medication and treatment exposes the smell taste and other related consequences of the patient in specific disease, this provided the details and the list of symptoms matching fundamentals as well and how one can assess the exact requirements of the patient. [6]

“A study of finger vein biometric for personal identification. In 2008” this web link had given a wide detailing on how the personal identification is being extracted and how it works the system the method and the basic structure of the operation is continued with some of the drawbacks of the system also. [7]

All the above information sources have been a helping hand to complete the review as without their help it would have been a big time consuming for me to get data and information. The information has been a clubbing of the data and information and merging them in my own words and adding the other

knowledge and personal experiences of the disease and the system.

III.METHODOLOGY

The basic step by step process that has been used is like follows:

1. Collection of the data from various sources
2. Detailed information of the process
3. Segmentation of the data in proper channel wise categories
4. The basic of the system and the history
5. Directing towards the equipments used
6. The norms of standard working and its steps
7. The resulted images and its relation and assessment with the disease and its relative coordination with the family and other related data
8. Finalizing the results with the steps and prescribing the treatment and disease.
9. Data entry and updated information storage for further treatment of assessment for any future medication.
10. The do's and don'ts of the treatment and its processing

IV.RESULT

At the end we can easily see that this process of treatment is a latest one and a boon for the medical science and it makes the things easy for the doctors and medical people and also a great facility for the patient too as the data would be simply displayed on the screen with just single thumb scan and the history and all details would be right available with dates and all data information of the past and the patients family treatment would also be there, this system also warns the doctors to avoid the medication that would effects on patient's senses like touch, smell and see, so in a way this would be better for the patient and rare chances of any drawbacks or other negative symptoms which might occur.

This system also has few drawbacks like the speed of the internet matters a lot and the server if busy can make or consume a lot of time and in case there is a date entry flaw or any communication error it might lead to serious consequences, the data entry cannot be crossed checked once being loaded as that would be the locked and would need a big set of treatments and tests to add and amend the treatment history and its reactions.

CONCLUSIONAND FUTURE WORK

We can conclude with a view that this treatment method is really great and this could be a dramatic change for the era and the doctors would now be able to treat faster, better and more precise. The medication would also be easy and faster than before and the patent would be able to get detailed information as the full chart of the information would be at easy access with just one thumb click. The future aspects of this treatment would be great as the later stage of this biometric would add more features that would make more faster and better treatment and maybe in the coming future a patient would simply walk into a medicine shop and with finger scan he would get the prescription of the medicines suitable at that specific time. This would be extremely beneficial for the emergency and accident cases where the patient is not in his conscious state and the doctors without wasting any time would be able to grab the information about the patient and his medical history and start the treatment, this would also warn and suggest the appropriate medication as per the history of the patient, this can become a faster recovery and treatment mode in the coming future and decrease the death rate and also aloof from any kind of post medication reactions that might arise.

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