

FORENSIC FACE SKETCH CONSTRUCTION AND RECOGNITION

Submitted in partial fulfillment of the requirements
of the degree of

Bachelor of Engineering

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CERTIFICATE

This is to certify that the project entitled “ **Forensic Face Sketch Construction and Recognition** “ is a bonafide work of “**Sah Jyoti – 115CP1476B, Sahu Akash -113CP1651A, Sarvade Supriya – 115CP1363B, Vadekar Saurabh – 116CP2084A**” submitted to the University of Mumbai in partial fulfillment of the requirement for the award of the degree of “**Undergraduate**” in “**Bachelor of Engineering**”.

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APPROVAL FOR PROJECT REPORT

This project report entitled “Forensic Face Sketch Construction and Recognition“ by “ Sah Jyoti “, “ Sahu Akash “, “ Sarvade Supriya “, “ Saurabh Vadekar “ is approved for the degree of **Bachelor of Engineering in Computer Engineering.**

Examiners

1.

2.

Date:

Place : MGMCET, Kamothe.

DECLARATION

We declare that this written submission represents my ideas in my own words and where others' ideas or words have been included, I have adequately cited and referenced the original sources. I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my submission. I understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

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ABSTRACT

In this modern age, the overall crime rate is increasing day-by-day and to cope up with this the law enforcement departments too should find ways that would speed up the overall process and help them in bringing one to justice. One such way can be using face recognition technology for identifying and verifying the criminal.

The traditional approach here is to use the hand-drawn face sketches drawn by forensic sketch artist to identify the criminal, modernizing this would mean using the hand-drawn sketch and then matching them with the law enforcement departments database to identify the criminal. Using this approach would result in the various limitations with latest technologies and even would be time consuming as there are very few forensic sketch artists available when compared to the increasing crime ratio.

Our project is aimed on decreasing the time span and speeding up this process by providing a standalone platform to the law enforcement department which would allow users to create accurate face sketch of the suspect without the help of forensic sketch artist and no special training or artistic skills. The sketch can be created using drag and drop feature in the application with variety of face elements and can automatically match the drawn composite face sketch with the law enforcement departments database much faster and efficiently using deep learning and cloud infrastructure.

Keyword: Forensic Face Sketch, Face Sketch Construction, Face Recognition, Criminal Identification, Deep Learning, Machine Learning, Two Step Verification.

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