ML based Deep-Fake Image Detection

Submitted in partial fulfillment of the requirements of

Third Year

in

B.E(Artificial Intelligence and Data Science)

By

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CERTIFICATE

This is to certify that the Mini Project 2B entitled "Title**"** is a bonafide work of **Shubhankar Gite (19) , Vedant Ranade (53) , Trushank Vashikar (66) , Shreyas Yesade (71)** Submitted to the University of Mumbai in partial fulfillment of the requirement for the award of the degree of **"Bachelor of Engineering"** in **"Artificial Intelligence and Data Science".**

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Mini Project Approval

This Mini Project entitled " ML based Deep-Fake Image Detecton " by **Shubhankar Gite (20) , Vedant Ranade (53) , Trushank Vashikar (66) , Shreyas Yesade (71)** is approved for the degree of **Bachelor of Engineering** in **Artificial Intelligence and Data Science.**

Examiners

1……
(Internal Examiner Name & Sign)

2……
(External Examiner name & Sign)

Date:

Place:

DECLARATION

I declare that this project represents my ideas in my own words without plagiarism and wherever 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 project work. I promise to maintain minimum 75% attendance, as per the University of Mumbai norms. I understand that any violation of the above will be cause for disciplinary action by the Institute.

Yours Faithfully

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3._____

4._____

(Date & Signature of Students)

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Abstract

The rise of deepfake technology has raised concerns about the authenticity of visual content on the internet. This project addresses this issue by developing a system capable of detecting deepfake images. Using Python programming language and a sophisticated neural network architecture known as Convolutional Neural Networks (CNNs), the system can accurately distinguish between AI-generated images and real ones. By integrating this detection model into a user-friendly web application using Flask, anyone can easily utilize it. Moreover, deploying the application on Azure ensures that it can handle high volumes of traffic and remains accessible to users. Through extensive testing and evaluation, the effectiveness of this solution in identifying deceptive visual content is demonstrated, offering a promising step towards combating the spread of misinformation and maintaining trust in digital media.

Acknowledgement

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