UNMASK AI

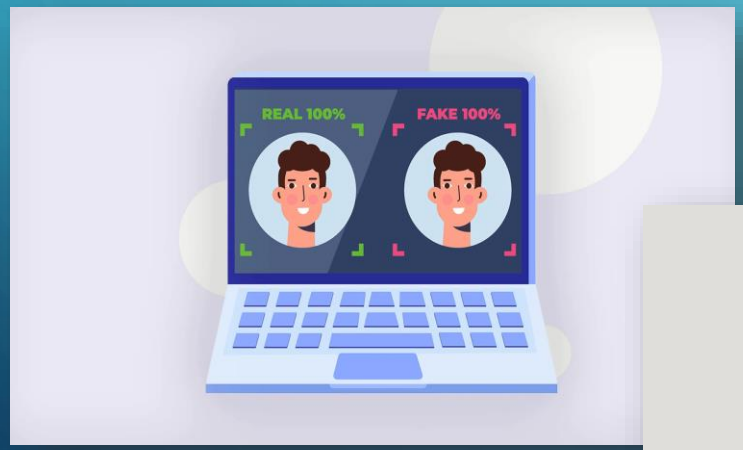
AI-BASED DEEPFAKE VIDEO DETECTION SYSTEM

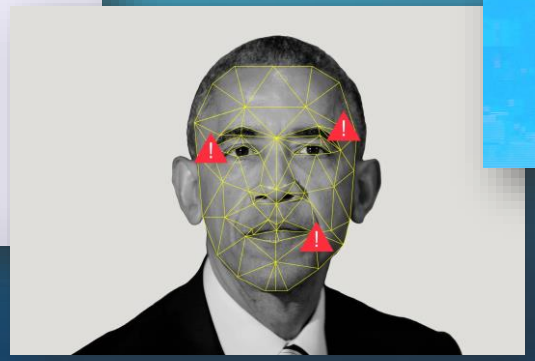
Project Overview

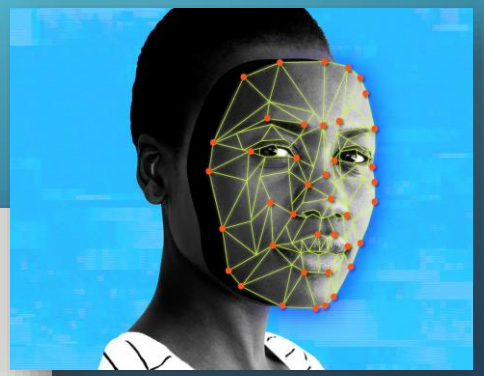
Deepfake videos use AI to manipulate videos by replacing someone’s face or voice with another person’s likeness. This project aims to build a system that detects Whether a Video is real or fake using deep learning techniques

Problem Statement

- Deepfakes are AI-generated fake videos that manipulate faces and voices.
- Difficult to detect with the naked eye.
- Used for spreading misinformation and violating privacy.
- Lack of reliable detection systems on digital platforms.

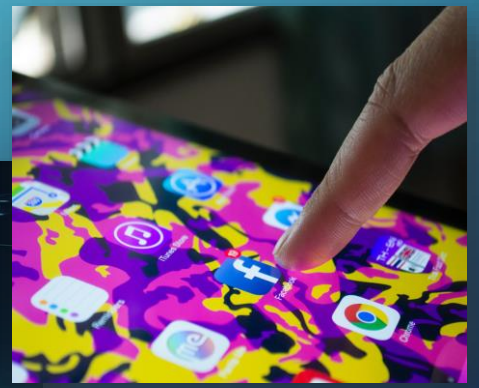






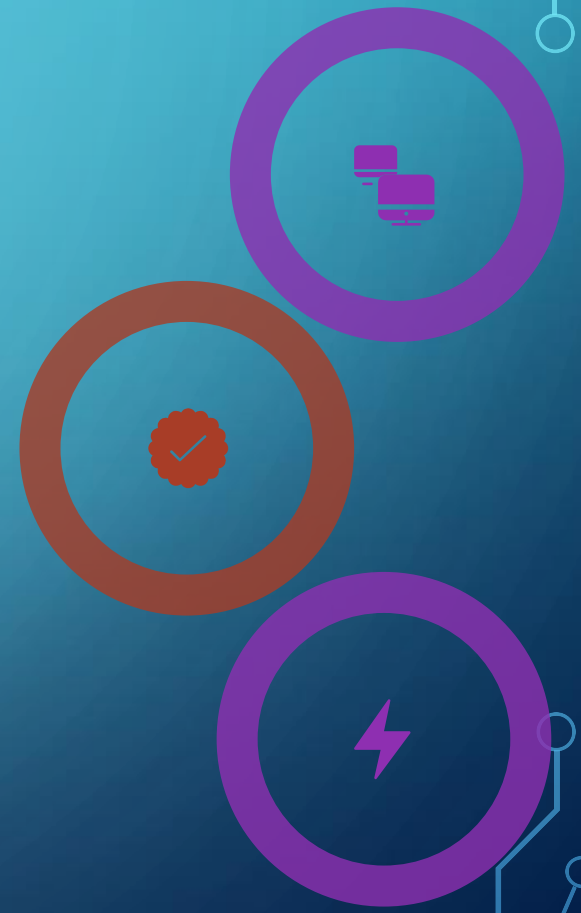
Proposed Solution

- AI-based system to detect deepfake videos.
- Uses Machine Learning and Deep Learning algorithms.
- Analyzes visual and audio inconsistencies.
- Provides confidence scores for detection.



Advantages

- High detection accuracy.
- Real-time video processing.
- Helps prevent misinformation.
- Protects privacy and digital security.



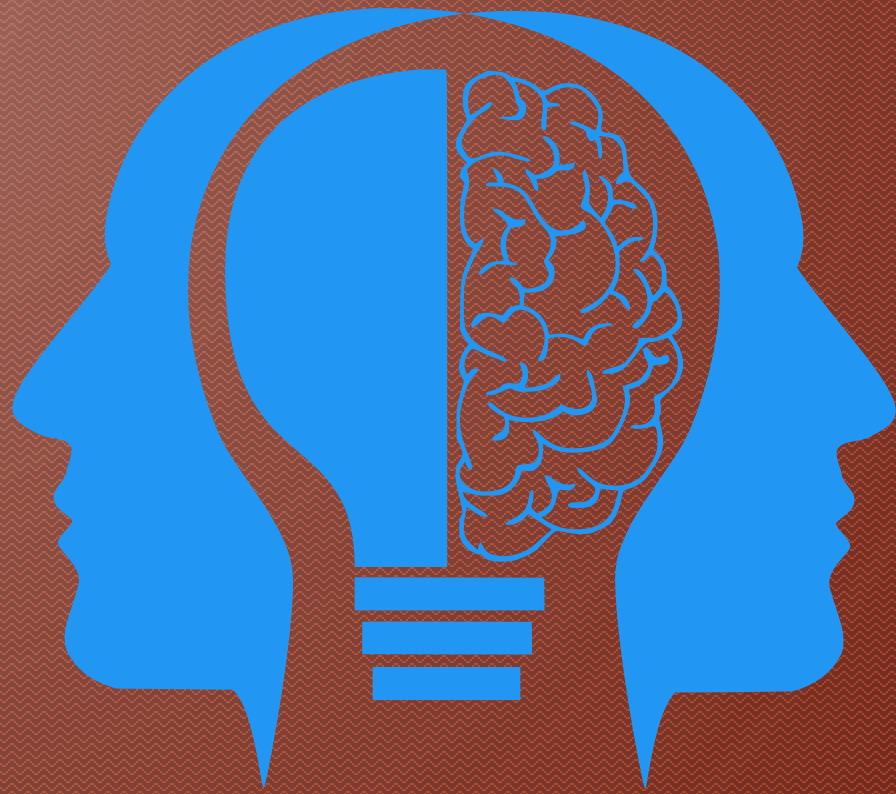
Tech Stack Required

component	Technology
Backend	Python (Flask/Django)
Deep Learning	TensorFlow ,PyTorch
Face Detection	OpenCV, dlib
Frontend	HTML, CSS, React.js
Database	SQLite or MongoDB

Future Scope

- Add audio-based deepfake detection
- Use advanced pre-trained models like EfficientNet.
- Build a mobile app interface for deepfake detection.

Conclusion

The AI-Based Deepfake Video Detection System helps detect fake videos, ensuring media authenticity and privacy protection. It uses AI techniques to prevent misinformation and can be improved with audio detection and real-time processing in the future.

THANK YOU