

Hi [Her Name],

Hope you're doing well!

I wanted to share with you a breakdown of the different features I'm planning for the "Real or AI" app, along with suggested technologies that could be used for each one.

Some of these may be more related to AI and machine learning – so please don't worry if any of it feels outside your usual scope.

The goal here is just to align on the direction, and to see what parts you'd feel comfortable building – and what might require bringing in another expert later on.

Let me know what you think!

Thanks again for all your work so far – I really appreciate it ■

## ■ 1. Voice Analysis – Real Voice or AI-generated?

Goal: Detect whether the audio was spoken by a human or generated by AI tools like ElevenLabs.

- OpenAI Whisper – for speech-to-text and contextual understanding
- Mozilla DeepSpeech – open-source speech recognition
- pyAudioAnalysis – pitch, frequency, and speech pattern analysis
- Resemblyzer – compares voice signatures to detect synthetic audio

## ■■ 2. Image/Profile Scan – Real Photo or AI-generated?

Goal: Identify whether a photo was generated using Midjourney, DALL·E, or Stable Diffusion.

- EfficientNet / ResNet50 – image feature extraction
- FidNet – open-source fake image detection model
- Deepfake image datasets (e.g., LAION, StyleGAN) – for training

## ■ 3. Video Detection – Deepfake or Real Video?

Goal: Detect facial manipulations, mismatched lip movements, or inconsistencies.

- DeepFaceLab / FaceForensics++ – deepfake training/testing tools
- XceptionNet – model for manipulated video detection
- MediaPipe / Dlib – face tracking and expression analysis

- OpenCV – video frame processing

## ■ 4. Text Scan – Human or AI-generated Writing?

Goal: Analyze sentence structure, tone, and patterns to detect AI-generated text.

- RoBERTa / DeBERTa – advanced NLP classification models
- GLTR – highlights text predictability
- OpenAI GPT detectors – for text analysis
- Custom classifiers trained on AI vs human text

## ■ 5. Profile Scanner – Fake Profile Detection

Goal: Score user authenticity based on image, bio, voice, and behavior.

- Combination of:
  - - Image analysis (ResNet, FidNet)
  - - Text analysis (RoBERTa, GLTR)
  - - Voice detection (Resemblyzer)
  - - Behavior pattern tracking (login habits, etc.)
- Optional: Graph Neural Networks – for suspicious link analysis

## ■ 6. 'Real or AI' Game Engine

Goal: Let users guess whether a sample (image, voice, or text) is AI or human.

- Frontend: Flutter / React Native
- Backend: Node.js + Python (for AI logic)
- Firebase or Supabase – for auth, user data, scores
- Well-balanced dataset of real vs AI content

## ■ Bonus: Data Sources

- Kaggle AI-generated datasets (text, images, audio)
- This Person Does Not Exist – image data

- Voice samples from ElevenLabs, Google TTS, etc.
- Human-written text from Reddit, StackExchange
- OpenAI GPT outputs – for AI samples