Moodscribe

Febuary 2024

ual: central saint martins

RECORD with Moodscribe

press "M" button

press submit

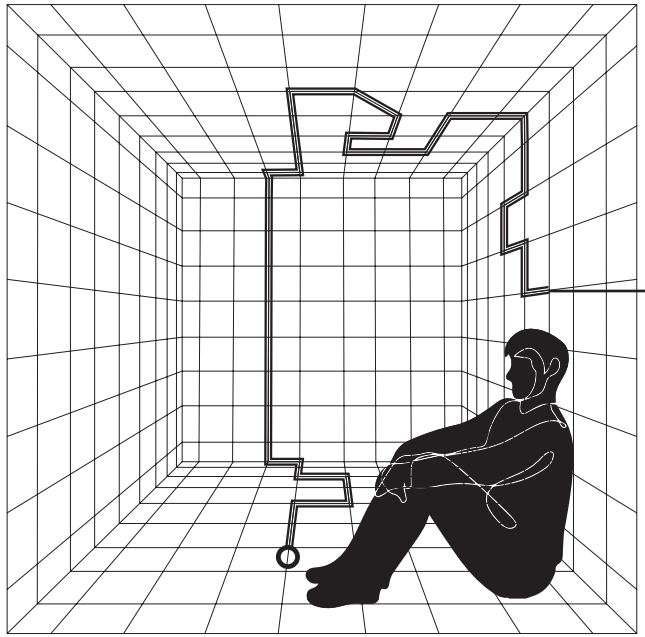
Analyze sentiment with OliverAi

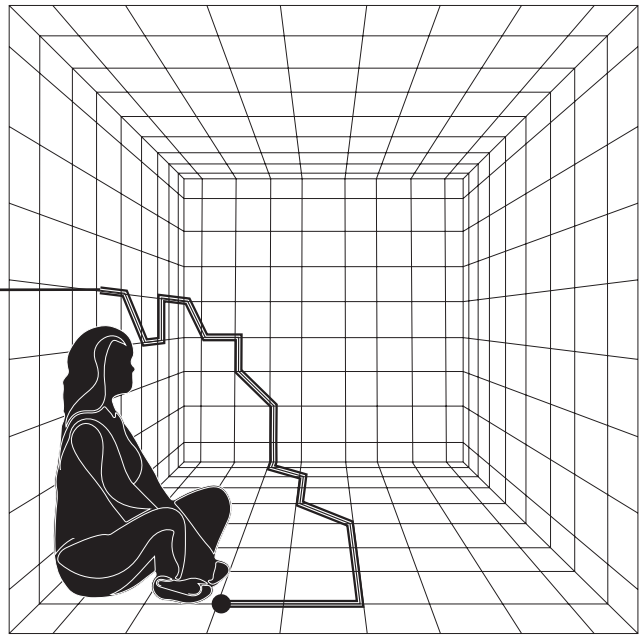
Map result to font, colour & emoji

press send

Desired message

Generate message

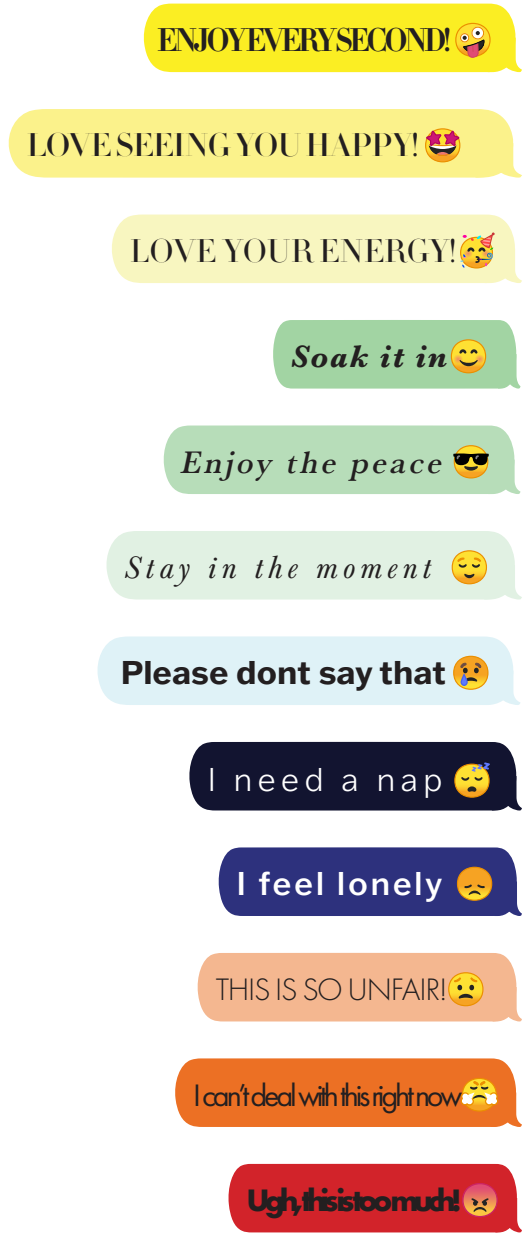




MoodScribe is an AI-powered keyboard that enhances text communication by analyzing vocal tone and adjusting fonts, spacing, colors, and emojis for emotional clarity.

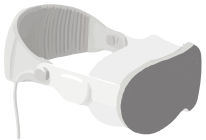
Designed for young people in long-distance relationships, it helps bridge emotional gaps in digital conversations. With 14 million Americans in long-distance relationships and 50% of texts misunderstood, MoodScribe restores nuance and connection.

While built for smartphones, its technology can help AI and AR devices capture warmth and empathy. I collaborated with a computational scientist to develop a server with an API that analyzes voice tonality—using volume and intonation—to generate emotive messaging automatically.



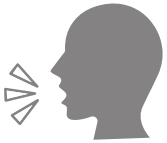
This project stemmed from my struggle with long-distance communication, where texts lacked depth. Inspired to bridge this gap, I created a solution that brings the authenticity of speech to digital messaging, helping people foster deeper connections.

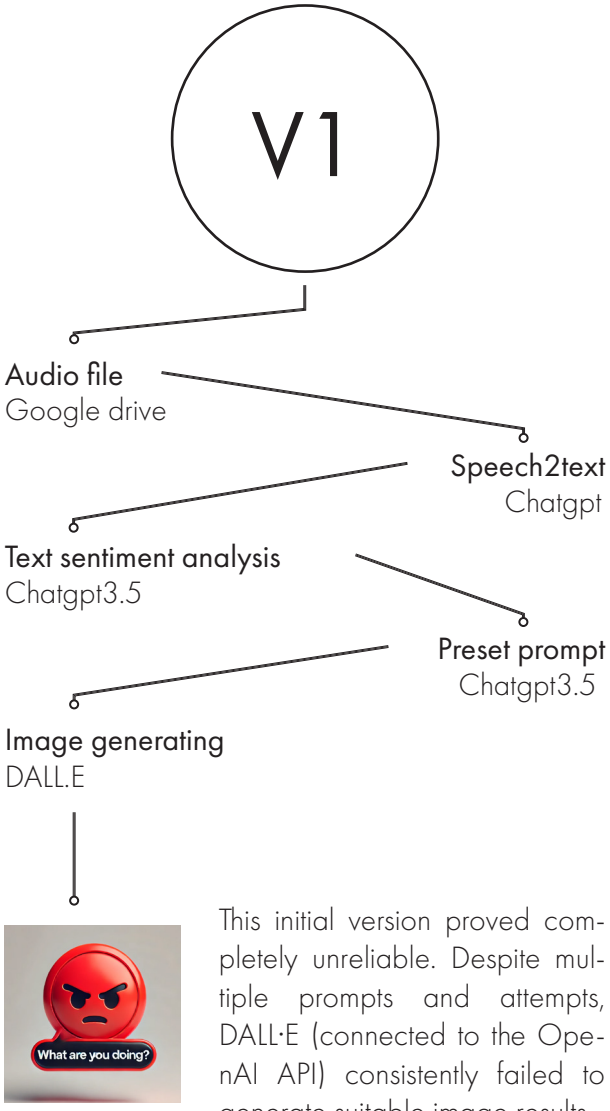
I also began analyzing the future of communication in technology. One key insight I gained is that methods like Apple Vision Pro, which uses over 13 cameras to track eye movements and facial expressions for emotional insights, can be highly invasive and violation of privacy.



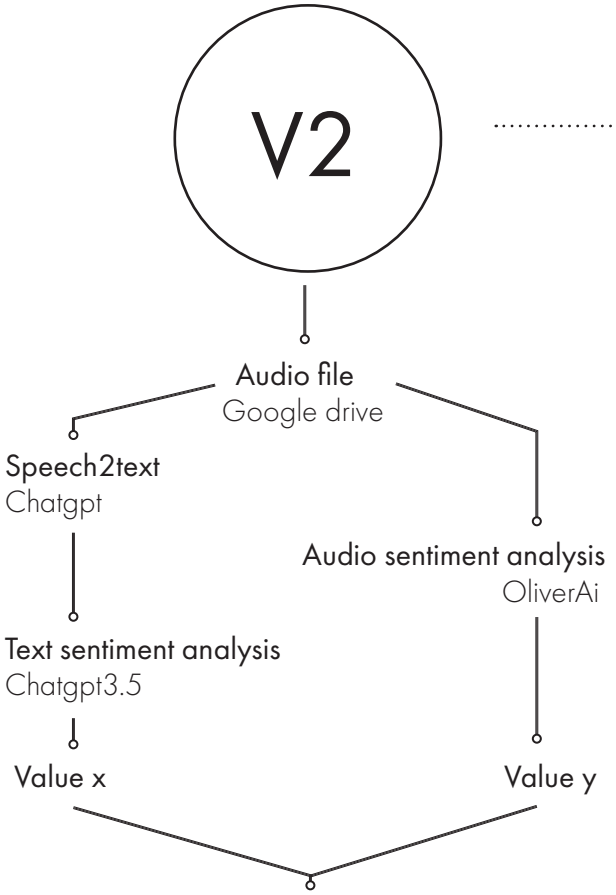
Future communication beyond keyboards faces challenges. Speech-to-text loses key texting benefits, while emojis enhance emotion, personality, and connection. Their role in digital conversations remains essential.

Voice messaging, the current solution for many issues with keyboardless communication, has its own drawback. It is inefficient since listening takes much longer than reading. While people read at 200–300 words per minute, they speak at only 100–150, meaning voice messages take twice as long to process as text.



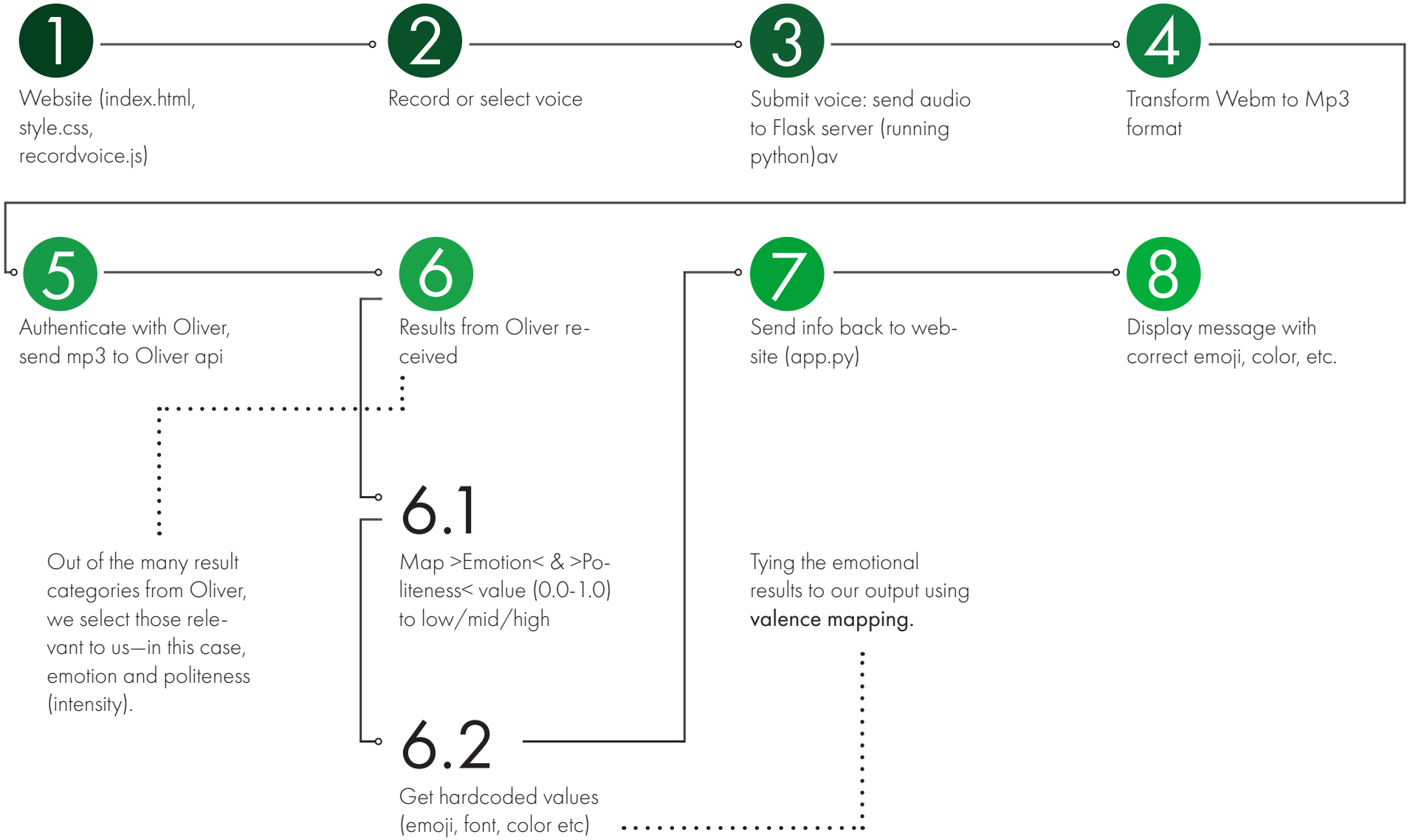


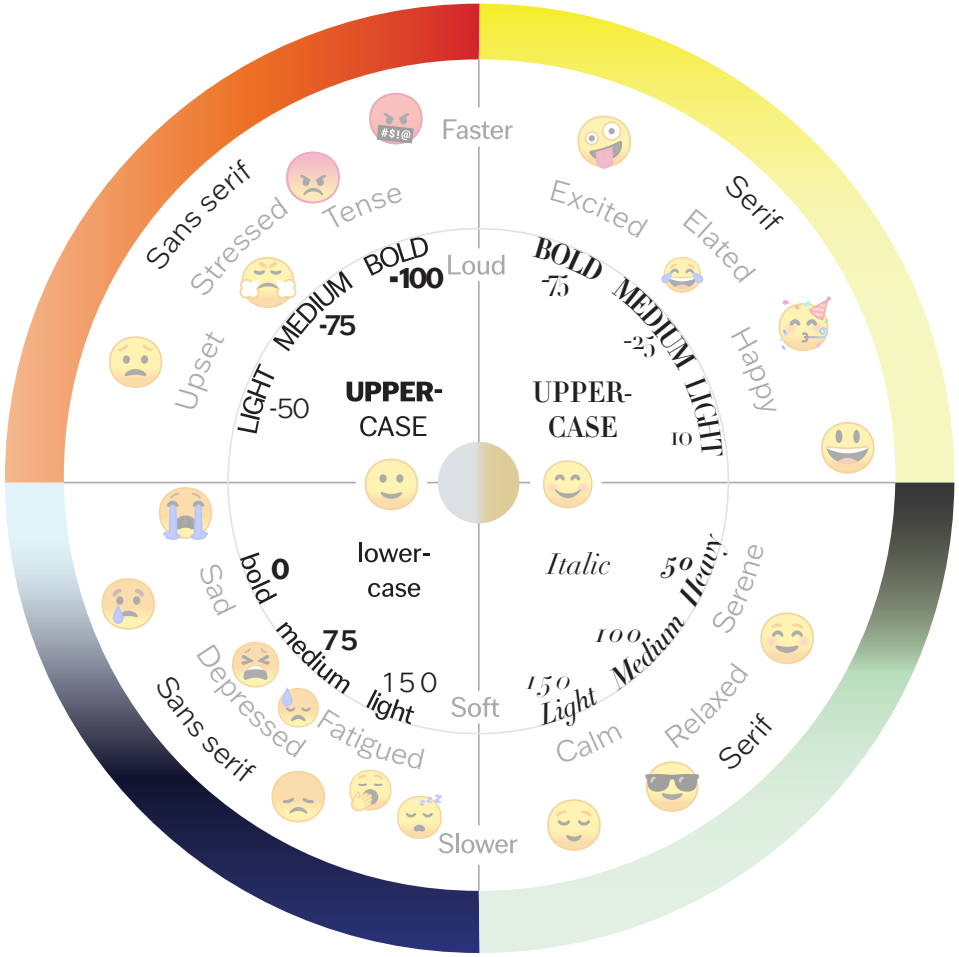
This initial version proved completely unreliable. Despite multiple prompts and attempts, DALL·E (connected to the OpenAI API) consistently failed to generate suitable image results.



I wanted to find a way to combine both results, but this turned out to be unnecessary. Oliver AI already includes a preprogrammed voice transcription function in over 14 languages. Additionally, due to time constraints, this method proved too labor-intensive.

Version 3, process start to end





Valence mapping categorizes emotions by positivity/negativity (x-axis) and intensity (y-axis). This method worked best with OliverAI's sentiment analysis.

The hardest part was choosing fonts. Since no quantitative studies exist, I interviewed graphic designers and researched typeface history.

For the upper-left quadrant, I chose **Futura**, a geometric sans-serif used in warnings and aerospace, best for short, impactful messages. The lower-left quadrant features **Franklin Gothic**, a 1900s newspaper font known for readability, suited for longer messages.

On the positive (right) side, I used serif fonts. The upper-right quadrant has **Didot,** seen in Vogue and Harper's Bazaar, conveying drama and sophistication—ideal for lively messages. The lower-right quadrant features **Baskerville** (1757), a readable, trustworthy font for calm, reassuring text.

Feedback revealed my font analysis was Eurocentric. To improve accessibility, I adjusted line weight and letter spacing based on emotional intensity.

Color selection was tough. Studies show colors evoke multiple emotions, but I needed consistency for pattern recognition, so I followed Serena Archetti's Illustrator's Guide to Colors.

Mapping emojis seemed easy. I used the Novak method, which scores emoji sentiment like valence mapping, but user testing showed this needed the most tweaking.

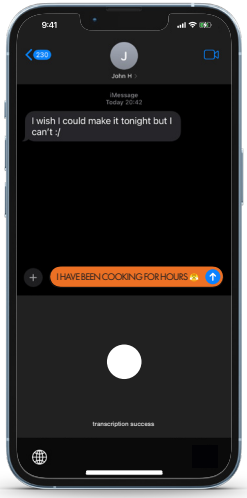
User journey

Press microphone to start recording

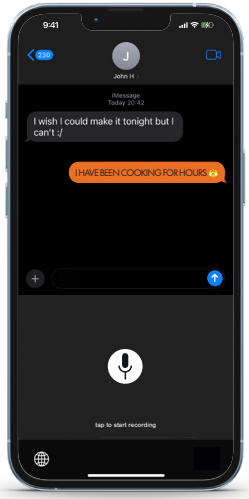
Waveform animation starts changing with voice

Tap to stop recording

Audio is being processed. During this action bouncing ball animation begins until processing is finished



Generated emotive message appears, choose to send or record again



Message sent

Next steps..

1. Secure Funding through UAL: Pitch It - Creative Enterprise Funding
2. Develop a Custom Machine Learning Algorithm with Dexter Leander (Computational scientist)
3. Transition from a Valence Model to a VAD (Valence-Arousal-Dominance) Model
4. Build a Custom Server with End-to-End Encrypted Data and focus on GDPR and CCPA compliance.
5. Develop a Token-Based Revenue Model to focus on privacy
6. Iterate & Optimize Based on User Insight
7. Expand into B2B: Offer as a Service for AI Companion Startups

B2B mission statement;

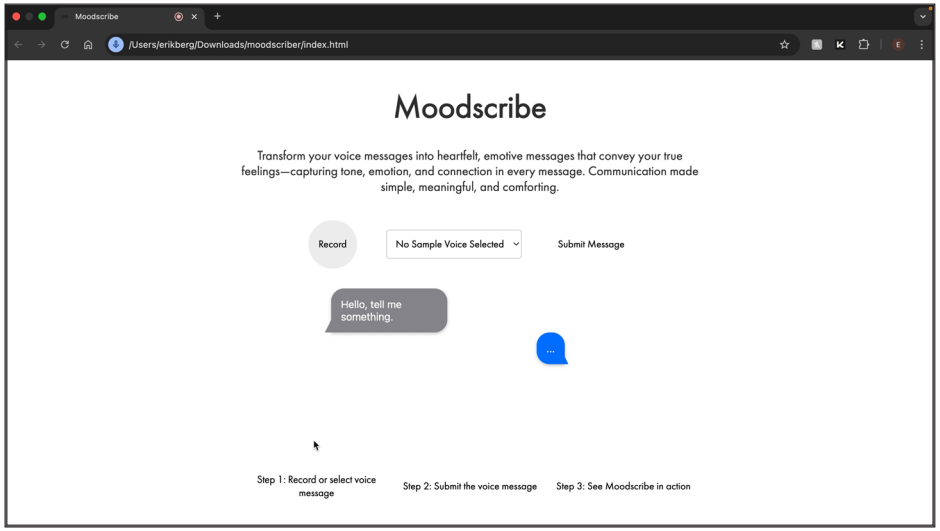
"AI companions struggle with communication. Existing models either use invasive emotion-tracking hardware or inefficient voice-to-text, which loses nuance and slows interaction.

MoodScribe offers a better solution—analyzing voice for emotional context to create more human, expressive AI interactions, bridging the gap between emotion and technology without compromising privacy."

Teaser video

https://youtu.be/0tC0Z3r-iYo

Demo video



https://youtu.be/KEq_avpqkD8