SANGEETHA N

Final Project

PROJECT TITLE

"Emotion AI: Empathetic Human-Computer Interaction"

AGENDA

- Problem statement
- Project overview
- Who are end users ?
- Your solution and its value proposition
- The wow in your solution
- Modelling
- Result

PROBLEM STATEMENT

Developing an emotionally intelligent AI system capable of accurately recognizing and responding to human emotions across various modalities, while addressing privacy concerns and mitigating biases, remains a crucial challenge for advancing empathetic human-computer interaction.

PROJECT OVERVIEW

The project aims to develop an emotional recognition system using deep learning techniques to detect and interpret human emotions from text, speech, and facial expressions. Addressing privacy and bias concerns, the system seeks to enhance empathetic human-computer interaction across diverse applications such as customer service and mental health support.

WHO ARE THE END USERS?

End users for emotional recognition technology vary widely and can include individuals seeking mental health support, customer service representatives aiming to improve interactions, educators aiming to enhance student engagement, and developers integrating emotion-aware features into virtual assistants or chatbots.

YOUR SOLUTION AND ITS VALUE PROPOSITION

The solution is an emotionally intelligent AI system capable of accurately recognizing and responding to human emotions across various modalities. Its value proposition lies in enhancing empathetic human-computer interaction, improving mental health support, customer service, educational experiences, and overall user satisfaction through personalized responses and tailored experiences.

THE WOW IN YOUR SOLUTION

The "wow" factor in the solution for emotional recognition lies in its ability to deeply understand and respond to human emotions, fostering empathetic interactions between users and AI systems. This capability enhances user satisfaction, improves engagement, and enables more personalized and effective communication across various applications and industries.

MODELLING

In emotional recognition modeling, deep learning techniques such as neural networks are utilized to analyze input data from various modalities (e.g., text, speech, facial expressions) to detect and interpret human emotions. These models are trained on labeled datasets, enabling them to accurately recognize emotional cues and generate appropriate responses, facilitating empathetic human-computer interaction.

RESULTS

The results of emotional recognition showcase the system's ability to accurately detect and interpret human emotions across different modalities, including text, speech, and facial expressions. These results demonstrate improved user satisfaction, enhanced communication, and personalized interactions, underscoring the potential for empathetic human-computer interaction in various applications and industries.

Demo Link