



# University of Asia Pacific

Department of Computer Science and Engineering

## Thesis (CSE-400)

**Supervised By**

**Fahad Ahmed**

**Lecturer**

**Dept. of CSE**

**University of Asia Pacific**

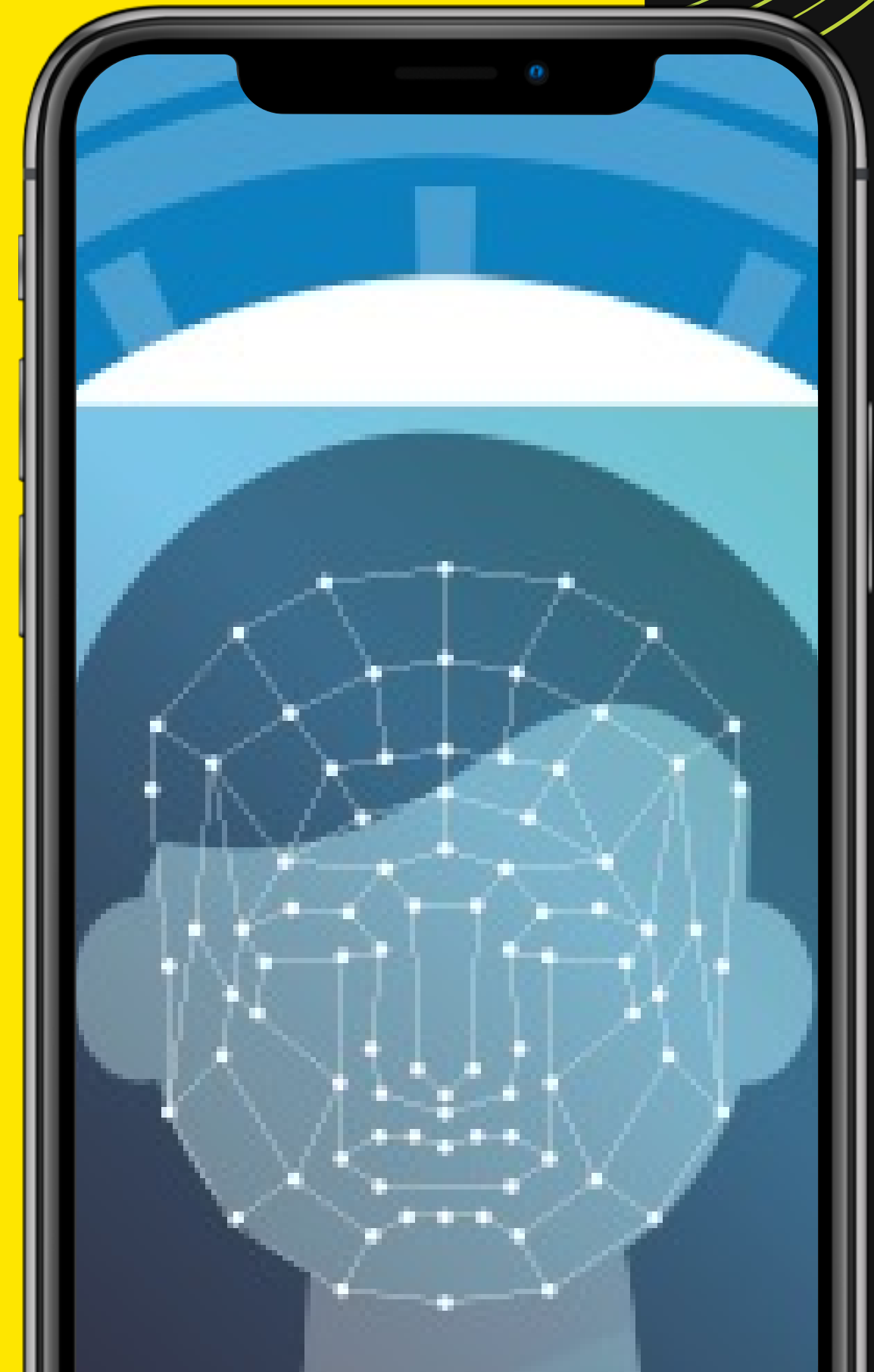
**Submitted To**

**Jahir Ibna Rafiq**

**Assistant professor**

**Dept. of CSE**

**University of Asia Pacific**



# Project Proposal

Primary idea discussion

## Emotion Monitoring Based on Face Recognition



in Rohan  
01045

# Team Members



**Shahin Alam**  
ID 17201023



**Nime Molla**  
ID 17201029



**Rayhan Rohan**  
ID 17201045

Project Github link :

[https://github.com/AhnabShahin/Emotion\\_monitoring](https://github.com/AhnabShahin/Emotion_monitoring)



# Highlights

- Decrease in happiness has been observed during confinement due to COVID-19.
- Recognition of sadness obtained a significant increase during confinement due COVID-19.
- Confinement has implications for mental health and emotional and social functioning.



# Motivation

The COVID-19 pandemic resulted in more than half the world's population being placed in lockdown to stem the spread of the virus. The severe restrictions imposed in many nations had the potential to significantly influence the physical and psychological well-being of those affected. These can affect people's emotion because, due to isolation, interactions and social contacts have been drastically reduced.





# Objective

The objective of Facial Emotion Detection (FED) is to identify the emotion of a human face. That is given a face of a human web base system (ratio) has to automatically identify the type of emotion of the face as happiness, sadness, disgust, surprise, anger, fear, natural, doubt and contempt





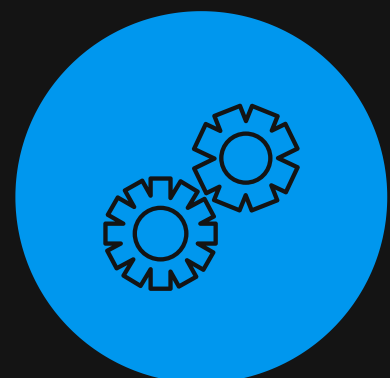
Knowledge-based methods



Feature invariant approaches

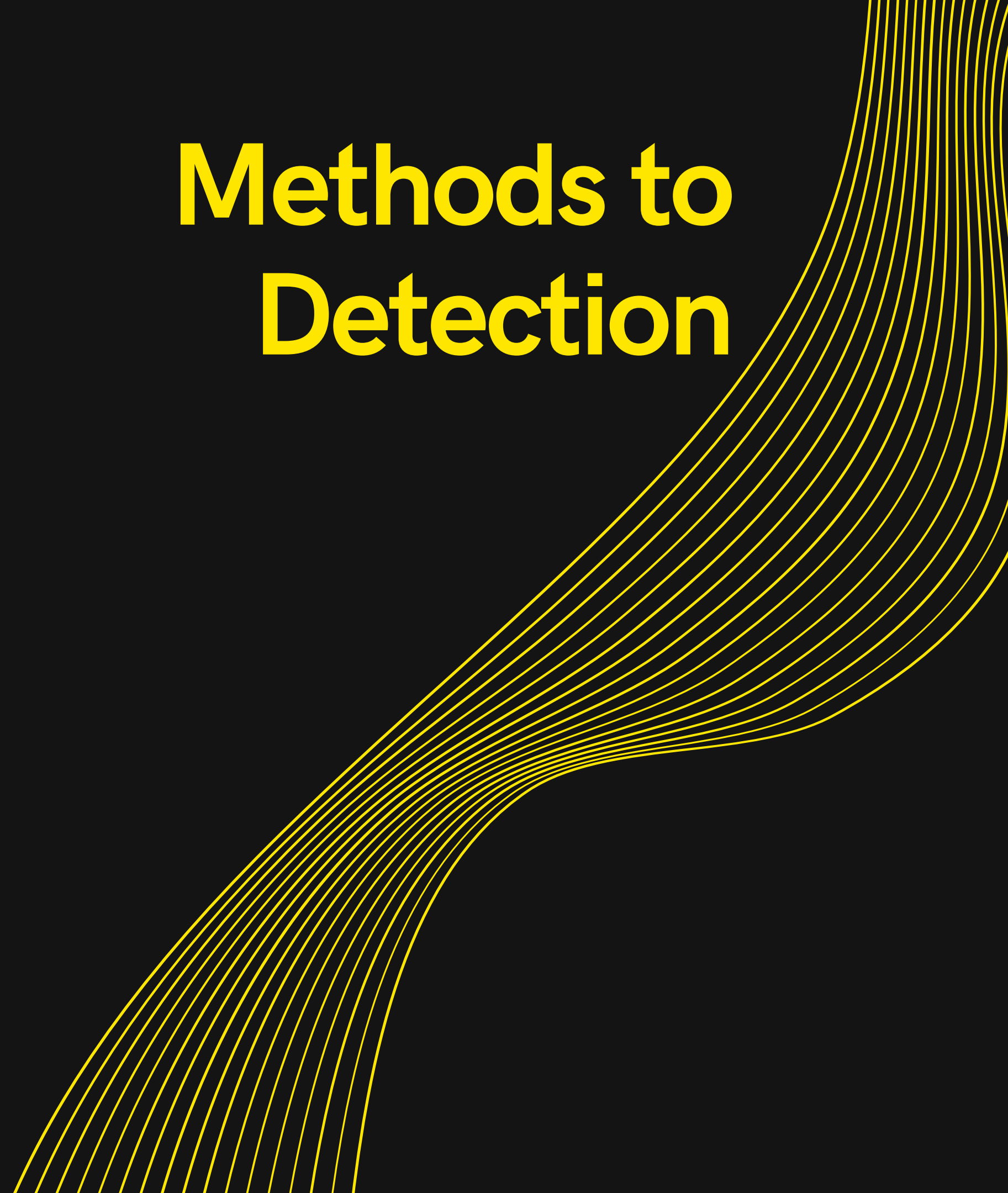


Feature invariant approaches



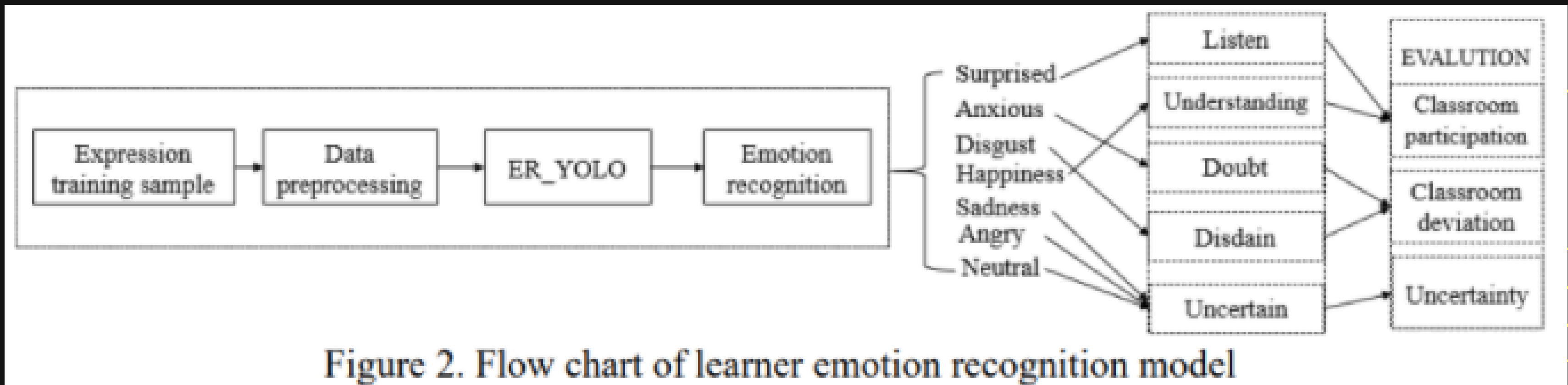
Appearance-based methods

# Methods to Detection



# Flow chart

WE WILL IMPLEMENT YOLOV4 ALGORITHM FOR DETECTING FACE.







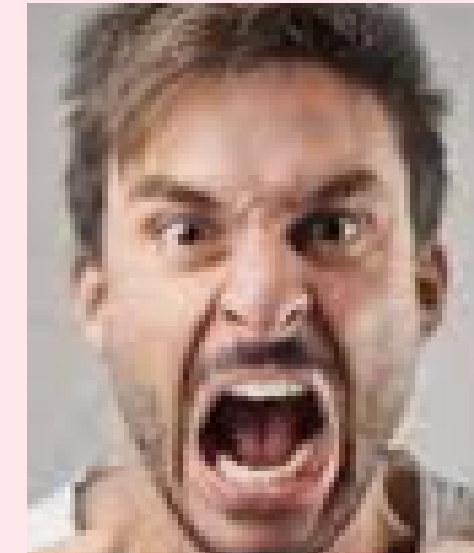
**worried**



**happy**



**Sad**



**angry**



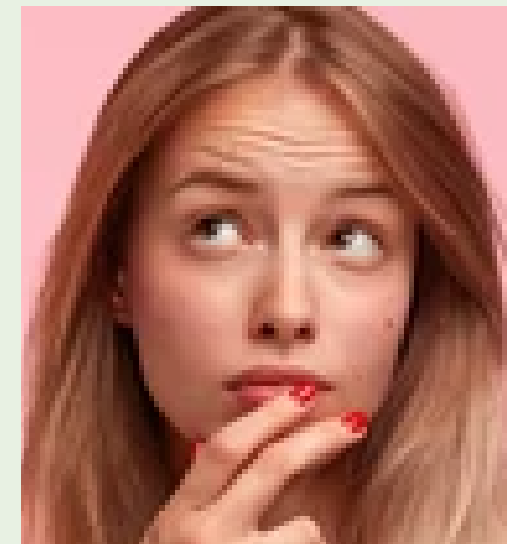
**surprise**



**Fear**

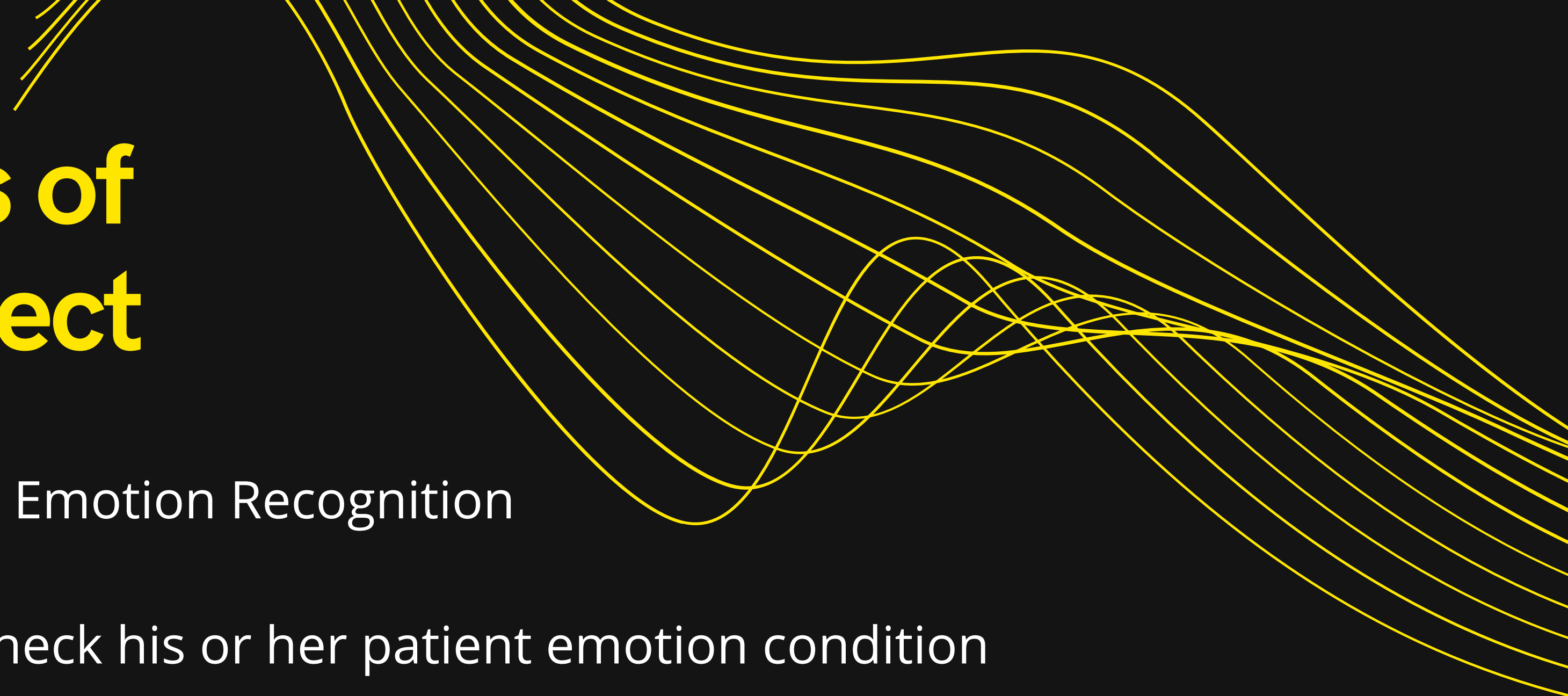


**disgust**



**doubt**

# Benefits of the project



By using Facial Emotion Recognition

A doctor can check his or her patient emotion condition

Businesses can process by knowing the emotion of their users thus saving costs and making life better for their users.

In the Field of Ad marketing and many other field.

# Challenges of recognizing emotion

- The lack of permission
- Predatory marketing
- Technical challenge
- Create our own dataset
- Modify the data
- Face occlusion and lighting issues

The background features a dark blue gradient with several thin, wavy yellow lines. These lines are concentrated in the top-left and bottom-left corners, creating a sense of movement and depth. The rest of the background is a solid, dark blue.

**Thank You....**