FACIAL EMOTIONS RECOGNRIZATION

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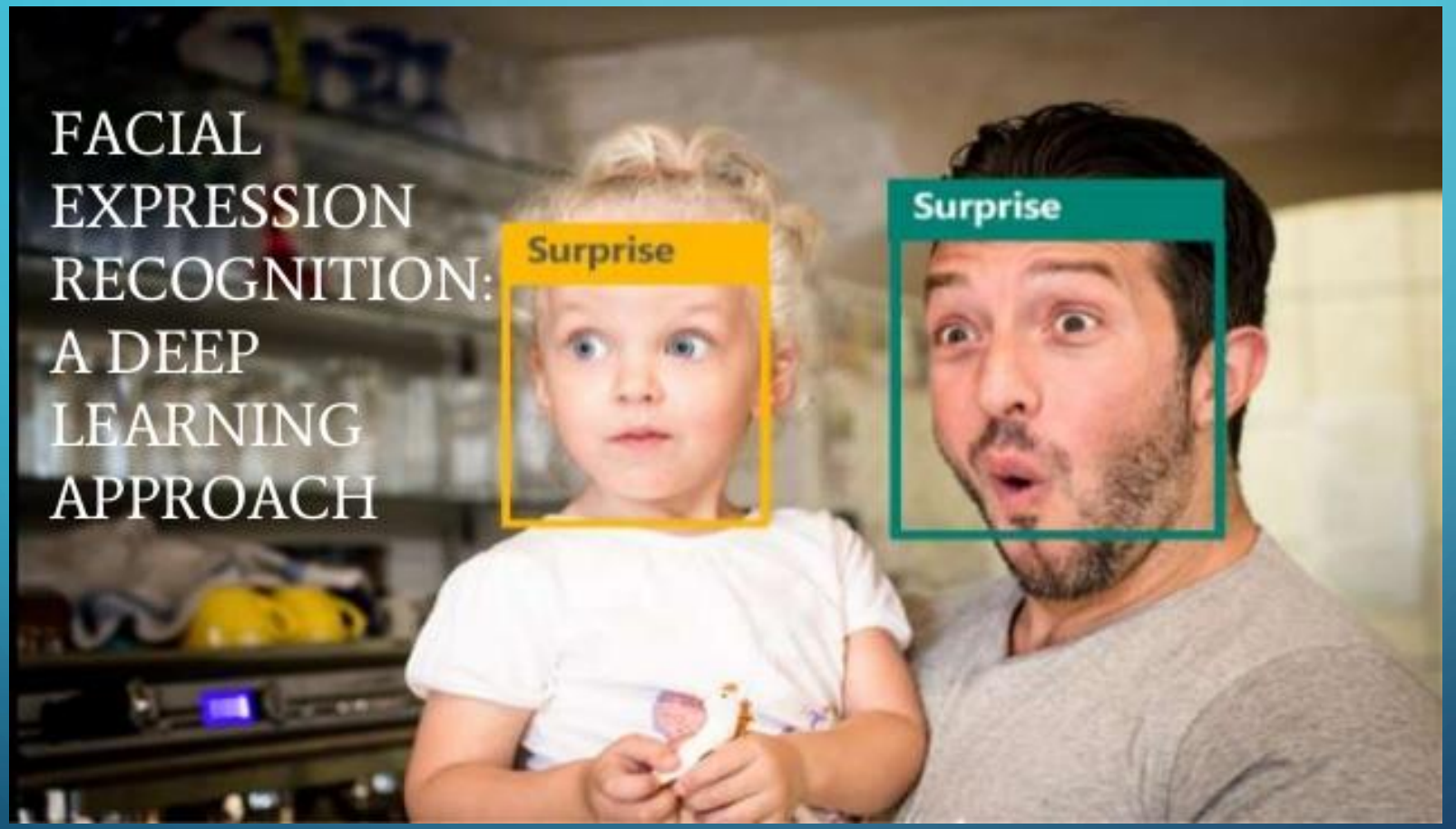
WHY EMOTIONAL DETECTION ?

- The motivation behind choosing this topic is specially lies in huge investments large corporations do in feedbacks and surveys but fail to get equitable response on their investments.
- Emotions Detection through facial gestures is a technology that aims to improve product and service performance by monitoring customer behaviour to certain product or service staff by their evalution.

FACIAL EMOTION



- There are six types of Facial Emotions.

What is emotion ?

- Emotions are reflected in voice, hand and body gestures, and mainly through facial expressions.

IMPORTANCE OF FACIAL RECOGNIZATION

- Human beings express emotions in day to day interactions.
- Understanding emotions and knowing how to react to people's expressions greatly enriches the interaction.

Facial Emotion Recognization by CNN

- Data Preprocessing
- Image Augmentation
- Feature Extraction
- Training
- Validation

DATASET DESCRIPTION

- The dataset consist of 48x48 pixel grayscale images of faces. The faces have been categorized into facial expression in to one of seven categories

0=Angry

1=Disgust

2=Fear

3=Happy

4=Sad

5=Surprise

6=Neutral

METHODS

- Convolutional Neural Networks
- Data Preprocessing
- Data Augementaion
- Convolutional 2D
- Batch Normalization and Max pooling 2D
- Optimizer loss function and metrics
- Validation
- Performance evalution

CAPTURE IMAGE

- Digital Image Processing
- Opencv
- Web Cam

APPLICATIONS

- E-Learning System
- Robotics system
- Human-Computer Interaction System

Conclusion and Feature Work

- FACIAL expression is one of the most powerful, natural and universal signals for human beings to convey their emotional states and intentions.
- Numerous studies have been conducted on automatic facial expression analysis because of its practical importance in sociable robotics, medical treatment, driver fatigue surveillance, and many other human-computer interaction systems.
- In the field of computer vision and machine learning, various facial expression recognition

THANK YOU