

Facial Emotion Recognition in job interviews



Introduction:

Emotions play a huge part in human experience, and several times, they affect our decision-making abilities. We make decisions based on whether we are happy, angry, sad, disgust, surprise, or fear. We also choose activities and hobbies based on the emotion type they incite. Understanding emotions can help us navigate life with greater ease and stability.

Objectives:

The idea of this project is to use facial emotion recognition on job interviews. Companies can use this technology to screen prospective candidates based on some factors like body language and mood. Therefore, they will be able to find the person whose personality and characteristics are best suited to the job. The goal is to build a Convolutional Neural Network (CNN) model that uses the dataset images to determine the correct emotion type of a person face.

Data Description:

The dataset is from Kaggle ([link](#)). It consists of 32,298 examples of 48x48 pixel gray scale images of faces divided into train and test dataset. Images are categorized based on the emotion shown in the facial expressions (happiness, neutral, sadness, anger, surprise, disgust, fear). The train set consists of 28,709 examples and the test set consists of 3,589 examples.



Libraries:

- Pandas
- Numpy
- Seaborn
- os
- Pandas profiling
- Plotly express
- Matplotlib pyplot
- Sklearn
- Keras
- pyLDavis
- Warnings
- Nltk

Tools:

- Python
- Jupyter notebook