Abstract

Facial Expression Recognition has increasing importance in assisting human-computer interaction issues. This paper "Emotion Recognition Using Fuzzy Rule-Based System" proposes a fuzzy method for the facial emotions recognition on still images of the face. The technique involves extracting mathematical data from some special regions of the face. The extracted mathematical data are then fed to a fuzzy rule-based system. Fuzzification operation issues triangular membership functions for both input and output. The method is implemented on MATLAB. An Algorithm is developed which gives 6 facial expressions as an output i.e., happy, sad, disgust, anger, surprise and fear, where input is the still image of the face, on being applied to a fuzzy rule-based system. The method for the feature extraction of the still image is also developed which is very important for recognizing the facial expression.

References


- Chaiyasit Tanchotsrinon, Suphakant phimoltares and Saranya Maneeroj, "Facial Expression Recognition using graph-based features and artificial neural networks", AVIC Research Centre, Chulalongkorn University, Bangkok.


Index Terms

Computer Science Fuzzy Systems

Keywords

FER Fuzzy Rule-Based System Fuzzification Triangular Membership Function