

Compound emotion detection

Research project



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Dedication

We dedicated our all struggle
to family and teachers who support
us to during this project.

Final Approval

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ABSTRACT

Emotion recognition and detection is an emerging area of research for the last decade. The studies on emotions highlights the fact that the focus of researchers has been further extended from basic emotions to compounds emotions due to its vast applications in surveillance systems, suspicious person detection, pain detection, automated patients observation in hospitals and driver monitoring. The study proposes and implements novel approaches using the Martinez dataset [2] that compute various features using facial fiducial points given in Martinez dataset to recognize basic and compound emotions. The results show that our approaches outperform the existing approach given in Martinez paper [2] using the same data set in terms of accuracy and time efficiency. Different approaches applied which have list of feature used to get the accuracy of 77.33 %. List of features include angles, length to width ratio of eyes and lips, triangles, ratio of triangles and angles, slope table, histogram of gradients, regional properties.

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1. INTRODUCTION

1.1 Problem Overview

Detection of emotion is a vast field. Emotions are of two different categories basic and compound. Scientists start detecting compound emotion in recent years but the accuracy of detection is not as equal to basic emotions. Compound emotion detection is not an easy task because it composes of two basic emotions and problematic issue is to differentiate in them.