ABSTRACT

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Title : Detection Of Children's Facial Expressions on The Effects Of Playing Games Using CNN Algorithm

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This thesis explores into the use of Convolutional Neural Network (CNN) algorithms for the aim of recognizing children's facial expressions during gaming activities, with a focus on understanding the emotional consequences of gaming. The study intends to assess CNN's accuracy in detecting these five basic emotions among children aged 6 to 13 also with Kaggle dataset during gaming sessions by studying facial expressions, notably those suggestive of anger, happiness, sadness, fear, surprise, and disgust. The methodology consists of numerous processes, including data collection, preprocessing, augmentation, model training, and evaluation, with the overarching goal of identifying patterns and trends in children's emotional responses to gaming. The study uses CNN algorithms to build strong models capable of accurately recognizing and categorizing children's facial expressions, providing significant insights into the emotional dynamics inherent in gaming experiences. The methodology consists of numerous processes, including data collection, preprocessing, augmentation, model training, and evaluation, with the overarching goal of identifying patterns and trends in children's emotional responses to gaming. The study uses CNN algorithms to build strong models capable of accurately recognizing and categorizing children's facial expressions, providing significant insights into the emotional dynamics inherent in gaming experiences. children's emotional states, paving the door for the creation of more compassionate and engaging gaming experiences that are suited to children's emotional needs this study not only influences the design and implementation of gaming experience but also emphasizes the need of developing emotionally resonant connection with digital settings aimed and youngest.

Keywords: Children, Facial expression Recognition, Gaming, Convolutional Neural Network (CNN),
Emotional Analysis