Tracking and Detecting Depression Level using Facial Recognition and PEN & IQ Test

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Abstract: *This study presents a novel approach to monitoring and tracking depression levels using facial recognition technology, the Perceived Emotional Neglect (PEN) test, and an IQ test. The hypothesis driving this research is that there exist specific changes in facial expressions associated with depression, as well as an overall decline in cognitive function, which can be quantified using these tests. The proposed methodology consists of two phases: the first phase analyzes depression-related changes in facial expressions, while the second phase employs the PEN and IQ tests to determine the severity of depression. The main objective of this research is to develop a technique for tracking and detecting depression levels, which could potentially facilitate early diagnosis and treatment of depression.*

Keywords: *Facial Recognition, Mental Health, Classification, Algorithms, Artificial Intelligence, CNN.*

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