

## Classification of Facial Nerve Paralysis Based on Regional Evaluation

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### Abstract

This paper present an approach of regional evaluation using Kanade - Lucas – Tomasi (KLT) method and extract feature points to classify the normal and patients subjects and also to determine the severity level of paralysis for each region of face. There are Individual Score Table, Total Score Table and Paralysis Score Table were presented. A 100% of accuracy has been obtained in identifying the paralysis with  $k = 3$  using k-NN classifier for the Individual Score.

*Keywords:* Facial Nerve Paralysis, Facial Nerve Evaluation, Bells' Palsy, Kanade-Lucas-Tomasi, Optical Flow

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