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AN ESTIMATION TO SPEAKING FREQUENCY IN VIDEO STREAMING

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ABSTRACT

This paper presents an algorithm to estimate the state of open or closed mouth in real time video streaming. It detects associated frequency of mouth motion events in specific time interval which helps to identify speaking and yawning. While speaking, accurate lip movement is estimated using 3D cascade classifier and only lip coordinates are stored in the database for memory efficiency. Horizontal and vertical distances of the lip are used as an estimation of lip surface area. Speaking frequency is counted based on comparison of statistical data in database. Our proposed method shows satisfactory performance with a high speaking frequency detection rate on live video streaming.

KEYWORDS: Image Processing, Lip Tracking, Lip Corner, Speaking Mode, Streaming