

Automated Quantification of Eye Blink Rate Based on Viola-Jones Algorithm

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In this article, we have proposed a novel tool that helps to objectively quantify eye blink rate. Using the proposed algorithm, a threshold for normal blink rate can be set to test those who have to reduce eye blink rate and are prone to ocular surface dryness. The statistical results show excellent agreement between software-detected number of blinks and visually measured with 90% accuracy for the participants. In addition, the comparison between our tool and other approaches of eye blink monitoring shows that our tool is competitive with only 5% wasted blinks.

Hamdan, Mohammad M., **Shehadeh, Hisham A., (2018), Automated** Quantification of Eye Blink Rate Based on Viola-Jones Algorithm, International Journal of Technology Diffusion (IJTD).