

Real-time Attention Span Tracking in Online Education

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Abstract: *Over the last decade, e-learning has revolutionized how students learn by providing them access to quality education whenever and wherever they want. However, students often get distracted because of various reasons, which affect the learning capacity to a great extent. Many researchers have been trying to improve the quality of online education, but we need a holistic approach to address this issue. This project intends to provide a mechanism that uses the camera feed and microphone input to monitor the real-time attention level of students during online classes. We explore various image processing techniques and machine learning algorithms throughout this study. We propose a system that uses five distinct non-verbal features to calculate the attention score of the student during computer based tasks and generate real-time feedback for both students and the organization.*

Keywords: Artificial Intelligence, Attention, Blink rate, Drowsiness, Eye gaze tracking, Emotion classification, Face recognition, Body Posture estimation, Noise detection.

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