

Online Exam System and Real Time Proctoring

Prof. Ashwini Ghatol¹, Ravindra Kanitkar², Chinmay Barbade³, Prajwal Pophale⁴,
Amey Khandekar⁵, Sanket Dewase⁶

Assistance Professor, Department of Computer Science and Engineering¹

Student, Department of Computer Science and Engineering^{2,3,4,5,6}

Sipna College of Engineering and technology, Amravati, Maharashtra, India

Abstract: *In the pandemic situation of COVID-19 education institutions have change their mode from offline to online for providing education facility. Allowing to learn and improve themselves at their own pace With this advantage an disadvantage can also be seen concern with examination taken to check excellence of student is that malpractice or cheating in examination. To eliminate this effect a solution is proposed called Online Proctoring Using AI Technology. Online Proctoring System (henceforth called as OPS), in general make use of online tools to maintain sanctity of the examination. There are various psychological, cultural and technological parameters need to be considered while developing AI-based Proctored System. In this paper, we present a Online Proctoring System that performs automatic online exam proctoring. The system hardware includes one webcam and a microphone, for the purpose of monitoring the visual and acoustic environment of the testing location. The system includes five basic components that continuously estimate the key behavior cues: user verification, text detection, voice detection, gaze estimation and phone detection. By using the continuous estimation components, and applying a temporal sliding window, we design higher level features to classify whether the test taker is cheating at any moment during the exam. The system includes five basic components that continuously estimate the key behavior cues: user verification, text detection, voice detection, gaze estimation and phone detection. To check how efficient our proposed system is we collected multimedia (audio and video data) representing various malpractice action's while taking online exams. The results determines how accurate, robust, and efficient our online exam proctoring system is..*

Keywords: AI, AIPS, Artificial Intelligence, Exams, Online Proctoring, Online Learning, Proctoring System, user verification, gaze estimation, phone detection, text detection, voice(sound) detection.

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