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A Survey on Smart Classroom Using Machine Learning

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Abstract
Everything around the globe is getting digital. And talking about digital the management in schools and colleges is still old. The attendance is taken manually by the teachers and hence a record is maintained. Due to manual attendance a lot of face proxies are given by students for their fellow classmates and friends. Also, sometimes students give teachers a really hard time in maintaining the proper attendance record, which is time consuming and also inefficient. The automated attendance system that use face recognition technology with the help of a video camera fit inside the classroom, captures the objects(students) present and marks the students present in the dataset. With the growth in technology, education system has also seen a lot of improvement. But still monitoring of student attendance using traditional system consumes too much time which could be employed in a better way inside the classroom. Small changes can tremendously affect bigger changes. Moreover, automated attendance system can help us to check whether a student is sleeping inside the classroom or whether he is proactive inside the classroom. Classroom Management Behavior System can gives us a concise idea of the various emotions students are face inside the classroom. This paper describes different methods used for attendance marking and detection of the level of attention paid in class by students.

Keywords
Convolutional Neural Network, Rectified Linear Unit, Graphics Processing Unit