**ATTENDANCE MONITERING SYSTEM**

**Problem Statement:**

A Traditional attendance System is where Educators(Teachers) will call students name and students will give their attendance when their names are called out. And those who give attendance their names are marked as present rest are marked as absent.

**Problem with the above system is:**

* It is very difficult to handle huge students. For example a student’s batch of more than 500 students.
* It is very time consuming to call all the students name and mark their attendance.
* There will be a chances of giving proxy (Fake) attendance, where it is difficult to handle the proxy.
* Now what if we want to submit or send the attendance record to university where exam ticket is issued based on certain percentage of attendance, again from manual to data entry job need to be done which is again time consuming.

**Solution to the above problem.**

As we all know how the technology is improved, everyone will have a at least a basic smartphone or students pursing degree will have a basic laptop.

A College or university website will be there where students need to sign up to the website by providing all there information like USN,ID,NAME etc. Here student image is compulsory where it is mapped into their ID or USN. Once student is done with the sign up process they can login in give their attendance by just giving their face identity (just like face unlock in the smart phone)

**How it Works??**

In the college website there will be two login options

1. Student login
2. professor login

The subject professor need to login and host the attendance system where students can login and give their attendance. Once the subject professor host the system, professors current location will be taken using API like foursquare. When students give their attendance by giving their face identity, if he/she is present in the current location then automatically image mapped to USN or ID will be marked as present in the database. If student is not present in the current location of the professor then the student will be marked as absent in the database. Image recognition is done using Neural networks

**Gathering the Data:**

While Signing into the website students are asked to give their face identity atleast 5-10. Using these data the machine is trained with neural network specifically CNN and ANN. Every time when students give their identity machine is trained again now and then to achieve best accuracy. By these student cannot give a proxy attendance.