## horizontal line

Smart Water Level Monitoring and Management System using machine learning

Capstone Project : Group Number 78

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# Overview

In the scenario where, due to exploitation of water resources and speeding of climate change due to human activities, water is becoming a luxury these days and keeping a tab on water consumption is a necessity now. We know that water conservation starts from a family and a person in a family can easily track their water consumption either by observing day to day activities or checking the water level of their overhead tank every day.

But through this project we are trying to make a system which can provide us with a feature of real- time remote water level monitoring so manual hard work of water level monitoring can be prevented.

We are also looking to add the feature of remote controlling of water-pump so that water level in the tank can be managed remotely.

In addition, we are going to make a web platform which will display the real time water level as well as past trends of water usage. Here machine learning will be used to predict some water-usage and expenditure behaviour for future reference.

# Goals

1. Real- time water level monitoring of the tank with the help of Internet of things and cloud services application.
2. IOT based web-application for the water pump to control water level of the tank.
3. Real-time data analysis using machine learning techniques to predicts certain water usage behaviour and other patterns of user.

Modules:

1. H/w

2. Cloud

3. Web application

4. Machine learning algorithm- SVM,Per,LR etc

5. Deep learning