

# SMART WATER MANAGEMENT

USING

IOT



## **INNOVATION:**

Using machine learning algorithms to analyze water consumption patterns and provide conservation suggestions through IoT (Internet of Things) is a great idea to promote water conservation and efficiency.

### **1. Data Collection:**

Set up IoT devices like smart water meters or sensors in residential or commercial properties to collect water consumption data.

Collect additional relevant data, such as weather

conditions, property size, and occupancy.

## **2. Data Preprocessing:**

Clean and preprocess the collected data to handle missing values and outliers.

Normalize or scale the data for better algorithm performance.

## **3. Feature Engineering:**

Create relevant features, such as daily, weekly, or seasonal consumption patterns.

Incorporate external data sources like local water usage statistics or drought indicators.

## **4. Machine Learning Model Selection:**

Choose appropriate machine learning algorithms for your task. Time series forecasting models, regression, or clustering algorithms may be relevant.

Train models on historical data to learn consumption patterns.