SMART WATER MANAGEMENT

USING

<u>IOT</u>



INNOVATION:

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

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 relevent 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 consumtion 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 ask. Time series forcasting models, regression, or clustering algorithms may be relevant.

Train models on historical data to learn consumption patterns.