AI

Custom Solutions

INDUSTRIAL AUTONOMY

WITH AI & ML

SMHcoders

Let's Digitalize Your Business..

**Water Industries
Solutions Portfolio**

About SMHcoders

SMHcoders is a UAE-based software solutions company specializing in Artificial Intelligence (AI) and Machine Learning (ML), serving diverse industrial segments. With expertise in predictive analytics, computer vision, chatbot development and AI/ML integrations, we help industries achieve smarter decisions, optimized operations and sustainable growth.

Challenges in the Water Industry

Water utilities and treatment plants face pressing challenges, including:

- Aging infrastructure leading to leakage and inefficiency
- High energy consumption in treatment and pumping operations
- Water scarcity and demand growth, requiring optimized resource management
- Unplanned downtime of critical assets like pumps, motors, and filtration units
- Regulatory compliance and increasing ESG reporting requirements
- Workforce safety in hazardous environment

Water Industries

Services

01 AIChatbot Development

02 Natural Language Processing

03 Predictive Modelling

04 Computer Vision

05 AI Development Services

06 Web Development

07 Mobile App Development

08 Chat GPT Integrations

Solutions

AI-powered Flood Prediction and Response System to abnormal conditions

Autonomous Drought Management and Water Allocation System

Smart Coastal Infrastructure Management

Autonomous Precision Irrigation Management System

Intelligent Erosion Monitoring and Prevention System

AI-driven Circular Wastewater Resource Recovery System

Autonomous Predictive Maintenance of Water Networks

AI-powered Water Quality Monitoring and Control System

Customer Engagement and Real-time Consumption Management Platform

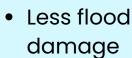**Autonomous Integrated Stormwater Management System**

AI-driven Autonomous Groundwater Recharge Management

Smart Digital Twin for Autonomous Water Infrastructure Management
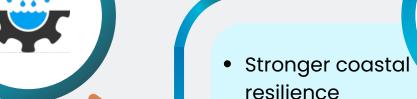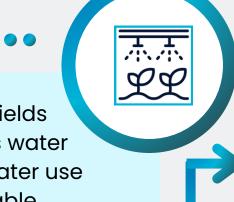
Key Benefits

- Less flood damage
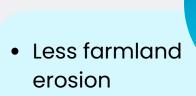- Stronger community resilience
- Better emergency resource use

- Stable agricultural production
- Lower drought impacts
- Fair water distribution

- Stronger coastal resilience
- Lower reactive maintenance costs
- Smarter infrastructure investments

- Higher yields with less water
- Lower water use
- Sustainable farming practices

- Less farmland erosion
- Better productivity and soil health
- Cost-effective erosion control

- Less resource waste
- Lower costs via recovery
- Supports circular economy

- More reliable water infrastructure
- Lower operational and repair costs
- Optimized resource allocation and maintenance

- Better public health
- Lower compliance risks
- Greater customer trust

- Higher customer satisfaction
- Lower water use
- Stronger utility-customer relationships

- Stronger urban weather resilience
- Less flood damage
- Better water reuse and conservation

- Sustainable groundwater use
- Prevents depletion and subsidence
- Improves long-term reliability

- Greater infrastructure resilience
- Higher efficiency, lower costs
- Better investment decisions