

Mock Research Manuscript

Title: AI-Driven Smart Waste Management System for Sustainable Urban Development

Abstract

Rapid urbanization has increased municipal waste generation. This study proposes an AI-driven smart waste management system using IoT sensors and machine learning to optimize waste collection routes, reduce operational costs, and improve recycling efficiency. A prototype was evaluated on simulated city data and achieved a 22% reduction in collection distance and 18% improvement in bin overflow prediction accuracy. The findings demonstrate that AI-enabled waste management can contribute to sustainable cities while reducing environmental impact.

Keywords

Artificial Intelligence
Internet of Things (IoT)
Smart City
Waste Management
Machine Learning
Sustainability

Authors

Dipanshu Dashore
Dr. Jane Smith

Introduction

This is sample placeholder content for testing a manuscript submission portal. Replace with actual research before publication.