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Smart Waste Segregation using IoT Technology

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Abstract: *The Internet of Things (IoT)-based Waste Segregation System revolutionizes waste management by automating the classification of waste into wet, dry, and metal categories. Leveraging advanced sensors—including proximity, IR, and raindrop moisture detectors—the system ensures precise detection. The Arduino Uno processes sensor inputs, controlling servo and stepper motors to direct waste into appropriate bins with exceptional accuracy. A buzzer adds real-time alerts to enhance user engagement.*
This innovative system not only reduces human intervention but also promotes efficient recycling and sustainable waste management practices. Future integrations with cloud platforms promise real-time tracking and advanced analytics, enabling smarter and cost-effective solutions for modern waste challenges.

Keywords: Internet of Things

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