WASTE MANAGEMENT ♥PTIMIZATI♥N USING I♥T

1. **I♥T Sens♥r Data** – bin fill levels, gas emissi♥n readings, timestamps.
2. **Ge♥l♥cati♥n Data** – bin l♥cati♥ns, c♥llecti♥n truck GPS l♥gs.
3. **AI Predicti♥n Input/♥utput** – hist♥rical fill patterns, ♥verfl♥w status, predicti♥n results.
4. **R♥ute ♥ptimizati♥n Data** – r♥ad netw♥rk, traffic data, c♥llecti♥n schedules.
5. **User Feedback/Surveys** – usability sc♥res, adjustment rec♥mmendati♥ns.
6. **Envir♥nmental Impact Data** – c♥llecti♥n frequency, emissi♥ns, c♥st savings.

Suggested Datasets

Here are s♥me publicly available datasets y♥u can start with:

1. **Smart Waste Management (Simulated ♥r Real)**
   - SmartBin Dataset – India G♥vt. ♥pen Data, may require cleaning.
   - ♥penSenseMap – Envir♥nmental I♥T data including air quality and waste levels.
2. **R♥ute ♥ptimizati♥n & GPS Tracking**
   - ♥penStreetMap (♥SM) – R♥ad netw♥rk data f♥r r♥ute ♥ptimizati♥n.
   - Uber M♥vement – Traffic patterns in maj♥r cities.
3. **AI/ML Training f♥r Waste Detecti♥n**
   - TAC♥ Dataset – Image dataset f♥r litter detecti♥n and classificati♥n.
   - WasteNet – Ann♥tated images ♥f different waste types.
4. **Municipal & Envir♥nmental Data**
   - EPA Envir♥nmental Dataset Gateway – Waste, emissi♥ns, and c♥llecti♥n data.
   - City ♥f San Francisc♥ ♥pen Data P♥rtal – Includes waste c♥llecti♥n metrics.