

# An advanced Al system for a smooth bottle recycling process





## An advanced AI system for a smooth bottle recycling process

Service offered: Development of a highly advanced Al system for a UK startup firm

Industry: Recycling industry

#### BACKGROUND

The client is a pioneering UK startup that embarked on a mission to revolutionize the bottle recycling process. They wanted us to build an accurate and performative Al model to streamline and boost the user experience and eventually introduce stand-alone recycling machines to pick up bottles ready for recycling.

#### SOLUTION IMPLEMENTED

- · We had regular discussion sessions with the clients to understand their needs and came up with a unique AI solution for improving recycling accuracy and avoiding fraudulent attempts.
- We have built a reliable AI solution with the integration of advanced computer vision sensors to ensure effective material identification, enabling perfect sorting and processing of bottles.
- · Development of anti-fraud systems to differentiate organic waste effectively and identify reverse movement of objects in the conveyor belt thereby promoting fair recycling practices.

#### **OUTCOMES**



25%

Reduction in Fraudulent attempts



Customer retention rate

The client was completely satisfied with our compact AI model that paved the way for enhancing user experience with an accessible and convenient way to recycle bottles around the clock. The client was able to attract a large audience base within a short period and expand their services in the U.S. market too.

### **Technology Used**



FastAPI



mongo DB.

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