

# ARbot: Automated Recycling Robot

*Recycling technology with the user in mind*

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## The Problem: A Higher Standard For Recycling



Santa Cruz Resource Recovery Facility's "clean" paper waste stream.



## About ARbot

The purpose of ARbot is to help Material Recycling Facilities (MRFs) meet the current 0.5%<sup>[1]</sup> contamination threshold imposed on global recycling operations. The ARbot team aims to deliver a sorting technology, designed to meet the industry's cost-sensitive demographic.

## How ARbot is different?



Provides a low-cost product



Works alongside the facility and its workers



ARbot is easily deployable



ARbot is custom designed for each client



Interested?  
arbot.inquiry@gmail.com

## Our Procedure

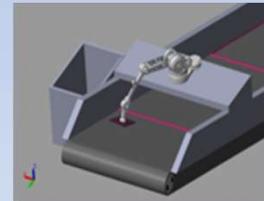
### Detect & Track Contaminants

Use state of the art computer vision detection and tracking algorithms to identify contaminants.



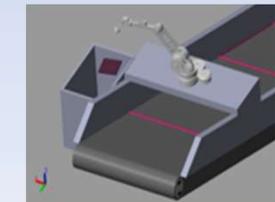
### Compute Trajectories

Plan and predict expected target location



### Execute Sorting Task

Complete sorting trajectory to remove target from waste stream



## References

[1] T. Eng. Could the chinese national sword inspire global recycling innovation? [Online] <https://recycling.tomra.com/blog/chinese-national-sword-inspire-global-recycling-innovation>

[2] L.Johnson. Campus Mixed Recycling Landfilled Since November [Online] <https://www.cityonahillpress.com/2019/03/01/campus-mixed-recycling-landfilled-since-november/#:~:text=UCSC%20sends%20six%20tons%20of,is%20about%2070%20percent%20contaminated.>