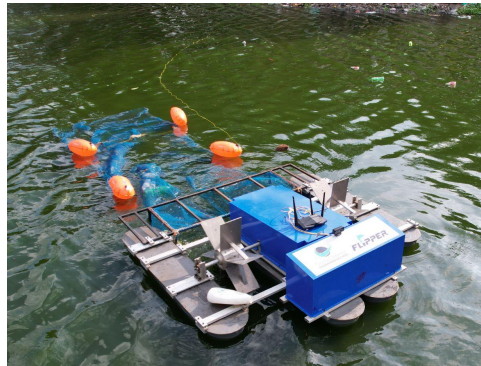


FLIPPER- A patented data and plastic waste collection vessel



FLIPPER is a **patented** device by Varun Saikia



→ **Clean**

Electric vehicle that collects upto **500 kg** of floating garbage

→ **Smart**

AI enabled, route pre programmed using GPS

→ **Data**

Recognises type of **plastic waste** collected and **logs its coordinates** on the map

Real Clean Tech

FLIPPER vs Competition (e.g. Trash Skimmer)

1. Cost-Effective

- **10x lower cost** than competitors
- Scalable and **higher garbage collection capacity**

2. Sustainable Operations

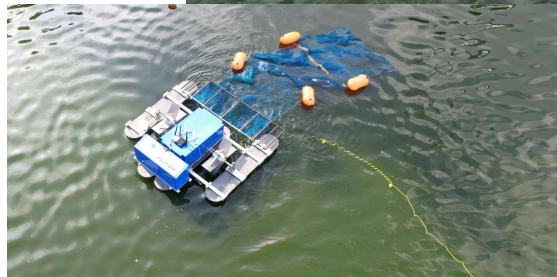
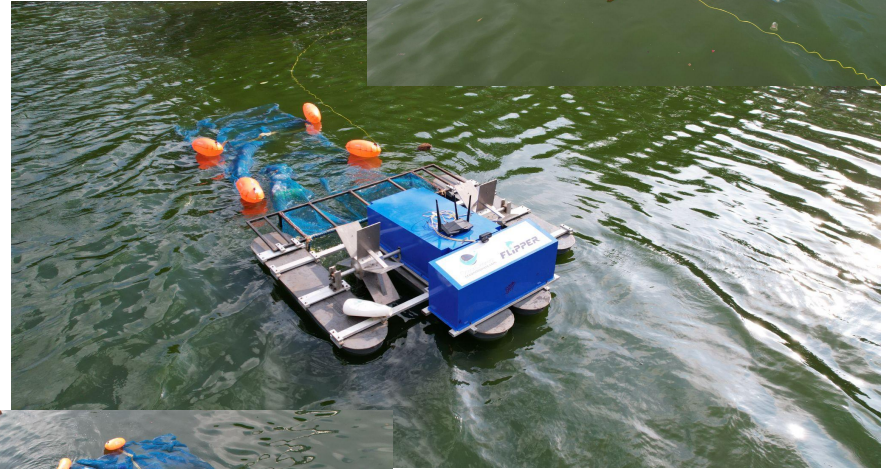
- **Electrically powered** (no petrol/diesel engines)
- **Lower maintenance** costs
- Zero carbon emissions

3. Comprehensive Solution

- Garbage collection from water bodies
- **Prevents eutrophication**
- **Aerates water body**
- Removes unwanted vegetation



American Meteorological Society recognised technology



Data



Since most Indian water bodies **lack systematic monitoring**, we are **Revolutionizing Water Quality Monitoring**, with plans to collect data on the **water quality, PH levels, chemical compositions, valuable data about vegetation in water body, different waste streams** and much more.

- Applications of the data collected:
 1. **High-Resolution Mapping**
 - Continuous non-stationary data gathering
 - Detailed dynamic output over time, with interactive and easy to comprehend forms
 2. **Regulatory Compliance Support**
 - Reliable data for decision-making
 3. **Early Warning System**
 - Indicator of ecological degradation
 - Enables proactive interventions
 4. **Efficacy Assessment**
 - Evaluate sanitation/clean-up efforts

FLIPPER Demo Results-

- Points on map = coordinates of plastic collection
- Colors indicate different types of plastics collected

120+ device inquiries and quotations from Govt bodies and Municipal Corporations




Collector Vadodara @Collec... · Dec 6, 2019
 વડોદરાનાં વિધાયર્થી @varunsaikia દ્વારા નદી, તળાવ જેવા પાણીનાં સ્થાનોમાં તરતો પ્લાસ્ટિક, થર્મોકોલ વગેરે જેવો કચરો દુર કરવા માટે નું મશીન બનાવવામાં આવેલ છે. જે ૦૩ કિ.મી/કલાકની ઝડપથી એક દુરામાં અંદાજીત ૧૦૦-૧૫૦ કિ.ગ્રા. કચરો કાઢી શકવાની ક્ષમતા ધરાવે છે.
 @vijayrupanibjp
 @pkumaris



SBM Panvel Municipal Corporation <pmchealth.sbm@gmail.com>
 to me ▾

Dear Team,

I m from **Panvel Municipal Corporation** (Government Firm)
 I would be grateful if you could send me a quote for Trash Cleaner.
 Further, any information feels free to contact on same mail id.

Thanking you,
 Swachh Bharat Abhiyan Cell
Panvel Municipal Corporation, Maharashtra



Founder

Awards and Achievements

- Started working on FLIPPER since the age of 12 and has been working on it for the last 6 years
- Granted **patent** for FLIPPER in 2023
- **National Award** at CBSE National Science Fair
- Outstanding achievement award in the field of Earth and atmospheric related sciences by **American Meteorological Society**
- Selected as 100 Rise Global Winner out of 50,000 international applicants



Varun Saikia

18 year old student studying Engineering at Carnegie Mellon University

News and Recognitions

- [Forbes- Fresh Solutions for Humanity](#)
- [NDTV](#)
- [Times of India](#)
- [Accuweather](#)
- [The Hindu](#)
- [BBC Gujarati](#)

