



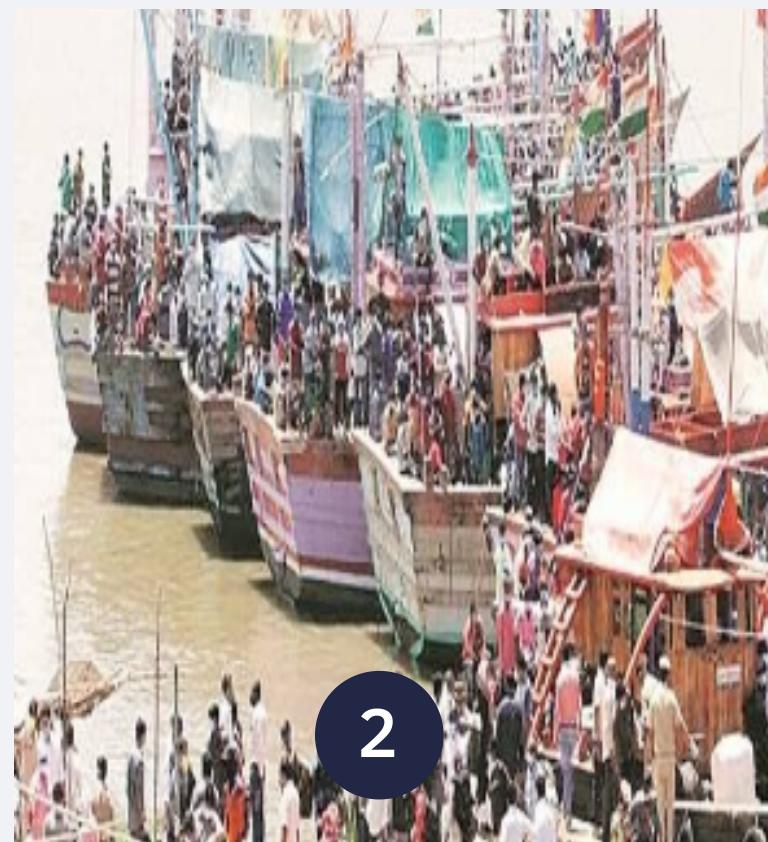
Pitch Deck

Presented by Team-4

Problems of Government



1
Inability to view &
analyze AIS data using GIS
applications



2
Inaccurate Reporting
Mechanism



3
Difficult to track
Overfishing

Problems of Fisherman



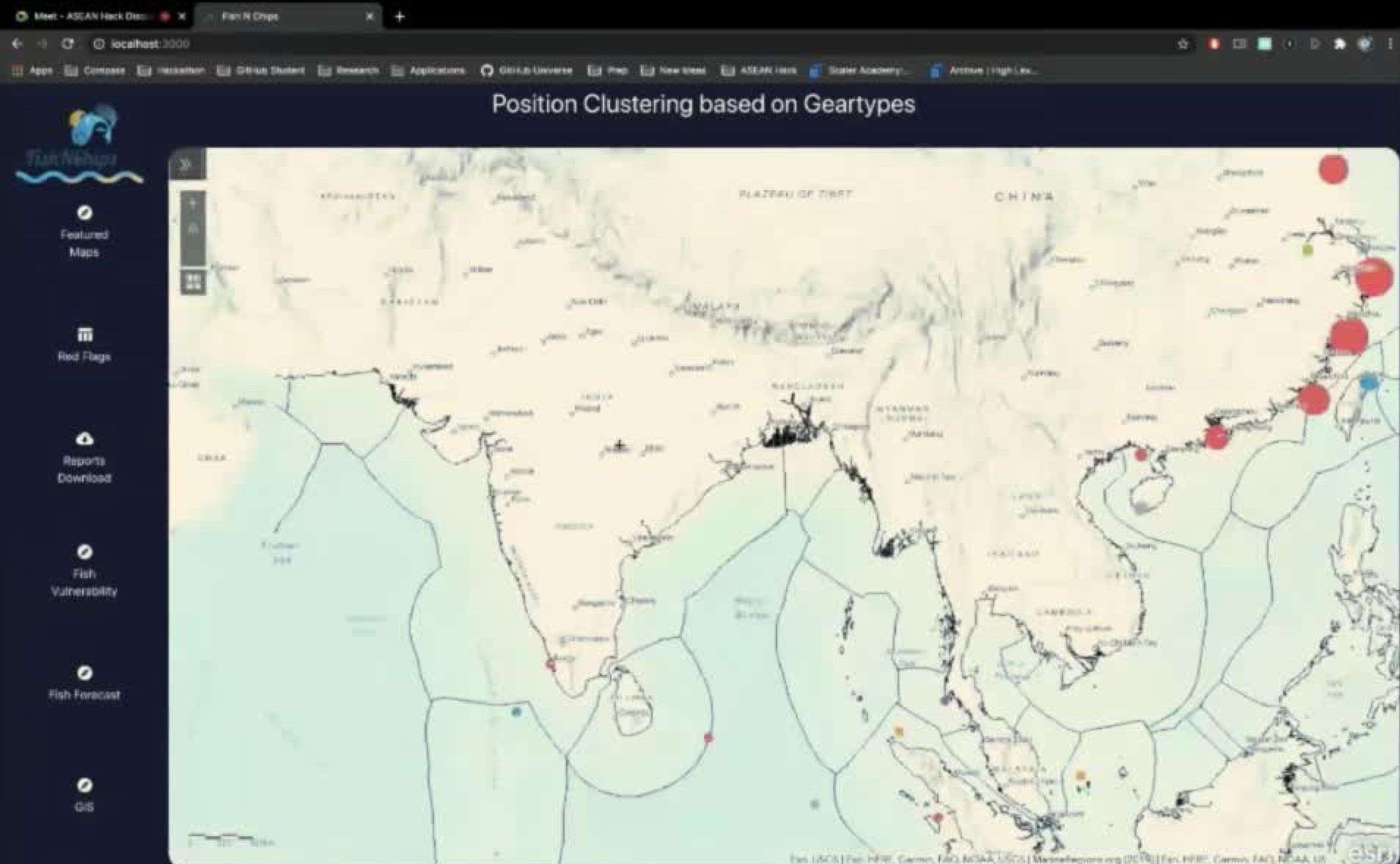
4

Small Fishermen have
no technology



5

Unintentionally crossing
EEZ



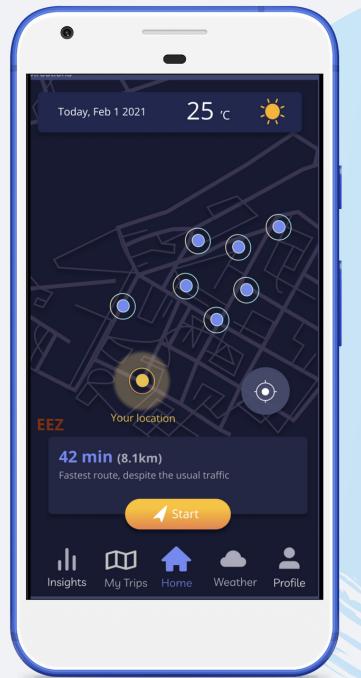


Our Solution



Website

Provide Policy Makers to get insights from data



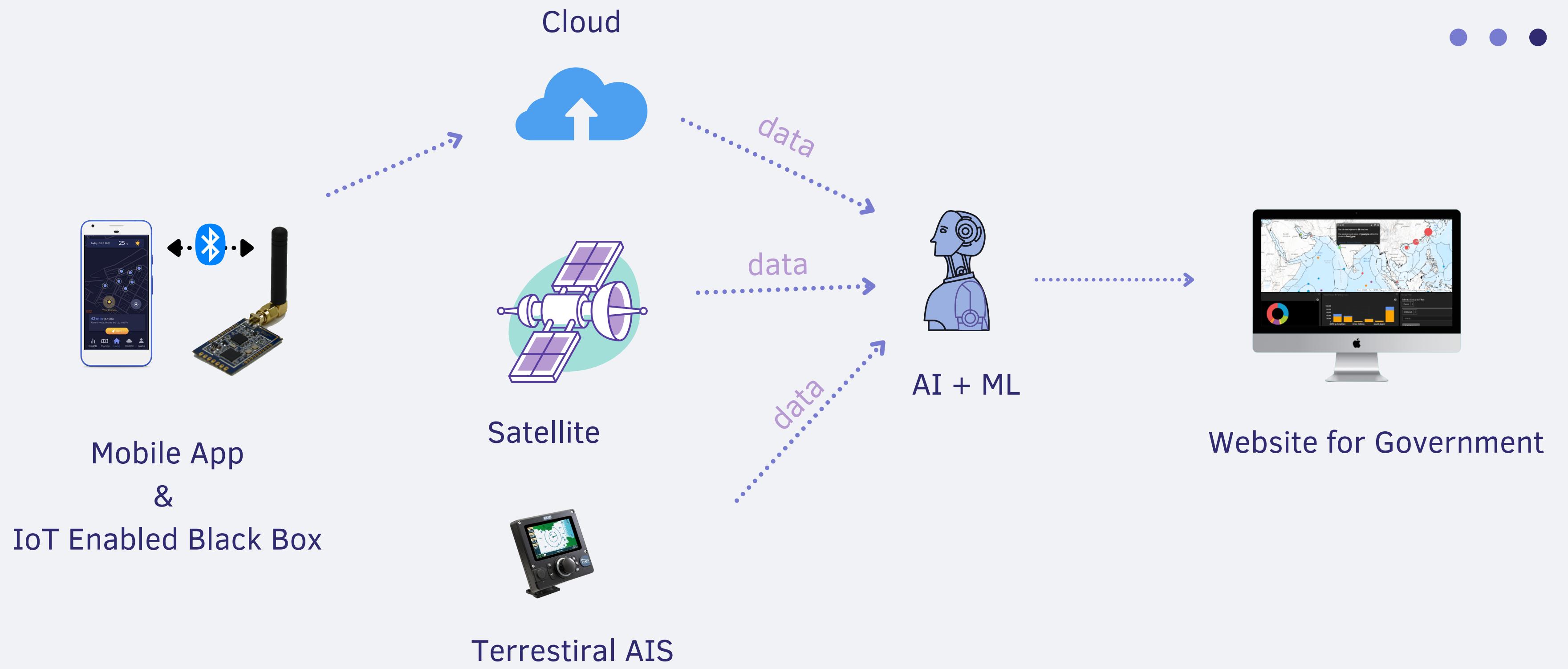
Mobile App

App for fishermen



Black Box

IoT enabled black box



How it works

TECHNOLOGY USED:

IoT + Android

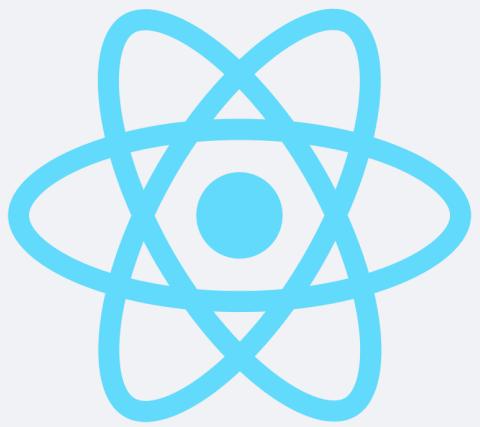
TRAINING

DEVELOPMENT

SKILLS

Python + ArcGIS

Web App Tech Stack



ReactJS



Microsoft PowerBI
Visualizations



ArcGIS

Map Provider

IoT + Android Tech Stack



Django



Android



Plotting Map



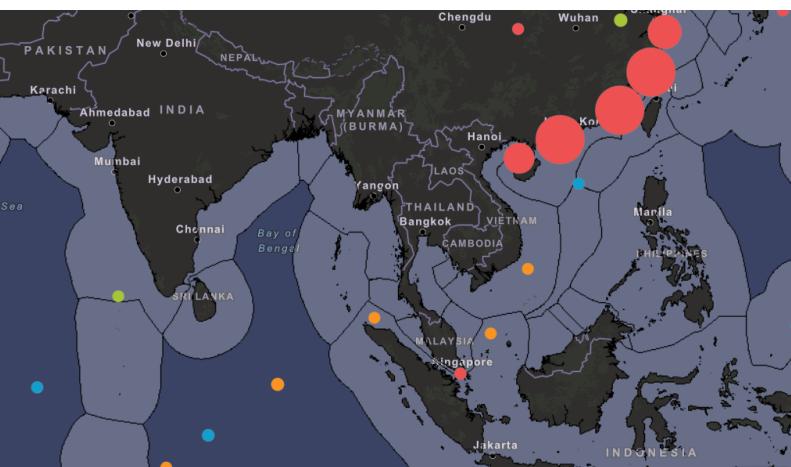
IoT Module



Key Features

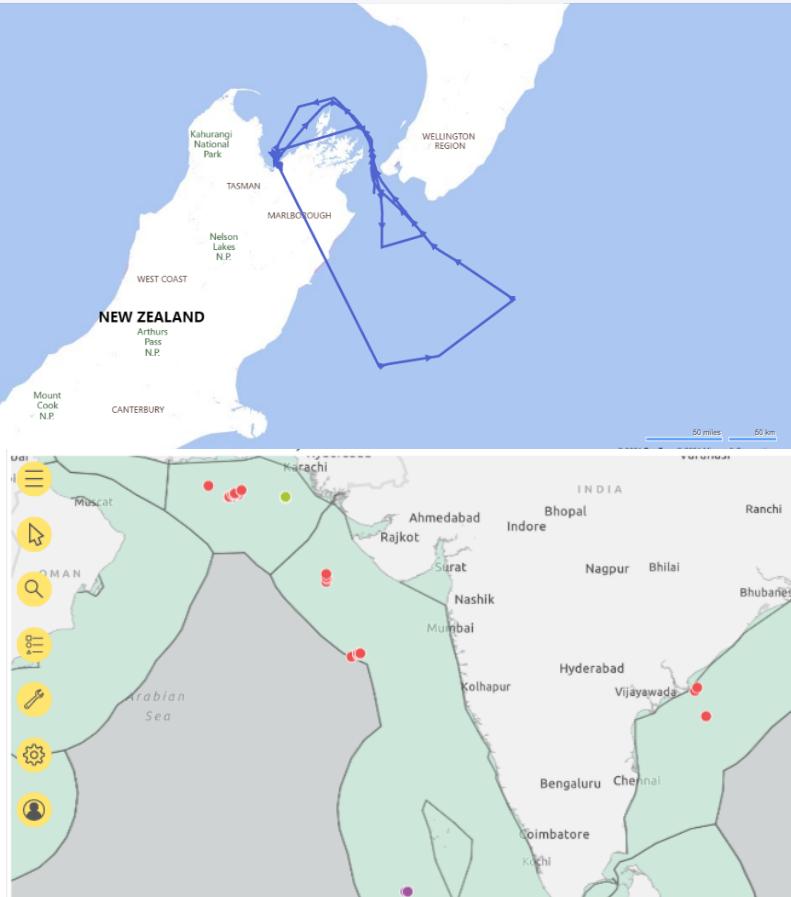
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Government Website



1 Positional Clustering

Government's concern about where fishermen like to fish

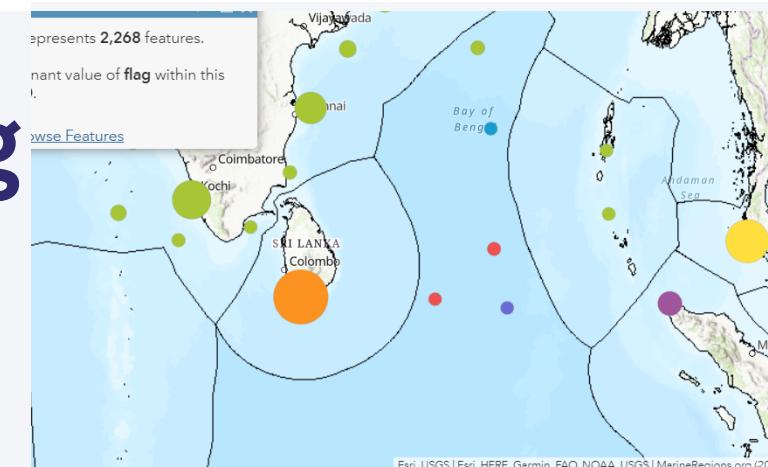


2 Trajectory Mapping

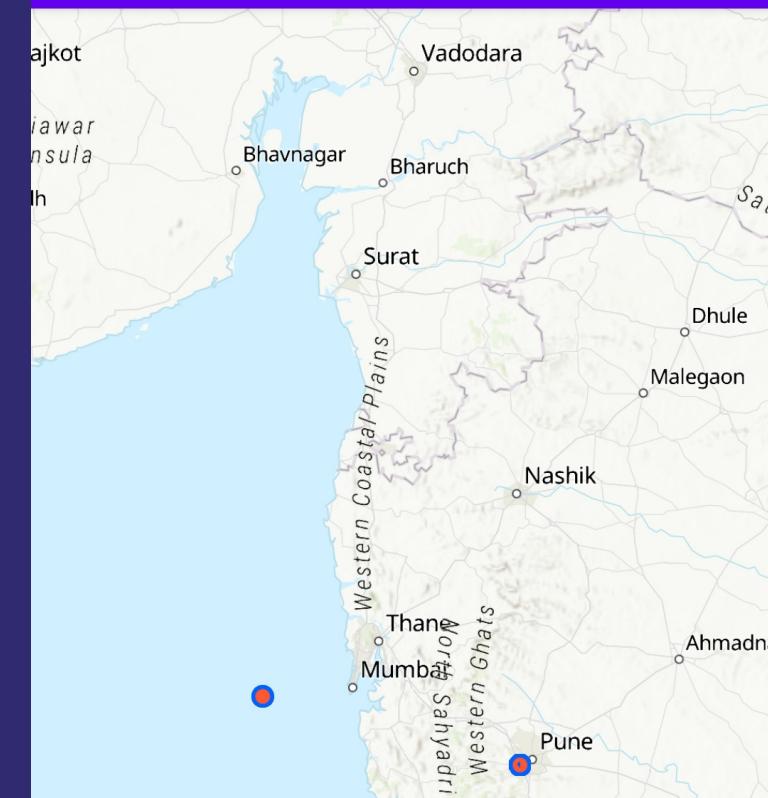
For timeline studies

3 Red Flagging

The behavior of vessels can be aggressive and needs regulation



Fleet Manager



4 Projection for Vessel Behavior

To analyze vessel behavior

5 Fleet Management

Government's concern about where like to fish

Mobile App

Here is the prototype of our mobile app



Problems

- Government can't able to track smaller boats having no technology like AIS.
- Safety is an issue for fishermen.
- Tools are limited to import AIS data.
- No Data visualisation fo AIS data
- Fishermen Reporting system is not robust.
- It is necessary to know the location where most fishing occurs in which time for the policymakers

Solution

- Website (Government)
- Mobile App + IoT Device (Fisherman)
- Stand alone IoT device with

Key Metrics

- Useful Fishing Insights for Government
- Affordable solution for small fishermen safety
- Cheap Black Box capable for Non - AIS

Unique Value Proposition

- Simple color-coded scheme
- Affordable IoT Device for small fishing boats
- Providing more data points
- Safety Mechanism for fishermen
- Concrete reporting system for both fishermen and government

Competitors

- Aquacloud
- FishAngler
- FishBrain
- Fishidy

Channels

- Startup Pitch Sessions and Investor Sessions

Customer Segments

- Government
- Policy Maker
- Coastal Navy
- Security Agency
- Researchers
- Fisherman
- Fleet Owner

Cost Structure

- IoT Product Development
- Paid API
- Cloud Services

Revenue Streams

- IoT device
- Software As A Service (SAAS)
- App Subscription Model

How much does the IoT Device cost?

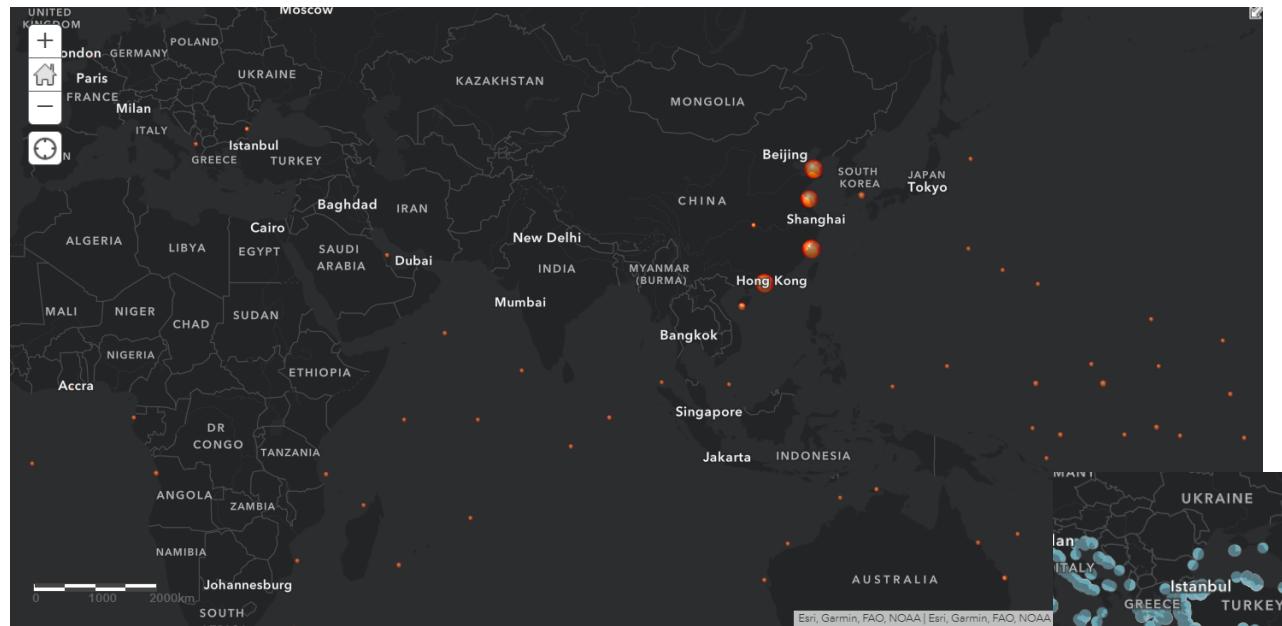
2,500 INR



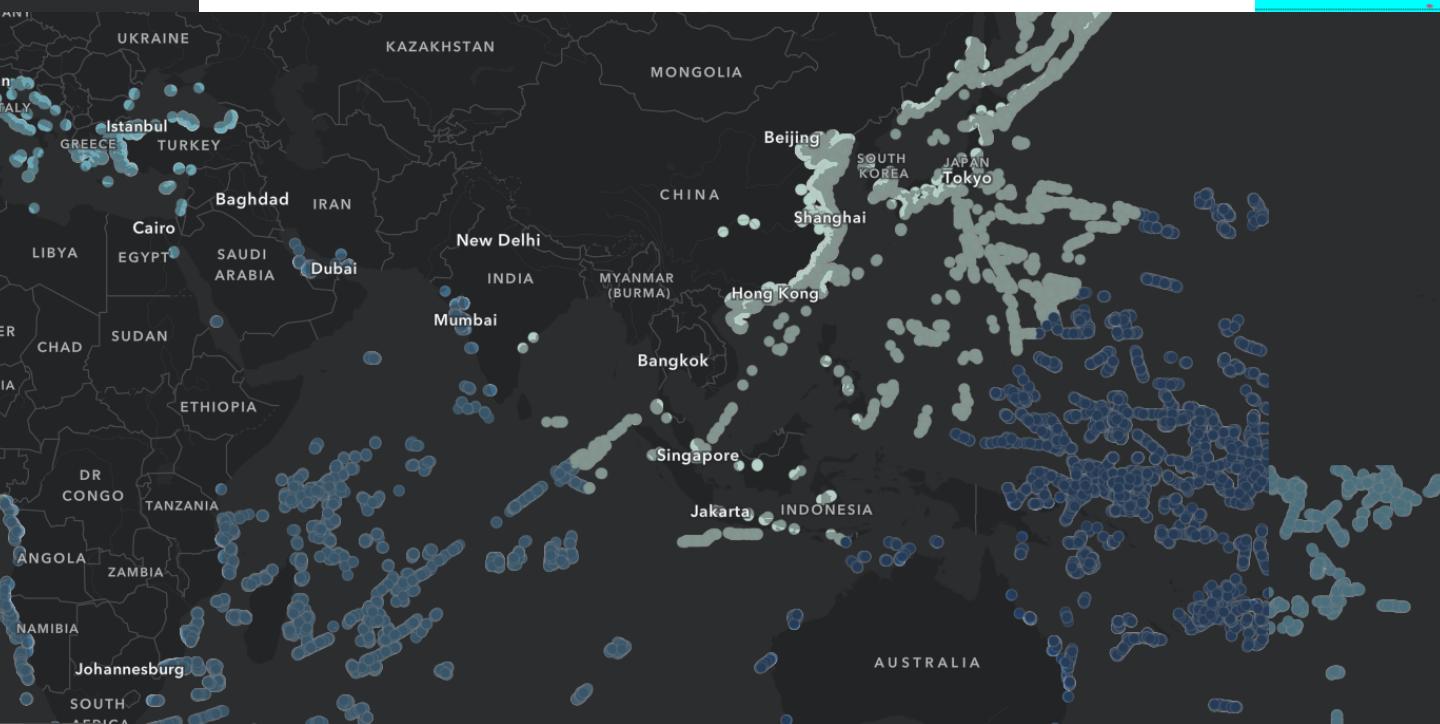
Comparison between AIS Data & Black Box Data

| Standard AIS Signals | Our Mobile App + Black Box |
|-----------------------------|----------------------------|
| MMSI | MMSI |
| Lat | Lat |
| Lon | Lon |
| Timestamp | Timestamp |
| Vessel Name | Vessel Name |
| Heading | Heading |
| SOG | SOG |
| COG | COG |
| Length | Length |
| Width | Width |
| Call Sign | FleetID |
| Status | Altitude |
| Draft | Pressure |
| AIS Transceiver Class (A/B) | Temperature |

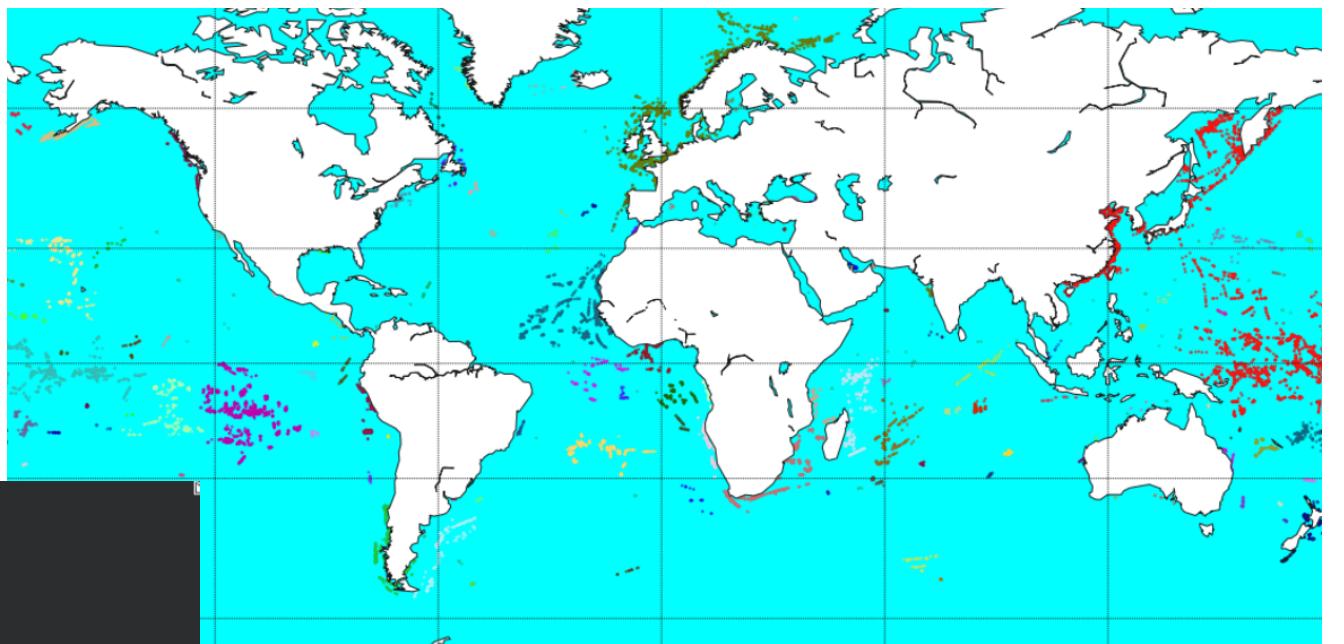
Comparison between Algorithms



Optics



ArcGIS Build-In



K-Means

GitHub Repo

ASEAN India Hackathon Team #4

Repositories 9 Packages 6 People 6 Teams 1 Projects 1 Settings

Find a repository... Type: All Language: All Customize pins New

server-app Private

JavaScript 0 stars 0 forks 0 updated 1 hour ago

android-app Private

An Android app for fishermen

Java 0 stars 0 forks 0 updated 3 hours ago

front-end-react-code Private

JavaScript 0 stars 0 forks 0 updated 5 hours ago

marinetraffic Private

Android app

Java 0 stars 0 forks 0 updated yesterday

data-visualization Private

This repo is for data visualization of multiple datasets to find insights on the data

HTML Apache-2.0 0 stars 0 forks 0 updated 6 days ago

frontend Private archived

JavaScript 0 stars 0 forks 0 updated 7 days ago

backend-service Private

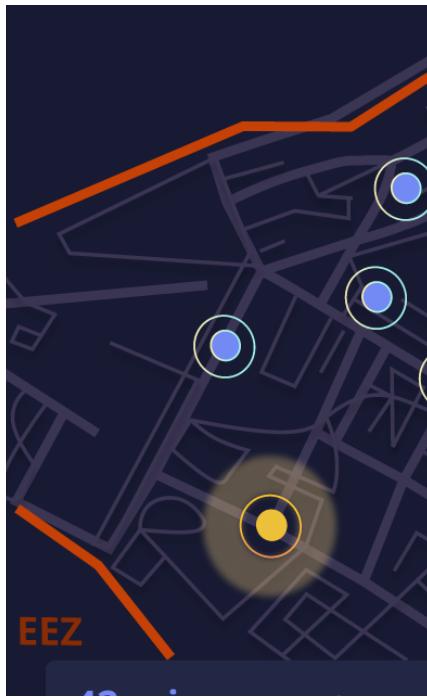
This is branch for Bank and services that will be used in our app

HTML BSL-1.0 0 stars 0 forks 0 updated 14 days ago

tracker-scripts

The screenshot shows a GitHub organization page for 'ASEAN India Hackathon Team #4'. It lists several repositories: 'server-app' (private, Java, 0 stars, 0 forks, updated 1 hour ago), 'android-app' (private, Java, 0 stars, 0 forks, updated 3 hours ago), 'front-end-react-code' (private, JavaScript, 0 stars, 0 forks, updated 5 hours ago), 'marinetraffic' (private, Java, 0 stars, 0 forks, updated yesterday), 'data-visualization' (private, HTML, Apache-2.0, 0 stars, 0 forks, updated 6 days ago), 'frontend' (private, JavaScript, 0 stars, 0 forks, updated 7 days ago), 'backend-service' (private, HTML, BSL-1.0, 0 stars, 0 forks, updated 14 days ago), and 'tracker-scripts' (public, 0 stars, 0 forks). A sidebar on the right shows 'Top languages' (JavaScript, Java, HTML, Python, Jupyter Notebook) and a 'People' section with 6 members and an 'Invite someone' button.

• • • Fisherman Mobile App



1 EEZ Live Map

Live map with EEZ boundary



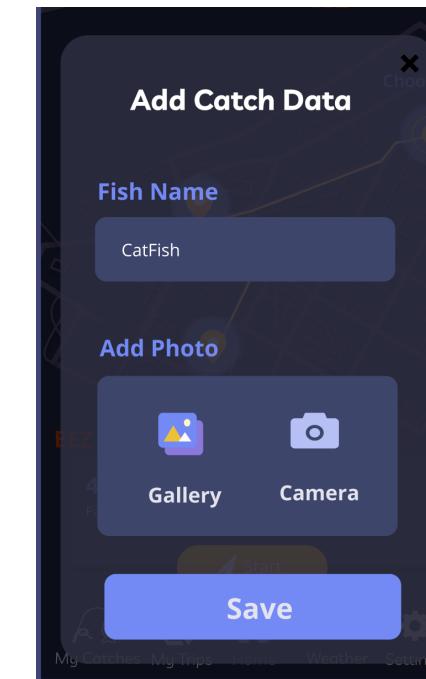
2 Insights

Warning System for fishermen when they cross EEZ



3 Weather Forecast

Give weather forecast of a week



4 At-Ground Catch Reporting

Solution for at-ground reporting

Future Work:

- Insights about fishing density to improve fishing efficiency and reduce fishing efforts
- Real-Time fish catch update in overfishing status

