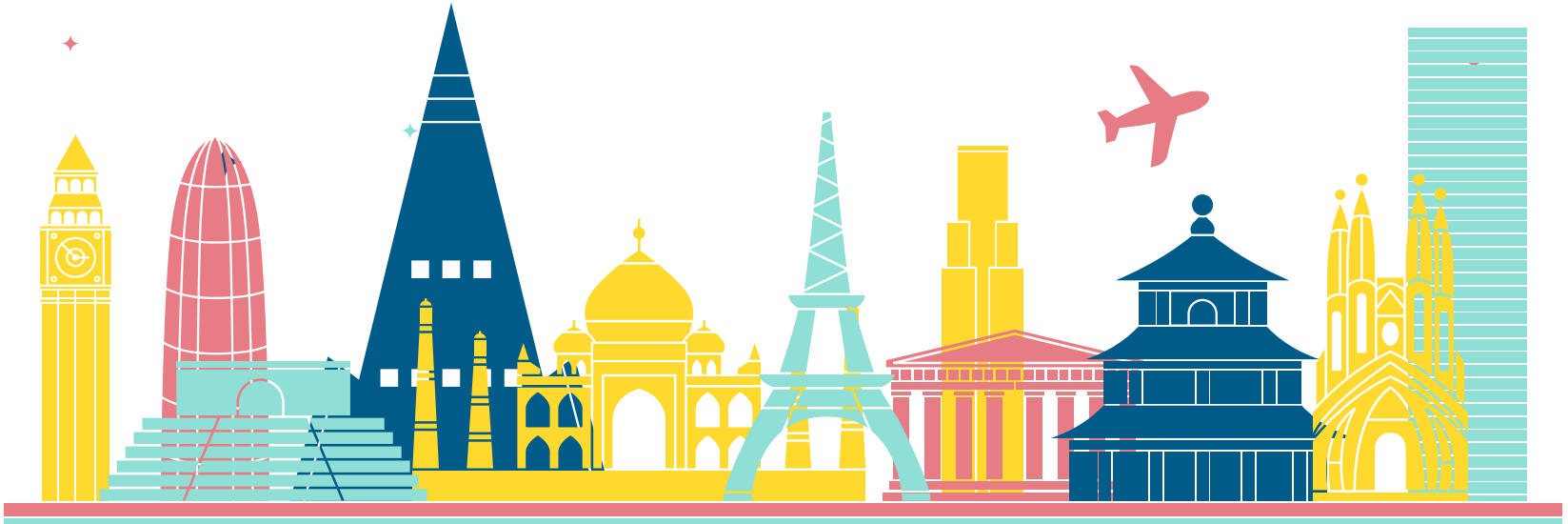
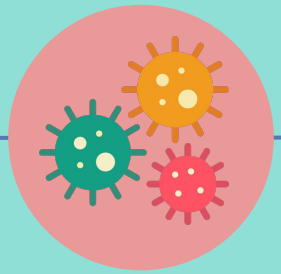
Voyageur

Restoring Public Confidence
on Safe Travels



Problems

Our team member Bhavya won HackAsia ‘19 Grand Prize and got tickets to a conference in Barcelona in May 2020.



Due to the COVID-19 pandemic, the conference was cancelled and postponed to summer 2021.

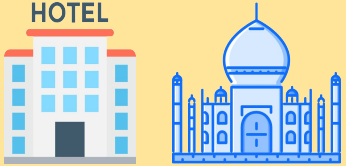
Now, he is unsure if he should travel to Spain in 2021, even if the epidemic has died down.

We realized this would be the case for many travelers, both **leisure** and **business**. One of the major problems would be making travelers gain the **confidence** to travel again. We decided to do something to encourage people to travel, by assuring them of **safety**.

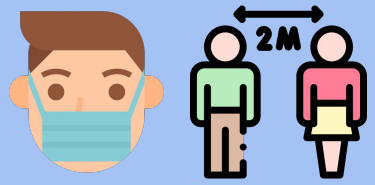
Problem Identified:

- Super crisis in the transportation & travel domain in the aftermath of Corona.
- Lack of a system that helps in defining zones based on safety rules such as social-distancing in real-time.
- Negative impact on people's mindset, behaviours and confidence to travel
- There is a need of an holistic system that helps travelers to feel safe while traveling.

Our Solution - Module 1



Software services for hotels, airports, parks, museums, theatres, and other enclosed **private tourist spots**.



Our system will auto detect whether people are **following social distancing** and **wearing masks**, from cctv footage.

The owners of the place will be **alerted** if someone is **not following the rules**, to ensure safety rules are being followed.

These places can **advertise** their safety stats and that they're using a **system to ensure safety**, to attract more tourists.

Tourists will **trust** places that have such a **system**. It will **restore public confidence on safe travels**.

Privacy

- The video footage from the tourist places will be accessible only to their owners.
- We will collect no data or information, and won't have access to the cctv footage.
- We just provide a software platform to these places for ensuring safety rules.

Our Solution - Module 2

An **Android app** for travelers/tourists. In it, users can pick a **destination** and a **date** of interest.

The app will send them **updates** of that place, and give the **estimated** number of cases, using **data analytics**.

Users can make an **informed decision** and **postpone** or **cancel** their trip advance, without losing out money.

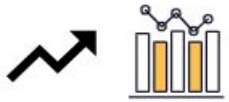
This will also help air travel companies and hotels, who have to bear **losses** if a person **cancels** their bookings.

Being **well researched** will encourage people to travel. Seeing **regular updates** about a place they are about to visit in a hassle free way will restore their confidence.

Instead of creating this as a new app, we will sell this to travel companies (like MakeMyTrip, Traveloka). They can integrate the **white labeled app** in their existing apps.

USE CASE

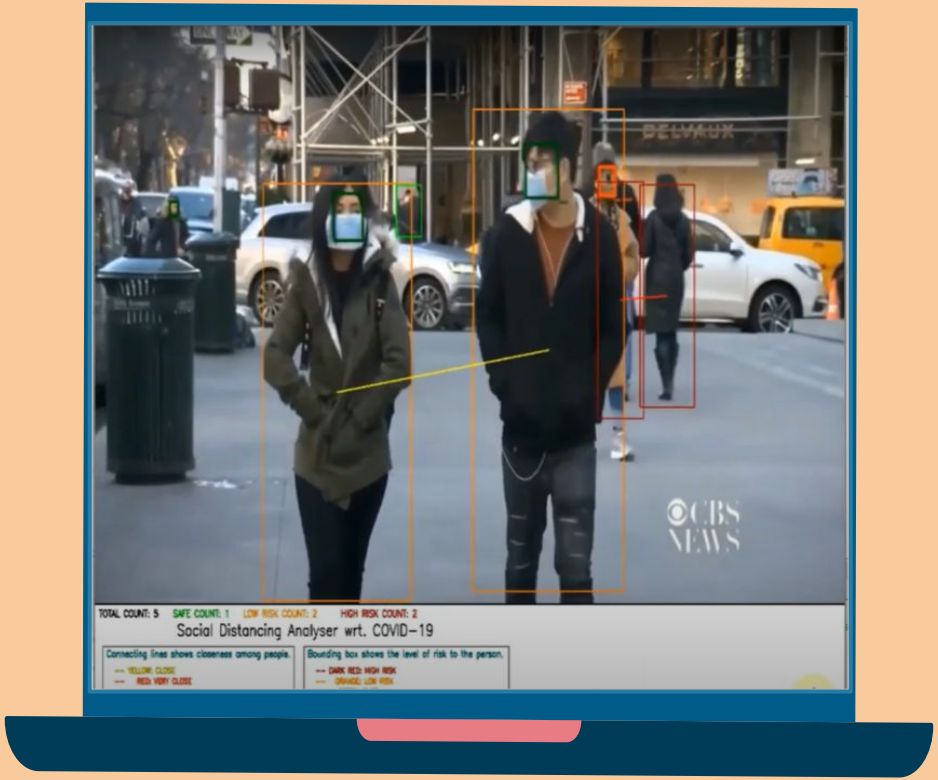
Providing Status, trends and news of the traveller's destination on travelling and hospitality industry



Predicting future trends in COVID cases. Heling travelers make more informed decision.

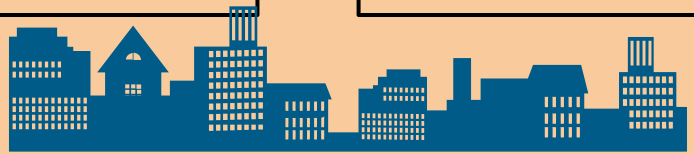
Provide safety ratings of various hotels/restaurants and other tourist places using AI-Social distance calculator and Mask detection Algorithm.

Thereby reviving confidence among travellers and the overall economy



Social distancing and mask detection

Creating hotspots by analysing the crowd density



Don't let Pandemic curb your Enthusiasm

COVID Data

Checkpoints

Get Info

Get Help

Analysis

Map

Top News

Spain's coronavirus antibodies study adds evidence against herd immunity

Positive

Source : CNN
Barcelona
Spain

Coronavirus: Spain's Alhambra Palace reopens to visitors

Positive

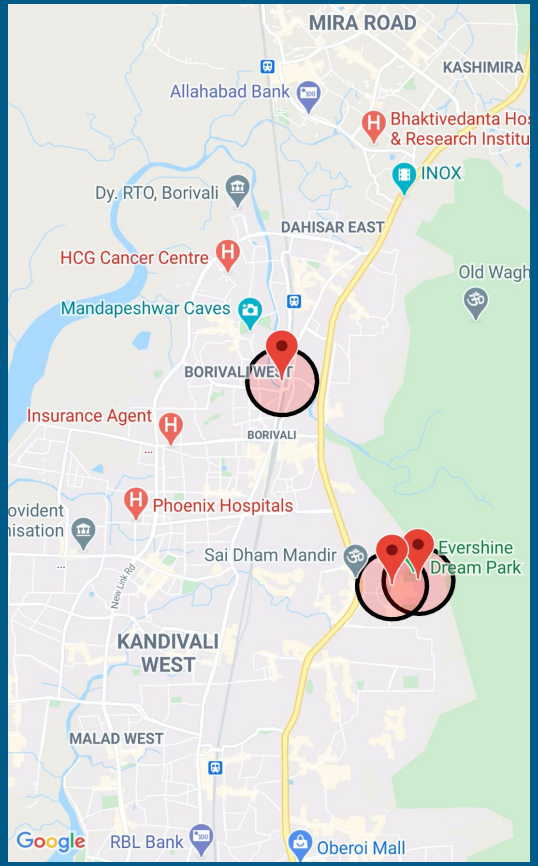
Source : Fox News
Barcelona
Alhambra Palace
Spain

User Feedback

Darshan Patil
Recently visited
Barcelona, Spain

Positive

" Safe place to go "



Wednesday Jul 08, 2020

Bon VoyAIDE
Hello!
I am the virtual assistant of Bon VoyAIDE.
You can ask me all the travel-related queries!
10:12 AM

Hi
10:13 AM

Bon VoyAIDE
Hello!
I am the virtual assistant of Bon VoyAIDE.
You can ask me all the travel-related queries!
10:13 AM

Cases in Barcelona
10:13 AM

Bon VoyAIDE
There are 62,057 COVID cases in Barcelona
10:13 AM

Covid helpline
10:14 AM

Bon VoyAIDE
104
020-26127394
044-29510500

Coronavirus: Spain's Alhambra Palace reopens to visitors

Positive

Source : Fox News
Barcelona
Alhambra Palace
Spain

User Feedback

Darshan Patil
Recently visited
Barcelona, Spain
Positive

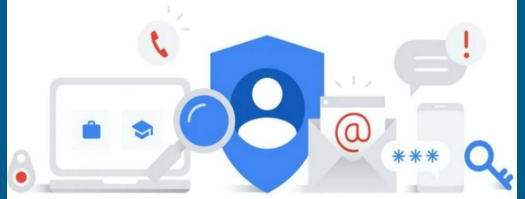
" Safe place to go "

Bhavya Meghnani
visited 2 mons ago
Barcelona, Spain
Positive

" Social distancing is followed "

Japan

Confirmed	Recovered
73264	63734
Deaths	**Active**
1412	8118



Stakeholders & Potential Customers (APAC Region)

Online Travel Companies

make my trip
zuji
trivago
goibibo .com
Expedia

Hotels and Restaurants

Holiday Inn & Suites
TAJ INNERCIRCLE REWARDS & PRIVILEGES
Jetwing HOTELS SRI LANKA
HOTEL INDONESIA GROUP

Museums

Asian Art Museum
MUZEUM AZJI I PACYFIKU
USC Pacific Asia Museum

Amusement Park & Museums

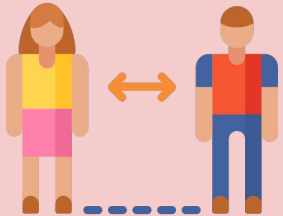
UNIVERSAL STUDIOS SINGAPORE
INDIAN WILDLIFES
JURONG BIRD PARK
The Indian Museum Ministry of Culture Government of India

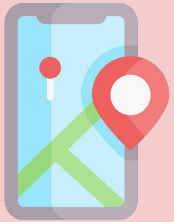
Residentials areas & Shopping malls

AEON MALL
KTCC MALL YOUR ONE-STOP SHOPPING MALL
Lucky Chinatown 美加廣場

Package based Subscription Model

Face Mask Detection Model with Camera	Social Distance Monitoring with Camera	Mobile Application for End-users with all Features	Prediction Model with Stats & Performance data
Face Mask Detection Model without Camera	Social Distance Monitoring without Camera	Mobile Application for End-users with few Features	Prediction Model with only Performance data





Clients can buy only the required Voyageur package module that will help them to cut down cost. They can also buy custom packages based on their needs. (Eg:- With / without camera)

Project Cost Structure

COST OF A SINGLE PRODUCT

$ 1213 /year

COST PER CAMERA (Installation + Maintenance)	45 $
COST OF USING AI SERVICE (Mask+ Social Distance) And CLOUD SERVICES (AWS)	0.50 $ /hr

TOTAL COST IN A YEAR

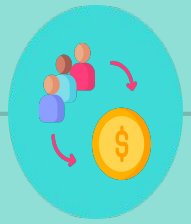
$ 122,650 /year

Single product cost (100 products)	121,300$
Marketing cost	650 $
Packaging & Logistics	400 $
Miscellaneous	300 $

Vision of Investment

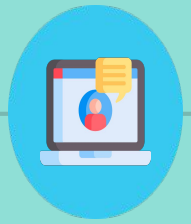
TECH MODULES

- Computer Vision
- Android App
- Website App
- Cloud Service
- Prediction Model
- Web/News Bot
- Pipeline Module



MARKETING

- Free trial-15 days
- Via Bloggers
- PR Services
- Advertising Camp.
- Referral Programs
- Social Media
- Email Promotions
- Influencer Module



SUPPORT TEAM

- Technical - 4 ppl
- Marketing - 6 ppl
- Business - 3 ppl
- Developer - 3 ppl
- Tester - 3 ppl
- Legal - 2 ppl
- Innovation - 3 ppl
- Ground Help - 5ppl

MISCELLANEOUS

- Patenting
- Infrastructure
- Resources
- Guidance
- Events & Shows
- Mascots
- Others

Tech Stack

Camera footage - Public Places, Bus/Train, Parking Lot

ML Model deployed on Google Cloud Patlform

Big Data Analytics on Google BigQuery

Data Stored in Cloud Datastore (fast NoSQL database)

Mobile Application

Firebase as Database

WEBSITE/ APPLICATION

Angular (HTML, CSS, Javascript) and NodeJS

Android Studio for Mobile Application

Data Extraction API

HOTEL RATING AND TREND PREDICTION

YOLO Model for person detection and Euclidean Distance Calculation

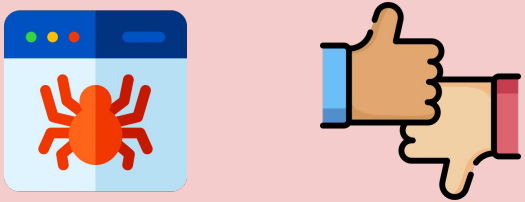
Keras and Tensorflow for CNN (Mask Detection Model)

RNN and LSTM for future COVID-19 trend prediction

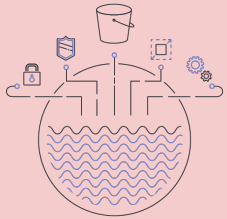
What happens to Voyageur after COVID19 ?

Face & Social Distancing Monitoring System

Crowd & Accident Management System



Web Scraper & ChatBot



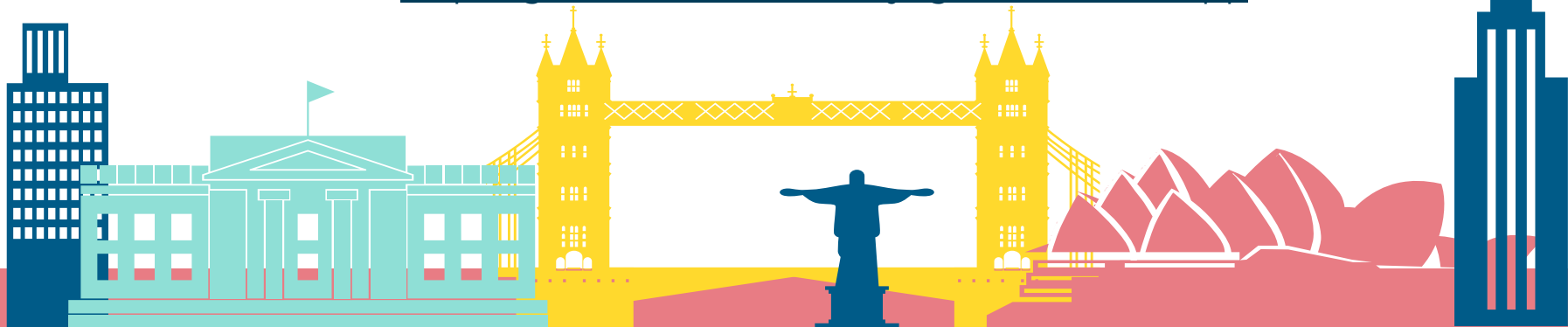
Health & Region specific tourist news & travel offers

Travel & Health related Queries

Thank You

Important Links

Demo Video
https://www.youtube.com/watch?v=AA_PkyL0Zfc

Code

- https://github.com/vedant74/-Hackathon-
- https://github.com/shru-r/voyageur_android_app